Jordan Roberts

BIG GOVERNMENT, BIG PRICE TAG

PART 1

MEDICAID EXPANSION = FUNDING GAP FOR STATE GOVERNMENT

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FOUNDATION
®

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Big Government, Big Price Tag

Medicaid Expansion = Funding Gap For State Government

Contents

Introduction

The Affordable Care Act (ACA), sometimes referred to as Obamacare, gave states the option to expand the Medicaid program to include non-elderly adults up to 138 percent of the federal poverty level. As of this writing, 38 states and the District of Columbia have adopted an expanded Medicaid program.[1] North Carolina is one of the 12 states that has not.

The debate over Medicaid expansion in North Carolina has primarily focused on the state portion of costs. As of 2020, the federal government covered 90 percent of a state's Medicaid expansion costs, leaving the state to cover the remaining 10 percent.[2] Costs of expansion to North Carolina would be determined by total enrollment, costs per new enrollee, and several other economic factors that forecasters must consider.

North Carolina Gov. Roy Cooper and state Democrats have fiercely advocated for expanding Medicaid in North Carolina, claiming the

program would not require "any state money."[3] Cooper proposed that taxes on prepaid health plans (PHPs) and hospitals would pay for the state's 10 percent share of the costs of Medicaid expansion.[4] Whether and to what extent PHP and hospital taxes could cover the 10 percent share remain in question.

Several studies have projected anywhere from 500,000 to 630,000 enrollees in the first years of expansion in North Carolina.[5,6,7] Forecasting Medicaid enrollment and costs after expansion has been difficult, however, because researchers must take into account changes in the economy, the law, and health insurance buying behavior among various groups of individuals.[8] Notably, all those projections were made before the current economic downturn, the effect of which could push the expected increase in enrollment to the higher side of the estimates.

In this study, we model several different scenarios based on the variability of projections for how many individuals would enroll in Medicaid after expansion and how much those enrollees would cost. We then compare those costs with the expected revenues from Cooper's proposed taxes to see whether the state could indeed cover the costs of Medicaid expansion without additional state appropriations or asking providers or PHPs to cover a larger amount than previously agreed.

METHODS

n this paper, we build our models to estimate Medicaid expansion costs using several different sources. Our assumptions come from Matthew Buettgens' 2018 report for the Urban Institute, "The Implications of Medicaid Expansion in the Remaining States: 2018 Update," which estimated Medicaid enrollment after expansion. We also rely on Cooper's budget recommendations for its spending figures for his expansion plan. We also use Medicaid enrollee expenditure data from the Centers for Medicare & Medicaid Services (CMS) and from the Kaiser Family Foundation (KFF) database.

The Urban Institute report uses its Health Insurance Policy Simulation Model to predict future Medicaid enrollment in expansion states.[9] In its 2018 analysis, Urban predicted that North Carolina Medicaid enrollment would increase by 626,000 people, including 365,000 people who would have been uninsured in 2019. While the Urban report estimated that 73 percent of the previously uninsured would enroll in Medicaid, Urban did not report what portion of those new enrollees belonged to the traditional Medicaid population and which portion belonged to the Medicaid expansion (Group VIII) population. Based on their national

estimates for increases in costs, however, Urban appeared to assume that most of the new Medicaid recipients would belong to the expansion population.[i]

Determining this new Medicaid population's size and makeup is crucial to producing an accurate cost estimate because federal reimbursement and average medical costs differ significantly between groups. In North Carolina, the federal government would cover 90 percent of the expansion population's costs but only 67.04 percent of the costs for the traditional Medicaid population.

According to CMS, the median cost per enrollee for the non-expansion adult population in 2017 was $6,131. For the expansion population, it was $7,527, and for children in the traditional Medicaid population, the median expenditure per enrollee was $3,787.[10] It is important to know those details in order to predict cost consequences of the "woodwork effect," which is higher enrollment among the traditional Medicaid population that would occur after a state decided to expand Medicaid to Group VIII enrollees. The total cost of expansion includes the cost of both the expansion population and the woodwork population.

In our analysis, we use CMS's per-enrollee costs inflated to 2021 dollars. We assume a median cost per enrollee for the traditional (woodwork) Medicaid population of $7,008, a Group VIII (expansion) population cost per enrollee of $8,604, and a traditional Medicaid population child cost per enrollee of $4,328.

We further assume for some scenarios that North Carolina has a slightly higher than average cost of adult Medicaid enrollees and a slightly lower cost for children in the woodwork population. According to 2014 data from KFF, adults on Medicaid in North Carolina were roughly 10 percent more expensive, and children on Medicaid in North Carolina roughly 10 percent

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i   Nationally, Urban's estimated increase in state Medicaid expenditures is approximately 20 percent higher than it would be if the entire increase in predicted enrollment were to come from the expansion population.

less expensive, than the national average.[11]

When we project the composition of woodwork enrollees in the models, we assume, based on CMS data, that the makeup for this population would fall roughly 91 percent among adults and 9 percent among children. We expect enrollment growth in all groups to track with expected population growth in North Carolina (1.13 percent per year) and the cost per enrollee to grow at the same rate as North Carolina's average rate of Medicaid inflation between 1991 and 2014 (3.4 percent per year), consistent with CMS's approach.

We then compare the most likely of our modeled scenarios with the governor's projections and proposed funding mechanisms. Comparing those numbers provide insight into how much of expansion costs the state could expect to cover with the governor's proposed funding sources and whether there would be a budget hole to fill.

POSSIBLE MEDICAID EXPANSION SCENARIOS

W e pull together data and assumptions from several sources to con-
duct our analysis. The first data source we use is Gov. Cooper's bud-
get recommendations for Fiscal Year 2019-2021. We can use pieces
of information from this document to understand how Cooper estimated
enrollment and costs per enrollee of his Medicaid expansion program.
Cooper indicated from the written portion of his budget that there would
be 626,000 enrollees at some point, but he only used 500,000 enrollees
for his spending line item.[ii]

We use these two baseline enrollment numbers to project several differ-
ent cost estimates. We also use them along with the governor's projected
expenditures and CMS's data on cost per enrollee to determine each pos-
sible scenario's likelihood. Since the General Assembly and the governor
did not agree on a spending plan last year, we push the governor's cost

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ii   Page 16 of the Governor's Budget Recommendations stated that Medicaid
      expansion would cover 626,000 individuals. In the line item in the bud-
      get on page 140, however, it stated that Medicaid expansion would cover
      500,00 individuals. For this reason, we model a wide range of scenarios
      based on different levels of anticipated take-up.

figures forward by one year, adjusting for inflation, to come up with the new costs in the first year.[iii]

In each of the tables that follow, green squares are assumptions, grey squares represent unknown figures, and white squares are the authors' calculations.

Expansion Possibility A

Expansion Possibility A models different scenarios under Cooper's expected costs and enrollment. In scenario A.1, we take Cooper's cost of Medicaid expansion and the total number of enrollees he indicated to come up with a per-enrollee figure for the Medicaid expansion population. Cooper's $4.3 billion expansion program for 500,000 enrollees amounts to $8,625 per expansion enrollee.

SCENARIO A.1

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	500,000	$8,625	$4,312.4	$431.2
Woodwork Adult	114,660			
Woodwork Child	11,340			
Woodwork Total	126,000	$1,037	$130.7	$42.6
Total	626,000	$7,098	$4,443.1	$473.8

Referencing our inflation-adjusted figures based on historical CMS data, we find that this estimate per enrollee is almost exactly in line with the "median" per-enrollee cost ($8,604) for expansion enrollees in other

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iii   The Medicaid expansion line item in the governor's budget estimated the Fiscal Year 2020-2021 costs of Medicaid expansion to be $4.1 billion and the costs of the woodwork population to be $126.3 million. These figures adjusted for inflation based on historical Medicaid data give us our starting point for the models of expansion costs of $4.3 billion and woodwork costs of $130.7 million

states. Taking this, it appears Cooper assumed that the Medicaid expansion enrollees would cost close to the median rate, but only for 500,000 enrollees.

Cooper's budget did not mention how many woodwork enrollees he expected, what the makeup of that population would be, or the estimated cost. Based on the budget, it's possible the governor thought the remaining 126,000 individuals he expected to enroll would be in the woodwork population. Costs per enrollee in this population are unknown. But by taking the $130 million the governor would expect to spend in 2021 on this population, we can calculate a per-enrollee expenditure of $1,037 for some mix of woodwork enrollees. This figure seems very unlikely, however, because compared with the CMS data for per-person expenditures, it would be far below even the minimum costs.

Since it is very unlikely the governor could cover 126,000 individuals in the woodwork population for $130 million, we now look at a scenario A.2. Here we estimate the total enrollment in the woodwork population based on CMS per-enrollee cost using Cooper's expected woodwork expenditures of $130 million.

SCENARIO A.2

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	500,000	$8,625	$4,312.4	$431.2
Woodwork Adult	17,567	$7,008	$123.1	$40.1
Woodwork Child	1,737	$4,329	$7.5	$2.5
Woodwork Total	19,305	$6,768	$130.7	$42.6
Total	519,305	$8,556	$4,443.1	$473.8

Using inflation-adjusted CMS per enrollee costs, we calculate 19,305 woodwork enrollees based on Cooper's estimated costs for the program. Based on CMS's ratio of adults to children in the regular Medicaid program, we estimate there will be 17,567 adults and 1,737 children,

which is a more likely woodwork cost calculation than in scenario A.1. Our estimate of 519,305 enrollees, however, is still far below the 626,000 that Cooper estimated would enroll in Medicaid because of expansion.

Another possible scenario is A.3, where the adults in the woodwork population would resemble the expansion population. We model this because we do not know what cost assumptions the governor used for the woodwork population since his budget did not mention enrollment figures. Taking the same enrollment estimates from the previous scenario and applying a "median" cost per adult in the woodwork population, we estimate a higher state cost than in scenario A.2 of nearly $10 million.

SCENARIO A.3

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	500,000	$8,625	$4,312.4	$431.2
Woodwork Adult	*17,567*	$8,604	$151.2	$49.3
Woodwork Child	*1,737*	$4,329	$7.5	$2.5
Woodwork Total	19,305	$8,219	$158.7	$51.7
Total	519,305	$8,610	$4,471.1	$482.9

In all three of these scenarios, we use the estimated enrollment of 500,000 in Cooper's budget and the governor's cost estimates to work backward to find the cost per enrollee and the amount of woodwork population it could cover. But since the governor's budget also discussed enrollment reaching 626,000, we need to model other scenarios.

Expansion Possibility B

For the next expansion possibility, we estimate costs of expansion for 600,000 enrollees, a take-up rate closer to that of the Urban report, on which Cooper based at least some of his assumptions for Medicaid expansion. Urban estimated 626,000 individuals would gain coverage

under expansion, and judging by Cooper's budget, he expected the same. The Urban report is unclear, however, on how many individuals would enroll in Medicaid under expansion and how many would be in the woodwork population. For that reason, we assume that there would be 600,000 in the expansion population and start with that figure in scenario B.1.

SCENARIO B.1

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	600,000	$7,187	$4,312.4	$431.2
Woodwork Adult	*21,081*			
Woodwork Child	*2,085*			
Woodwork Total	23,166	$5,640	$130.7	$42.6
Total	623,166	$7,130	$4,443.1	$473.8

KEY CONCLUSION
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Given Cooper's estimated total cost for the expansion population of $4.3 billion in 2021 and 600,000 enrollees, we can calculate a per-enrollee cost of $7,187. That estimate is much lower than CMS's inflation-adjusted per-enrollee cost estimate for the expansion population of $8,604, however. This comparison tells us that Cooper's estimates for the program's total cost at this enrollment level may be too low.

Given Cooper's estimated total cost for the expansion population of $4.3 billion in 2021 and 600,000 enrollees, we can calculate a per-enrollee cost of $7,187. That estimate is much lower than CMS's inflation-adjusted per-enrollee cost estimate for the expansion population of $8,604, however. This comparison tells us that Cooper's estimates for the program's total cost at this enrollment level may be too low.

Woodwork costs are unknown in this scenario, but holding everything else the same while proportionally raising the scenario A.1 enrollment of 500,000 to 600,000, we can calculate a woodwork enrollment of 23,166. Taking both the expansion population and woodwork population together, the enrollment under scenario B.1 would be 623,166 – very close to the 626,000 estimated in both the Urban report and Cooper budget.

Scenario B.1 includes a low cost per enrollee and unknown costs per woodwork enrollee. In scenario B.2, we estimate the costs of the program at the same enrollment, but now we use the median costs per enrollee based on CMS data for the expansion population and adult and child woodwork populations.

SCENARIO B.2

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	600,000	$8,604	$5,162.4	$517.5
Woodwork Adult	*21,081*	$7,008	$147.7	$48.2
Woodwork Child	*2,085*	$4,329	$9.0	$2.9
Woodwork Total	23,166	$6,768	$156.8	$51.1
Total	623,166	$8,536	$5,319.2	$568.6

KEY CONCLUSION
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Instead of an over $4.4 billion program with the lower per-enrollee cost, the estimated cost for this scenario is over $5.3 billion. The state would need to cover $568.6 million if enrollees were close to the median.

We still project 623,166 enrollees under this scenario, but both the total and state costs increase substantially. Instead of an over $4.4 billion program with the lower per-enrollee cost, the estimated cost for this scenario is over $5.3 billion. The state would need to cover $568.6 million if enrollees were close to the median.

Scenario B.2 assumes that the adults in the woodwork population would cost close to the median rate. As stated above, there is a possibility of the woodwork adults and the expansion adults costing close to the same per enrollee. Scenario B.3 estimates the costs of the program under that possibility.

SCENARIO B.3

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	600,000	$8,604	$5,162.4	$517.5
Woodwork Adult	*21,081*	$8,604	$181.4	$59.1
Woodwork Child	*2,085*	$4,329	$9.0	$2.9
Woodwork Total	23,166	$8,219	$190.4	$62.1
Total	623,166	$8,590	$5,352.8	$579.6

KEY CONCLUSION
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Under scenario B.3, with a more expensive woodwork adult population, the total woodwork population cost to the state would rise to $62.1 million, increasing the total state cost of expansion by $11 million.

Under scenario B.3, with a more expensive woodwork adult population, the total woodwork population cost to the state would rise to $62.1 million, increasing the total state cost of expansion by $11 million.

Expansion Possibility C

The next expansion possibility we examine uses the enrollment assumption of Expansion Possibility B and estimates the costs based on 2014 data from the Kaiser Family Foundation. According to KFF, traditional adult Medicaid enrollees in North Carolina are roughly 10 percent more

expensive than the average for all other states, while children enrolled in Medicaid in North Carolina are roughly 10 percent less expensive than the average. In scenario C.1, we estimate the total costs of Medicaid expansion if the assumption from KFF data were to hold for 2021, so that the expansion population and adult woodwork population would cost 10 percent more than the mean, and the child woodwork population would cost 10 percent below the mean.

SCENARIO C.1

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	600,000	$9,666	$5,799.4	$579.9
Woodwork Adult	21,081	$7,201	$151.8	$49.5
Woodwork Child	2,085	$3,941	$8.2	$2.7
Woodwork Total	23,166	$6,907	$160.0	$52.2
Total	623,166	$16,573	$5,959.4	$632.1

KEY CONCLUSION
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Still using the enrollment estimates from Expansion Possibility B with a 10 percent above average cost for North Carolina adults in Medicaid and a 10 percent below average cost for children, we project a total program cost of nearly $6 billion. The state would need to cover $632.1 million.

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Expansion Possibility D (CBO expansion scenarios)

For Expansion Possibility D, we model a scenario in which the uninsured take-up rate is 14 percent higher than the estimated enrollment in

previous scenarios and all enrollees cost the same median rate. The reason is to account for variability in estimates. In the past, researchers who have tried to model Medicaid enrollment after substantial policy changes such as Medicaid expansion have significantly underestimated their impact. Following the ACA's implementation, the Congressional Budget Office (CBO) underestimated enrollment by 14 percent, but the CBO's estimate was still more accurate than other credible estimates at the time.[12]

SCENARIO D.1

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	667,260	$8,604	$5,741.2	$574.1
Woodwork Adult	24,302	$7,008	$170.3	$55.5
Woodwork Child	2,404	$4,329	$10.4	$3.4
Woodwork Total	26,706	$6,767	$180.7	$58.9
Total	693,966	$8,533	$5,921.9	$633.0

KEY CONCLUSION

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Total take-up in this scenario would be 693,966 at a total cost of over $5.9 billion, with the state having to cover $633 million.

We calculate that the increased take-up rate would result in roughly 70,000 additional enrollees.[iv] We then distribute these new enrollees into the expansion population and the woodwork population based on the same distribution ratio as in Expansion Possibility B, roughly 95 percent

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iv   The Urban report estimates there will be approximately 365,000 individuals who enroll in Medicaid who were previously uninsured out of their estimated total of 626,000. We keep the assumption that the remaining 261,000 would move from private insurance to Medicaid. We then multiply the 365,000 figure by the increased take-up rate of 1.192 (87 percent in CBO/73 percent in Urban) to come up with 70,000 new enrollees.

expansion population and 5 percent woodwork. Total take-up in this scenario would be 693,966 at a total cost of over $5.9 billion, with the state having to cover $633 million.

As discussed in scenario C.1, North Carolina's regular Medicaid adults and expansion adults are roughly 10 percent more expensive on average, while children enrolled in Medicaid in North Carolina are 10 percent less expensive on average. In Scenario D.2, we estimate the costs of the program if those disparities continued to hold.

SCENARIO D.2

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	667,260	$9,666	$6,449.5	$645.0
Woodwork Adult	24,302	$7,201	$175.0	$57.0
Woodwork Child	2,404	$3,941	$9.5	$3.1
Woodwork Total	26,706	$6,907	$184.5	$60.1
Total	693,966	$16,573	$6,634.0	$705.1

KEY CONCLUSION
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For scenario D.2, using the enrollment estimates from scenario D.1 with a 10 percent above average cost for North Carolina adults in Medicaid and a 10 percent below average cost for children, we project a total program cost of over $6.6 billion. The state would need to cover $705.1 million.

For scenario D.2, using the enrollment estimates from scenario D.1 with a 10 percent above average cost for North Carolina adults in Medicaid and a 10 percent below average cost for children, we project a total program cost of over $6.6 billion. The state would need to cover $705.1 million.

Expansion Possibility E

The last expansion possibility we model is based on the Urban report's finding of significantly higher state costs of Medicaid expansion when not all of the new enrollees are in the expansion population. The Urban report did not mention how many of the new enrollees in Medicaid following expansion will be in the woodwork population. Based on their national enrollment and cost estimates, however, the report estimated that the total increase in state expenditures would be about 20 percent higher than if all of the new enrollees were in the expansion population.

Urban's average included states with a large share of woodwork enrollment and higher state share of cost, but it seems a useful exercise to model it for North Carolina. For this expansion possibility, we calculate what the distribution of enrollment between expansion and woodwork would need to be for North Carolina to reach that state cost ratio.

SCENARIO E.1

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	500,000	$8,625	$4,312.4	$431.2
Woodwork Adult	56,045	$7,008	$392.8	$128.0
Woodwork Child	5,543	$4,329	$24.0	$7.8
Woodwork Total	61,588	$6,767	$416.8	$135.9
Total	561,588	$8,421	$4,729.2	$567.1

KEY CONCLUSION

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If we compare this scenario to A.2, the program's estimated total costs and state costs are higher owing to the higher projected enrollment among the woodwork population.

In scenario E.1, we start with Cooper's base enrollment of 500,000 and estimate the woodwork total by deriving a total enrollment figure

from 20 percent higher state costs than previously expected in other scenarios. We calculate a total woodwork enrollment of 61,588, which we then distribute into adults and children among this population according to CMS data, and then we calculate the rest of the state costs. If we compare this scenario to A.2, the program's estimated total costs and state costs are higher owing to the higher projected enrollment among the woodwork population.

In scenario E.2, we start with a baseline of 626,000 total enrollment between both populations, and we bring the woodwork and state costs up to the ratio of 20 percent higher state costs.

SCENARIO E.2

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	557,213	$8,604	$4,794.3	$479.4
Woodwork Adult	62,596	$7,008	$438.7	$143.0
Woodwork Child	6,191	$4,329	$26.8	$8.7
Woodwork Total	68,787	$6,767	$465.5	$151.8
Total	626,000	$8,402	$5,259.8	$631.2

KEY CONCLUSION
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In this scenario, total expansion enrollment would rise to 557,213, and woodwork enrollment would increase to 68,787. We can compare this with scenario B.2, where enrollment was similar. Overall costs would be lower owing to a higher expansion population, but state costs would be higher because of the assumed 20 percent increase.

In this scenario, total expansion enrollment would rise to 557,213, and woodwork enrollment would increase to 68,787. We can compare this with scenario B.2, where enrollment was similar. Overall costs would be lower owing to a higher expansion population, but state costs would be higher because of the assumed 20 percent increase.

Finally, scenario E.3 starts with a baseline expansion enrollment of 600,000. In this scenario, woodwork enrollment would rise significantly compared with woodwork enrollment in scenario E.2.

SCENARIO E.3

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	600,000	$8,604	$5,162.4	$516.2
Woodwork Adult	67,254	$7,008	$471.3	$153.7
Woodwork Child	6,651	$4,329	$28.8	$9.4
Woodwork Total	73,905	$6,767	$500.1	$163.0
Total	673,905	$8,403	$5,662.6	$679.3

KEY CONCLUSION

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Starting with 600,000 enrollees in expansion, we estimate a 20 percent cost increase would raise woodwork enrollment significantly to 73,905. Both total costs and state costs are higher than in scenario E.2 because of the higher starting expansion enrollment.

Starting with 600,000 enrollees in expansion, we estimate a 20 percent cost increase would raise woodwork enrollment significantly to 73,905. Both total costs and state costs are higher than in scenario E.2 because of the higher starting expansion enrollment.

Which Scenario Is Most Likely?

We modeled several different scenarios above because previous estimates on cost and enrollment varied and the governor's budget did not make available every piece needed for an accurate cost estimate of Medicaid expansion. Also, making even a slight tweak to any assumption in the model, such as cost per new enrollee, can change the projected total cost of the program and therefore the projected state costs.

So which scenario is most likely?

To start, we believe that Gov. Cooper is underestimating both enrollment and cost per enrollee. In Expansion Possibility A, we model different scenarios based on the governor's projected costs and enrollment. Again, we know he estimated an enrollment of 626,000 at some point, but his budget included only 500,000 in the line item. In scenario A.1, we rule out the possibility of being able to cover 126,000 individuals with the amount Cooper proposed to spend on the woodwork population. Given that, we worked backward from the governor's cost estimates to find a more likely woodwork enrollment number of 19,305 under the $130.7 million estimated total costs. But adding that figure to the 500,000 for the expansion population would fall far short of the governor's estimated total enrollment of 626,000.

In Expansion Possibility B, we assume a total enrollment in the expansion population of 600,000. In scenario B.1, we find that a 600,000 enrollment number in the expansion population would mean 23,166 woodwork enrollees. But when we calculate a per-cost enrollment based on the governor's expected cost for the expansion population of $4.3 billion, we find that the cost per expansion enrollee would be much lower than expected. But scenario B.2 shows that under Cooper's expected enrollment, at median rates for all populations, the program's total cost would be over $5.3 billion. If woodwork adults' costs are equivalent to that of the expansion population, then the state share of costs would increase by about $11 million, as shown in Scenario B.3.

Expansion Possibility C is based the enrollment figures in Expansion Possibility B but includes the assumption, taken from KFF data, that North Carolina's traditional Medicaid adults are about 10 percent more expensive than the average of all the other states and that children enrolled in Medicaid in North Carolina are about 10 percent less expensive than the average. We have no reason to believe this finding would not hold in the present time. Scenario C.1 models this possibility and reveals that the program's total cost under those assumptions would be nearly $6 billion.

KEY CONCLUSION

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We believe that all of the scenarios are possible were North Carolina to expand Medicaid. Based on the Urban report, the governor's budget, and our calculations, however, we think that the most likely scenarios are B.2 and C.1. Both of those estimates come very close to the Urban and Cooper enrollment estimates of 626,000, but their estimated costs per enrollee are much more precise. The total cost of these two scenarios ranges from $5.3 billion to $6 billion.

Given that historical estimates have underestimated Medicaid enrollment after major policy changes such as Medicaid expansion, we model a scenario in which the take-up rate among the uninsured is higher than the 73 percent take-up rate estimated in the Urban report. Our Expansion Possibility D (CBO expansion scenarios) estimates an increase of 70,000 enrollees, distributed between the expansion population and the traditional Medicaid population at a ratio of 95 percent to 5 percent, respectively. This increased take-up would bring total enrollment among all populations to 693,966. This estimate is much higher than the 626,000 estimate from Urban and Cooper, although as explained above it is within the realm of possibility.

Finally, Urban's national estimates reveal project total costs could be about 20 percent higher than if all the increased enrollment were solely from the expansion population. In Expansion Possibility E, we model a similar ratio of 20 percent higher state costs for three scenarios: one based on 500,000 expansion enrollees per Cooper's budget, one on 626,000 total new enrollees per the Urban report, and one on 600,000 expansion enrollees per the higher expansion enrollment we calculated based on the governor's enrollment expectation of 626,000 and his budget's program costs. Since Cooper's costs and enrollment were low, we thought it worthwhile to model North Carolina's costs as if they were more reflective of the experience in other states even if those scenarios were less likely.

We believe that all of the scenarios are possible were North Carolina to expand Medicaid. Based on the Urban report, the governor's budget, and our calculations, however, we think that the most likely scenarios are B.2 and C.1. Both of those estimates come very close to the Urban and Cooper enrollment estimates of 626,000, but their estimated costs per enrollee are much more precise. The total cost of these two scenarios ranges from $5.3 billion to $6 billion.

TAX METHODOLOGY

W e now take our modeled scenarios and calculate how much revenue North Carolina would need to cover the state's portion (10 percent) of the cost of Medicaid expansion. Recall that the governor and Democratic lawmakers have repeatedly claimed that no new state appropriations would be needed to pay for Medicaid expansion because the premium taxes and provider taxes would be sufficient to fund the state's portion of expansion costs.

In this section, we examine this question using a baseline scenario (A.2) and the two most likely scenarios (B.2 and C.1). We compare the revenue the governor intended to raise with the state costs estimated in these scenarios. Funding for the state share would come from two primary sources besides the General Fund appropriations. The managed care organizations would pay a 1.9 percent premium tax on the PHPs they contract to the state, and hospitals and other care providers would pay a provider tax (i.e., bed tax) to fund the rest of the state share for the expansion population.

The insurer's tax burden is included in the negotiated rate, so it essentially inflates the cost of the PHPs and increases the federal share of payments. The PHP premium tax is the only acknowledged state appropriation because it goes into the General Fund with other premium taxes on private health insurance plans. Because the Medicaid program involves more than just payments to managed care organizations, the rate is 1.8 percent of the total cost.

The state share for the expansion population is 10 percent, so the provider tax must pay the other 8.2 percent of state cost not covered by the PHP premium tax. Providers have agreed to cover all of the state's cost for Medicaid expansion because, like the insurers, their cost gets recycled through the federal government into a subsidy.

It is not clear if PHP contracts with the state and with providers are based on the higher costs that clearly would arise from an appropriate accounting for expansion, if providers and insurers would seek higher payments, or if payment timing would cause problems for insurers or providers at the elevated costs.

Tax Shortfalls

We start with scenario A.2. This scenario is the governor's most likely cost and enrollment scenario based on his budget, which we believe underestimates both variables. Notwithstanding the underestimation, we use this scenario as the baseline because it is likely what managed care plans and providers have agreed to.

SCENARIO A.2-TAXES

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	500,000	$8,625	$4,312.4	$431.2
Woodwork Adult	*17,567*	$7,008	$123.1	$40.1
Woodwork Child	*1,737*	$4,329	$7.5	$2.5
Woodwork Total	19,305	$6,768	$130.7	$42.6
Total	519,305	$8,556	$4,443.1	$473.8

	State Cost ($ millions)	Premium Tax ($ millions)	Provider Tax ($ millions)	Remaining Appropriation ($ millions)
Expansion	$431.2	$77.4	$353.8	-
Woodwork Total	$42.6	$2.3	-	$40.2
Total	$473.8	$79.7	$353.8	$40.2

KEY CONCLUSION
★ ★ ★ ★ ★ ★

We found that premium taxes on the expansion population would raise $77.4 million, leaving $353.8 million to be covered by the tax on providers. Furthermore, we estimate that after taxes on premiums for the traditional Medicaid population, the state would still need to appropriate $40.2 million.

In scenario A.2–Taxes, we calculate the estimated tax revenue the state would need based on our modeled scenario A.2. We start with the total state costs of the expansion and woodwork populations, $473.8 million. We found that premium taxes on the expansion population would raise $77.4 million, leaving $353.8 million to be covered by the tax on providers. Furthermore, we estimate that after taxes on premiums for the traditional Medicaid population, the state would still need to appropriate $40.2 million.

Since we know this scenario is unlikely owing to the higher expected take-up in both the Cooper budget and Urban report, we then compare the estimated revenue needed from provider taxes and premium taxes with total state costs of expansion estimated in the more likely scenarios.

As we stated previously, scenario B.2 was one of the most likely scenarios given assumptions from the Urban report and Cooper's budget. In scenario B.2–Taxes, we estimate how much additional revenue the state would need from premium and provider taxes under scenario B.2.

SCENARIO B.2–TAXES

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	600,000	$8,604	$5,162.4	$517.5
Woodwork Adult	*21,081*	$7,008	$147.7	$48.2
Woodwork Child	*2,085*	$4,329	$9.0	$2.9
Woodwork Total	23,166	$6,768	$156.8	$51.1
Total	623,166	$8,536	$5,319.2	$568.6

	State Cost ($ millions)	Premium Tax ($ millions)	Provider Tax ($ millions)	Remaining Appropriation ($ millions)
Expansion	$517.5	$92.7	$424.8	-
Woodwork Total	$51.1	$2.8	-	$48.3
Total	$568.6	$95.5	$424.8	$48.3

KEY CONCLUSION
★ ★ ★ ★ ★ ★

The portion of state costs that the providers would cover would increase by $71 million to $424.8 million. All this funding would still leave the state needing to appropriate $48.3 million, $8.1 million more than in the previous scenario.

In this scenario, we start with a higher state cost of $568.6 million. With higher enrollment, the taxes on expansion enrollees would raise $15.3 million more on the expansion population and $500,000 more on the woodwork population. But the portion of state costs that the providers would cover would increase by $71 million to $424.8 million. All this funding would still leave the state needing to appropriate $48.3 million, $8.1 million more than in the previous scenario.

Our other equally likely scenario based on the models is scenario C.1. In scenario C.1–Taxes, we estimate the same tax revenue as above.

SCENARIO C.1-TAXES

	Enrollment	Average Cost/Person	Total Cost ($ millions)	State Cost ($ millions)
Expansion	600,000	$9,666	$5,799.4	$579.9
Woodwork Adult	21,081	$7,201	$151.8	$49.5
Woodwork Child	2,085	$3,941	$8.2	$2.7
Woodwork Total	23,166	$6,907	$160.0	$52.2
Total	623,166	$16,573	$5,959.4	$632.1

	State Cost ($ millions)	Premium Tax ($ millions)	Provider Tax ($ millions)	Remaining Appropriation ($ millions)
Expansion	$579.9	$104.2	$475.8	-
Woodwork Total	$52.2	$2.9	-	$49.3
Total	$632.1	$107.0	$475.8	$49.3

KEY CONCLUSION

★ ★ ★ ★ ★ ★

In this scenario, we calculate state costs to be $632.1 million. Premium taxes on the expansion population would raise $104.2 million, which would leave $475.8 million to be paid by the providers. This amount would be an increase of $122 million compared with the baseline. In addition to those revenues, the state would still need to appropriate $49.3 million, an increase of $9.1 million compared with the baseline.

In this scenario, we calculate state costs to be $632.1 million. Premium taxes on the expansion population would raise $104.2 million, which would leave $475.8 million to be paid by the providers. This amount would be an increase of $122 million compared with the baseline. In addition to those revenues, the state would still need to appropriate $49.3 million, an increase of $9.1 million compared with the baseline.

DISCUSSION

This study incorporates all possible assumptions about Medicaid expansion to forecast costs and enrollment amounts for several different scenarios. Despite lacking clarity from the governor's budget and the 2018 Urban report on some inputs, such as cost per enrollee or how enrollment would be distributed among the expansion and woodwork populations, we are able to work through several scenarios to come up with the most likely scenarios based on available data.

Now that we have calculated the tax assumptions for each of our most likely scenarios, we can estimate the difference between the expected cost of Medicaid expansion in North Carolina and how much revenue Cooper and state Democrats think that premium and provider taxes would raise. The provider tax agreed to by hospitals is supposed to cover the difference between total state costs and what the premium tax raises.

KEY CONCLUSION

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The other most likely scenario reveals an even larger funding gap. In Scenario C.1–Taxes, we find that the state would need an appropriation of $49.3 million, while the difference in the provider tax revenue needed would be $122 million. Under this scenario of Medicaid expansion, the state would face a funding gap of $171.3 million.

Starting with scenario B.2–Taxes, we find that the state would need an appropriation of $48.3 million. Going further, however, we find the difference between Cooper's baseline provider tax revenue and the provider tax revenue the state would need for this scenario would be $71 million. If scenario B.2 were the outcome, the state would have a funding gap of $119.3 million.

The other most likely scenario reveals an even larger funding gap. In Scenario C.1–Taxes, we find that the state would need an appropriation of $49.3 million, while the difference in the provider tax revenue needed would be $122 million. Under this scenario of Medicaid expansion, the state would face a funding gap of $171.3 million.

To be clear, those are estimates of the funding gap for the first year of an expanded Medicaid program. The funding gap would perpetuate and possibly even grow each year under Cooper's expanded Medicaid program, depending on the number of enrollees and per-enrollee costs.

CONCLUSION

Our findings reveal that the two most likely cost and enrollment scenarios that would come about from Medicaid expansion in North Carolina would leave the state with a funding gap estimated from $119.3 million and $171.3 million in the first year.

If Medicaid expansion were to be implemented in North Carolina, this funding gap of $119.3 million to $171.3 million in the first year alone would have to be made up through new state appropriations, increased taxes on managed care plans, or higher taxes on providers.

As the program grew, the funding gap would continue every year and could increase based on enrollment in the program and cost of the enrollees in the future.

Endnotes

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Jordan Roberts joined the Locke Foundation in the summer of 2018 as Health Care Policy Analyst. He analyzes state and national health policy issues with an eye toward removing government barriers and instead infusing health care with free-market solutions that encourage competition, expand access to quality care, and lower costs.

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Our Mission

The John Locke Foundation employs research, journalism, and outreach programs to transform government through competition, innovation, personal freedom, and personal responsibility. JLF seeks a better balance between the public sector and private institutions of family, faith, community, and enterprise.

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