RE-ASSESSING THE COSTS AND IMPACTS OF A UNIVERSAL HEALTH CARE SYSTEM IN MAINE

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Contents

Executive Summary 3
Introduction 4
Design principles 5
Estimated costs and savings 5
Table 1: MaineCare average annual costs, 2023 6
Table 2: Summary of costs 8
Table 3: Impacts of further expanding Medicaid for select populations 10
Changes in total health care spending 10
Chart 1: Composition changes, but total health spending remains similar under Universal plan 11
Alternative Calculation of Total Health Care Spending and Cost of Public Plan 11
Table 4: Alternative estimate of total health spending 13
Example of the revenue impacts on a physician-run practice under the single-payer plan 14
Table 5: Hypothetical example of plan on a small physician-owned provider's office 15
Impacts for hospitals under the single-payer plan 16
Table 6: Estimated potential savings from plan for Maine's largest hospital groups 18
Reducing administrative waste 18
Administrative costs in the state plan 19
Interaction with federal law 19
Paying for the public plan 20
Table 7: Potential new income tax rate structure 22
Table 8: Summary of revenues 23
Example impacts on Maine households 24
Appendix A. Detailed breakdown of costs 27
Appendix B. Premium contribution scale and methodology 29
Chart 2: Premium cap at different ratios of household income to poverty level 30
Notes 32

Executive Summary

This report is an update to the 2019 report "Assessing the Costs and Impacts of a State-Level Universal Health Care System in Maine," prepared for Maine All Care.[1] It aims to present updated figures and to address additional questions regarding the creation of a universal public health care program to ensure all Maine residents have access to affordable health care.

In general, the approach taken in this report is similar to that in 2019, with the incorporation of updated figures and data sources where possible. There are, however, some notable changes:

- Cost figures have been updated to reflect the increased cost of medical care. Between 2018 and 2023, the average cost of medical care has increased 13 percent.[2]
- Overall reimbursement rates to providers have been increased to better reflect the cost of providing care to patients.
- Total covered care under the proposed public plan has been expanded, particularly for older Mainers.

Together, these changes have resulted in higher overall costs for the public plan, while producing a more comprehensive and feasible roadmap to universal public coverage.

As in the 2019 report, this report lays out one potential route to universal public coverage, by building upon existing federal programs (particularly Medicaid and Medicare). It maximizes the number of people covered by federal programs or programs which generate federal matching funds, and covers the remaining population with a new public state-run plan which mirrors many of the characteristics of the existing MaineCare program (though with higher reimbursement rates).

In addition to federal funds, costs for the program are covered through a combination of individual and business payments which replace the current system of insurance premiums, and a series of changes to the existing tax code. These payment mechanisms are designed to be broadly progressive, requiring the largest contributions of those with the most means.

While this report finds that total health care spending would increase slightly under the proposed plan, total spending from in-state sources would decrease by $1.4 billion per year. Along with the progressive payment mechanisms, this means that most Mainers will pay less under the proposed plan than under the status quo, while also being free of the stresses that come from being unable to afford copays and deductibles, worrying about in-network coverage, or switching insurance providers.

The final implementation of a universal public health care system in Maine will be a significant undertaking, and policymakers will be faced with a number of decision-points and options. This report lays out one possible approach, and demonstrates the feasibility of the concept, as well as its potential benefits to the state as a whole.

Introduction

Since 2019, the case for a comprehensive public health care program has only increased. The COVID-19 pandemic demonstrated the inadequacy of our current expensive and fractured health care system, which leaves many Mainers without adequate access to care, either because they don't have health insurance at all, or because the coverage they do have leaves care unaffordable. At the same time, policymakers recognized the advantages to delivering care that is free at point of service with minimal administrative cost. For example, provision of Covid tests and vaccines was made free during the pandemic to encourage their use. Typical eligibility requirements for Medicaid programs like MaineCare were relaxed, allowing people to remain enrolled even if their income rose above the eligibility level during the public health emergency period. At the same time, the public health costs of Covid were worst among Americans with low incomes, partly because of a prior lifetime of poor access to affordable health care.

Over the past four years, state and federal laws have also taken steps towards greater access to health care. At the state level, Medicaid expansion has been fully implemented, leading to over 100,000 Mainers being enrolled in the expanded eligibility group. Maine has also added routine dental care to its MaineCare benefit, expanded eligibility for children and teens to 300 percent of the federal poverty level, and expanded postpartum coverage for new mothers to 12 months. At the federal level, an expansion of subsidies under the Affordable Care Act and closing the so-called "family glitch" has made individual market private plans more accessible to Mainers.

These changes, while beneficial, have still not resolved the problems with health care affordability and accessibility in Maine. In 2022, 6.6 percent of Mainers went without health insurance. Apart from 2021, this was at the lowest share of uninsured people as long as this statistic has been measured, since 1988.[3] Yet that still left 90,000 Mainers without health insurance, and that number probably rose as some of the public health emergency measures expired in 2023. Meanwhile, cost continues to be a barrier to care even for the majority with health insurance. Six percent of Maine adults with private insurance (around 33,000 people) and 3 percent of those with Medicare (9,500 Mainers) had to delay or forgo a doctor's appointment because of cost in 2021.[4]

Less visible to most Mainers is the underlying problem of cost in the health care system. Even when Mainers have access to insurance without high deductibles or copays, they — and by extension all of us — are still paying too much for health care. Compared to other developed countries, prices for similar health care procedures are significantly higher in the United States — primarily because the US does very little to regulate the price of health care products or services.[5] Again, political consensus in the US is beginning to recognize this problem and enact solutions. For example, the federal government began to negotiate a small number of Medicare drug prices for the first time in 2023. However, this represents only a small step towards what should be a much stronger policy of price negotiation.

A system of publicly funded and privately delivered health care can address many of these issues. It can ensure that every Mainer has health care access without periods of uninsurance. It can provide care with minimal costs to patients at the point-of-service, and it can reduce overall health care spending in the state through negotiation of prices. It can also provide savings through the reduction of administrative costs to providers, patients, and payers.

Design principles

In designing a public health care program for Maine, the Maine AllCare committee has laid out several key principles:

Universality — as far as is practicable, all Mainers should be included in the public plan

Efficiency — reduce the waste and overly complicated administration in the current system

Simplicity — the plan should be easy for Mainers to understand and use.

Additionally, any state-level health care reform must work within the structures of federal law, particularly the Employee Retirement Income Security Act (ERISA) which limits states' abilities to regulate employer-sponsored health care plans, and the Patient Protection and Affordable Care Act (ACA), which established multiple requirements for individual and employer purchase of private insurance.

There are also multiple existing public health care programs which are either partly or fully funded by the federal government. To reduce the total cost of a universal state program, it would be advisable to make use of these existing federal programs, with the state providing wraparound services to fill current gaps in these programs. MaineCare, the state's Medicaid program, already operates on this principle. For example, there are currently around 83,000 older Mainers who are currently enrolled in both Medicare and Medicaid (these are often known as "dual eligibles").[6] In these cases, Medicare is the primary source of health insurance, while Medicaid covers costs which are not covered by the Medicare program. Maine should follow a similar model for any residents who would be eligible for the new state plan and any other federal programs (including Medicare, the Veterans Administration, TRICARE for current service members, and the Indian Health Service).

Estimated costs and savings

The basic cost component for the proposed statewide health care plan is the current average annual cost of someone enrolled in the MaineCare program for state fiscal year 2023. These were chosen as baseline figures because MaineCare is an existing program which already covers individuals' health needs without a copay or deductible. The per-person MaineCare costs therefore represent a reasonable assumption of health care usage under a free-at-point-of-service health plan.

It is worth noting that the costs to cover people through Medicaid are likely to be lower for higher income individuals who will be newly eligible under the universal plan than the current low-income population. For example, in 2021 among Maine adults aged 18-64, 50 percent of those with incomes below $15,000 a year reported being in "poor" or "fair health" compared to just 4.4 percent of those with incomes above $100,000 a year.[7] This analysis does not attempt to adjust costs to account for those income factors, which means that the total computed cost may be somewhat overstated.

The existing per-person costs in state fiscal year 2023 were then adjusted upwards to account for a higher reimbursement rate which is equivalent to the current Medicare reimbursement rate. This cost will apply to Mainers who currently have private insurance plans or who are currently uninsured.

Table 1: MaineCare average annual costs, 2023

	Current cost	Cost at enhanced rate
Children (up to age 18)	$4,389	$5,635
Young adults (19 and 20)	$5,756	$7,390
Adults (21 to 64)	$8,601	$11,042

Source: Maine Department of Health and Human Services data via FOAA request. Costs for non-disabled MaineCare members for state fiscal year 2023. "Enhanced rate" is equivalent to the base rate plus 28 percent.

For Mainers who are currently enrolled in federal public programs (aside from Medicare), the costs will be lower, because these programs will act as the primary payer, with the new state program as a secondary payer:

> For Mainers with Veterans Administration health care, the estimated average annual cost for supplementary private insurance and out of pocket costs is $3,479.[8]
>
> For Mainers with TRICARE health care, the average annual out of pocket cost currently paid by patients is $4,314.[9]
>
> For Mainers covered by the Indian Health Service, the estimated shortfall in funding is 41 percent of the Medicare rate, e.g. $2,159 for children and $4,232 for adults.[10]

For older Mainers, nearly all of whom are enrolled in the federal Medicare program, the state could provide coverage to address deficiencies in the current Medicare program:

- While basic services are covered under Medicare's Part A and Part B components, Medicare generally covers just 80 percent of the incurred costs. To cover the remaining 20 percent, older Mainers purchase a Medicare Supplement Insurance, also known as a Medigap plan. Providing a state benefit equivalent to the most comprehensive level of Medigap plan would cost an average of $3,041 per person.[11]
- Medicare does not currently cover comprehensive dental, vision, or hearing benefits, including a state-level benefit for these would cost an estimated $980 per person per year.[12]
- To cover the costs of prescription drugs, the state plan could mirror the benefit currently provided by the Medicare "Extra Help" program, which covers the costs of prescriptions, except for a nominal copay, for older Americans with very low incomes and limited assets. The cost of this component is estimated at approximately $5,300 per person per year.[13]

The total annual cost for all three components would be $9,321 per person per year. Older Mainers would only need to cover the cost of Part B monthly premiums and some nominal copays.

Based on current demographics and insurance coverage, the total cost of a public plan using these components would be $10.6 billion per year (see Appendix A for full calculation).

This total cost would be offset by several sources of savings:

Increasing the reimbursement rate from Maine's current MaineCare levels would be covered by the traditional Federal Matching Assistance Program, meaning that the federal government would cover approximately two-thirds of these additional costs. This results in $678 million in savings.

Assuming that traditional Medicaid coverage could be expanded to meet the maximum eligibility levels in place in other states, to 221 percent of the federal poverty level for parents, 215 percent for non-parent adults, and 324 percent for children up to age 20, the federal government would cover $405 million of costs to cover new enrollees under the expanded eligibility rules.

Under the Affordable Care Act, the state could apply for a waiver to apply the current federal subsidies under the ACA towards a new state plan. These subsidies currently amount to $312 million but could be increased if the state encouraged more Mainers to purchase insurance before transitioning to the state-run plan. The more Mainers who are enrolled in the ACA marketplace and receiving subsidies, the larger the total amount of subsidies which can be reapplied using the section 1332 waiver.

The total cost of health and dental insurance for current state employees was $123 million in state fiscal year 2023.[14] The estimated cost of the state's share of school employee health insurance costs is another $119 million.[15] Note that the state may not wish to fully realize these savings in the final implementation of a universal plan. Currently, the state offers very generous health insurance benefits for its employees, paying up to 100 percent of premiums for the lowest-paid state workers.[16] For family plans, the state share is up to 75 percent of premiums. (This does not account for the copays and deductibles employees are liable for). Depending on each employee's family and financial circumstances, as well as their health status, some state employees may be liable for a larger contribution under the universal plan envisaged here. The state may therefore wish to apply some of these savings to continue subsidizing employee plans, or towards higher wages and salaries.

Approximately half of all workers' compensation claim costs are medical in nature.[17] With a comprehensive public plan in place, workers' compensation premiums would be reduced by approximately 50 percent. For the State of Maine, this results in a saving of $8.2 million each year.

Current state funding for the Low Cost Drugs for Maine's Elderly program would no longer be necessary, producing a $5.0 million annual saving.

After these savings, the net cost to the state of the public plan would be a little under $9.0 billion per year.

Table 2: Summary of costs

Total health care spending (see chart 1)	$19,323 million
Existing federal Medicare funds	-$3,776 million
Existing state and federal Medicaid health spending	-$3,671 million
Existing state and federal Medicaid administration	-$238 million
Existing federal spending on other programs	-$899 million
Residual out-of-pocket spending	-$88 million
Total new spending under public plan (see line 37 of appendix A)	$10,646 million
Federal Medicaid funds (increase reimbursement for current enrollees)	-$678 million
Federal Medicaid funds (expansion 1)	-$405 million
Federal share of Medicaid admin costs	-$44.9 million

Federal ACA pass-through money	-$312 million
State health plan savings	-$123 million
State share of school employee health plan savings	-$119 million
State workers' compensation savings	-$8.2 million
Low Cost Drugs for Maine's Elderly program	-$5.0 million
Remaining state share to raise through revenues	$8,951 million

For a detailed accounting of costs, see Appendix A.

Building on the current Medicaid model

The cost model above is broadly similar to the 2019 model, and assumes that the state would both maximize current Medicaid enrollment, and seek to expand eligibility to leverage further federal funds for investment.[18] The expansion proposed in 2019 and in the preceding section would bring Maine's Medicaid eligibility levels in line with the District of Columbia which currently has the highest approved levels of any jurisdiction in the country. This adds approximately 97,000 Mainers to the Medicaid program.

However, it may be possible to draw down more federal dollars by expanding the Medicaid program still further. New Mexico is considering a novel and ambitious approach of eliminating income eligibility in its Medicaid program altogether, effectively enrolling every resident in the program.[19] However, this would represent a highly novel approach. While Medicaid's statutory authority appears to allow for any upper income limit on Medicaid eligibility, no state or territory has expanded eligibility in such a drastic way, and it is possible that Congress would act to limit federal funding in such a scenario.

An alternative and more conventional approach would be to expand Medicaid eligibility, without opening the program to all residents. A more ambitious expansion of Medicaid eligibility could expand eligibility to 321 percent of the federal poverty level for parents, 315 percent for non-parent adults and 424 percent for children and young people up to the age of 20. This configuration would add another 162,000 Mainers to Medicaid in addition to those mentioned above, or almost 259,000 above the status quo. It would also result in savings of $1,013 million from federal matching funds, reducing the net cost to the state to $7.9 billion.

Table 3: Impacts of further expanding Medicaid for select populations

Group	Total population	Currently enrolled	Additional enrollment at DC levels	Additional enrollment at higher eligibility level
Parents (21-64)	221,000	59,000	12,000	33,000
Nonparents (21-64)	507,000	92,000	40,000	77,000
Children (0-18)	266,000	118,000	28,000	39,000
Young adults (19-20)	32,000	1,600	16,000	13,000
Other eligibility groups	n/a	124,000	0	0
Total	1,025,000	395,000	97,000	162,000

Author's calculation using US Census Bureau, Current Population Survey, Annual Social and Economic Supplement for 2021 and 2022. Current enrollment numbers derived from Maine DHHS data for June 2023. "DC levels" represent eligibility at 221 percent of the federal poverty level for parents, 215 percent of FPL for nonparents, and 324 percent of FPL for children and young adults. "Higher eligibility level" represents eligibility at 321 percent FPL for parents, 315 percent of FPL for nonparents, and 424 percent FPL for children and young adults. "Other groups" includes those who qualify due to a disability, those over 65, and those who are eligible for partial coverage like those in the Medicare Savings Plan or Drugs for the Elderly program. Numbers may not sum due to rounding.

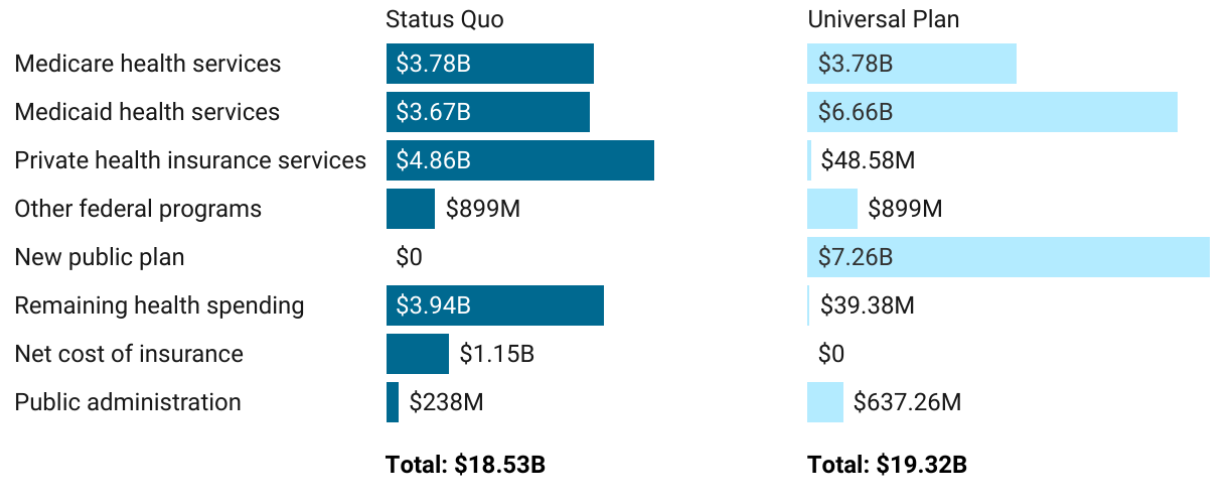
Changes in total health care spending

Modelling the precise impact of a universal public health insurance system on total health care spending can be difficult, and estimates will vary significantly based on assumptions about patient behavior, as well as secondary economic effects such as employer compensation patterns, and availability of care.[20] Nonetheless, based on the assumptions in this report, total health care spending would increase only slightly with the creation of the universal plan.

Currently, total health consumption expenditures in Maine, including administrative costs, are approximately $18.5 billion. Under the universal plan in this report, that spending could increase to $19.3 billion — an increase of 4 percent. Compared to the status quo, the new model sees significant savings from all-but-eliminating private health insurance companies' profits, and greatly reducing the administrative costs in general. This allows for significantly higher spending on health care services, with only a modest increase in total health spending. According to this estimate, spending on delivery of health care services increases by 9 percent, while expenses for administering health insurance plans decreases by more than 50 percent.

It is also worth remembering that of the increased health care spending under the new plan, a significant share will come from federal matching dollars in the Medicaid program. Assuming the more ambitious expansion of Medicaid eligibility, the new plan would include a total of $2.1 billion each year in federal funds (see Appendix A), so compared to the status quo, total spending from *in-state* sources would *decrease* by just under $1.4 billion each year.

Chart 1: Composition changes, but total health spending remains similar under Universal plan



Author's calculations using National Health Expenditure data for 2022 and State Health Expenditure data for 2020, adjusted to 2023 dollars using the Consumer Price Index for Medical services (CPI-M). Spending on Medicare and other federal programs are assumed to remain constant under the universal plan, while spending on out of pocket and other private expenditures are assumed to decrease by 99 percent. Estimates for spending under the new public plan and administrative costs are explained elsewhere in the report.

Alternative Calculation of Total Health Care Spending and Cost of Public Plan

While the analysis presented above represents the author's best estimate of total health care costs and savings under a universal health care plan, findings from other studies suggest that there is a wide variation of possible outcomes. One meta-analysis of 22 single-payer health care plans published before 2020 found that net costs or savings in the first year of such plans ranged from an increase in total costs of 7.2% to a decrease of 15.5%.[21] 19 of the 22 plans included in the meta-analysis resulted in net savings, with the median net savings amounting to 3.5% of total health care costs.

This suggests that the total costs calculated in this report, which shows an increase in total spending of 4%, may be overstating the total costs under the universal plan. However, it is difficult to say so definitively. In other single payer models, increased costs and savings have varied significantly depending on the assumptions made by the modeler.

Under the baseline model in this report, the total cost of health care delivery is based on the current cost to deliver care under the Medicaid (MaineCare) system, which has the advantage of using the real-world expenditures of Mainers who are currently enrolled in a plan with no copays or deductibles.

The alternative approach taken by many researchers is to begin with the current cost of total health care usage, and adjust that figure to account for increased costs from new demand, while offsetting costs for administrative savings and lower costs for services than those offered by commercial insurance. These can result in lower net costs for the universal coverage plan, but they result in many more assumptions which increases the potential for error.

Nonetheless, it may be helpful to see how this alternative approach would result in a different total net cost.

First, we must calculate the increased demand for health care which results from the elimination of copays, deductibles, and other out-of-pocket costs. Some researchers argue that because the need for health care is relatively inelastic, demand will not increase much as out-of-pocket costs decrease. Other researchers predict that many Americans forgo necessary care because of the out-of-pocket costs in the current system, and the system will see higher usage as these people can finally get their health care needs addressed. In some studies, this increased demand is curtailed by the inability of the system to deliver more care rapidly. Estimates of the cost of increased demand range from 2.0% to 19.3% of existing costs, with the 2020 meta-analysis finding the median cost of increased usage was 9.3%.

Beginning with total personal health expenditures of $17.1 billion in Maine in 2023, increased demand at the rate of 9.3% would result in increased costs of just under $1.6 billion under the universal public plan.

Administrative savings can be estimated in the same way as before – by comparing the overheads of a publicly administered plan like MaineCare with the net cost of private insurance. In total, moving to a public administration saves just over $750 million each year.

Adjusting payments to match those in Medicare provides some additional costs (through increasing current Medicaid rates) while reducing others (by reducing current commercial insurance prices to match those in Medicare). The additional Medicaid payments amount to around $930 million in additional costs, but these are more than offset by over $2.5 billion in savings from switching from commercial to Medicare prices.[22]

In total, the new costs under these assumptions would be a little under $17.8 billion, or 4% less than the status quo.

Table 4: Alternative estimate of total health spending

1	Status quo: Public Health Expenditures	$17,142 million
2	Status quo: Net cost of Insurance	$1,150 million
3	Status quo: Public Administration	$238 million
4	Status quo: Total	$18.530 million
5	Additional cost from increased demand (9.3% of (1))	$1,594 million
6	Administrative savings	-$751 million
7	Additional Medicaid payments	$931 million
8	Reduced commercial payments	-$2,549 million
9	New total	$17,755 million
	Of which health expenditures	$17,118 million
	Administrative costs	$637 million

Reimbursement rates

Determining appropriate reimbursement rates to health care providers is critical for any universal health care plan. The biggest criticism of the current Medicaid structure is that reimbursement rates for providers are too low, which forces providers to charge higher fees to patients with commercial insurance to make up the shortfall. For example, according to the Maine Hospital Association, Maine's Medicaid's service fees represent approximately 72 percent of the cost of care estimated by the hospitals. Meanwhile, the Medicare program reimburses approximately 87 percent of the cost of care. Hospitals make up these shortfalls (and those incurred by unpayable debts and charitable care) by charging private insurance plans at a rate of approximately 160 percent of the cost of care.[23]

However, estimating the true shortfall of the current MaineCare rates is complicated by the fact that payments vary widely by service and care setting. For example, under the Maine Hospital Association's calculations, Medicaid payment rates are, on average, 83 percent of those for Medicare. A national average from the Medicaid and CHIP Access Payment Commission found that state Medicaid rates average 78 percent of those for Medicare for hospital inpatient treatments.[24] However, an Urban Institute study in 2019 based on surveys to state Medicaid programs estimated that for physician services (including non-hospital providers), the Medicaid rate in Maine was just 66 percent of the Medicare rate.[25]

Moving to a universal public health care plan does offer some significant savings to providers. Administrative overhead would be reduced because they would have fewer insurers to bill, and universal coverage would eliminate the legal requirement for hospitals to provide charitable

care. It should also eliminate instances of providers being owed money which they will never recover from patients (sometimes called "bad debt"). Providers also face substantial book-keeping and overhead costs which would be reduced under a simplified billing program.[26]

Despite these savings, a plan which reimbursed costs at current Medicaid rates would likely result in a net loss in revenue for providers, as they would see significant reduction in revenue from patients switching from private plans to the new public plan. However, were the new plan to be set at the Medicare rate, along with a commensurate increase in the current MaineCare rates for individuals in that program, the transition to a universal public health plan would be sustainable for Maine providers.

To account for variations in the payments rates for Medicaid and Medicare between services, this analysis assumes that the reimbursement rate for the new plan would average 128 percent of the current Medicaid rate, based on the division of current health care spending between physicians and hospitals.[27] In a final plan, the rate could be increased more for physician services, and less for hospital services.

Example of the revenue impacts on a physician-run practice under the single-payer plan

This example assumes a small primary care physician's practice with a staff of three (one receptionist, one nurse, and a bookkeeper who processes billing and insurance related expenses). The figures are adapted from a study which appeared in the International Journal of Health Services in 2022.[28]

Under the proposed universal state plan, Medicaid revenues are increased by 51 percent to reflect increased reimbursement rates for physicians' practices. Meanwhile, the switch from commercial insurance to the new universal plan results in a 30 percent drop in revenue for those patients. As a result, the gross revenue of the practice declines slightly (9.5 percent).

With an estimated reduction in billing and insurance administration, the practice can reduce its bookkeeper position from 1 FTE to 0.66 FTE.

The practice saves $59,000 on health insurance premiums for the staff and their families, which is only slightly offset by the increased tax on businesses services (assumed to be 5.5 percent of all other expenses) and the new payroll tax (which will be assessed at 0.3 percent for a business with three employees).

The physician's gross revenue is therefore significantly higher after deducting expenses, and even with the increased higher rates of income tax for high earners, their net earnings after taxes are around 9 percent higher than under the status quo.

Table 5: Hypothetical example of plan on a small physician-owned provider's office

		Status Quo	Under new plan
1	Practice income (Medicare)	$110,000	$110,000
2	Practice income (Medicaid)	$85,000	$128,788
3	Practice income (Other)	$305,000	$213,287
4	Total gross practice income ((1)+(2)+(3))	$500,000	$452,075
5	Salary, receptionist	$36,890	$36,890
6	Salary, nurse	$53,343	$53,343
7	Salary, bookkeeper	$44,686	$29,493
8	Total payroll expenses ((5)+(6)+(7))	$134,919	$119,726
9	Other expenses	$56,004	$56,004
10	Health insurance for staff	$37,735	$0
11	Health insurance for physician + family	$21,342	$0
12	New payroll tax	$0	$359
13	New sales taxes	$0	$3,080
13	Total expenses ((8)+(9)+(10)+(11)+(12)+(13))	$250,000	$179,169
14	Gross physician revenue ((4)-(13))	$250,000	$272,905
15	Income tax owed	$16,116	$21,382
16	Net physician revenue ((14)-(15))	$233,884	$251,523

For a detailed breakdown of assumptions and costs, see Bryant 2022 at note 28. The income tax liability is calculated assuming the physician is a single filer and takes only Maine's personal exemption and standard deduction.

Impacts for hospitals under the single-payer plan

Using data from the Maine Health Data Organization, it is possible to estimate the aggregate impact of the proposed universal plan on Maine's hospitals. Depending on the assumptions used, hospitals could see slightly higher or slightly lower revenue compared to the status quo. Additionally, they would be see substantial reductions in administrative costs and employee benefits.

Under the primary set of assumptions used in this report, total spending on health care services (i.e. excluding administrative costs) in Maine would increase from $17.1 to $19.7 billion – an increase of 9% (see Chart 1). This would presumably translate into an equivalent 9% increase in patient service revenue at Maine's hospitals.

Under the alternative calculations, spending on services would essentially be flat at $17.1 billion (see Table 4).

Regardless of health care spending assumptions, it is unclear how much the increase in patient usage of services would cost hospitals. Under hospitals' own assumptions, even the enhanced reimbursement rates only cover 87% of the cost of delivering care, which implies that each additional service delivered at this rate results in a net loss in revenue for the hospital. Some of this would be offset by the savings enumerated below, but if the hospitals' calculations of costs are taken at face value, most hospitals in the state would incur a net loss from moving to Medicare reimbursement rates for all services.

There are, however, reasons to think that the impact on hospital revenues could be mitigated. Firstly, some hospital costs are fixed, so the marginal cost to serve additional patients is lower than the per-person cost of serving current patients.

Additionally, moving to a near-universal payment system for services could allow administrators of the public plan to adopt incentives for hospitals to operate more efficiently. The state of Maryland has been able to hold down health care spending and force hospital efficiencies through a number of tools, including all-payer rate setting and global budgeting.[29]

Some examples of sources for hospital savings:

In FY 2022, Maine's five large hospital systems spent $149 million providing Free Care (sometimes called Charity Care) to low-income patients without adequate insurance.[30] A further $301 million in bad debt was written off by the hospital systems in the same year. Hospitals report these numbers in terms of their calculated cost of care, which is higher than the amount they would be reimbursed under the universal plan; nonetheless, even with the discounted reimbursement, the elimination of these costs would save the large Maine hospital systems almost $392 million each year.[31]

Further, hospitals would see a reduction in billing and insurance-related expenses. Estimates for the total cost of BIR expenses vary, but a reasonable estimate is 8.5 percent of net patient service revenue.[32] If those costs are reduced by one third due to the switch to a universal coverage system,[33] BIR savings for the five large hospital systems would amount to $217 million annually.

Hospitals would no longer have to pay for employees' health insurance coverage. Maine Health Data Organization's hospital financial reports do not report a separate calculation for health insurance to employees, but an estimate can be derived from other known data. According to national estimates, health insurance premiums accounted for 7.5 percent of total employee compensation in private health care and educational service industries.[34] Since the total salary and benefit cost for the five hospital systems in 2022 was just under $5 billion in 2022,[35] the savings from eliminating health insurance premiums would be almost $374 million per year. However, most of this would be offset by the new payroll tax on employers. As large employers, hospitals would be liable for a 10 percent payroll tax under this plan.[36] Wages and salaries are estimated to comprise just over 66 percent of total hospital compensation in 2022,[37] meaning that the 10 percent tax would be assessed on $3.3 billion in wages, and result in a $329 million offsetting cost for the hospital systems.

The net result of all these changes would be just under $653 million in savings for the large hospital systems (8.4% of current net patient service revenue), which could offset a reduction in patient revenues from changes to the reimbursement rate structure.

Table 6: Estimated potential savings from plan for Maine's largest hospital groups

1	Current free care	$149 million
2	Current bad debt	$301 million
3	Current net patient service revenue	$7,732 million
4	Current salaries and benefits	$4,982 million
5	Free care savings (87% of (1))	$130 million
6	Bad Debt savings (87% of (2))	$262 million
7	Billing and Insurance Related savings (33% of 8.5% of (3))	$217 million
8	Health insurance savings (7.5% of (4))	$374 million
9	Wages and salaries (66.1% of (4))	$3,294 million
10	Payroll tax (10% of (9))	$329 million
11	Net savings ((5) + (6) + (7) + (8) – (10))	$653 million

Source: Author's analysis of Maine Health Data Organization, 2022 Hospital Financial Reports.

Reducing administrative waste

One critique of the current US health care system, which costs more and delivers less than the health care systems in peer countries is that the current structure, with multiple private insurance companies creates unnecessary administrative waste and thereby pushes up costs. For patients there is the inconvenience of wasted time and effort understanding their plan's coverage limitations and navigating copays, deductibles, and out-of-pocket maximum calculations, and this complexity can even lead Americans to give up obtaining care completely,[38] or to obtain care in the wrong place (e.g. the emergency room instead of a primary care provider's office).[39] These issues are widespread — 58 percent of Americans in a recent survey reported having trouble working with their insurer to access care[40] — but they are especially acute for Americans with low incomes or from working class backgrounds.[41] Costs are also directly passed on to patients via the need to employ large numbers of staff at insurance companies and provider's offices to navigate billing procedures.

Low-end estimates suggest that billing and insurance-related administrative costs account for around 13 percent of total health care spending,[42] which would be the equivalent of just over $2.4 billion for Mainers in 2023.[43] Estimates vary as to how much these administrative costs could be reduced and would be limited in Maine by the need to rely on gradual voluntary take

up for a universal plan. A reasonable estimate based on the experience of places like Canada might be a 33 percent reduction in these administrative costs,[44] which would mean an overall savings for the system of just under $793 million per year.

It should be noted that a reduction in administrative costs, even wasteful costs, will generally translate into a reduction in employment in the health care sector. There are currently around 12,000 people working in administrative roles in hospitals and health care provider settings; a one-third reduction in administrative costs could reasonably be assumed to result in a loss of 4,000 of these jobs.[45] Thankfully, Maine currently has a very strong labor market, in which there are more than two unfilled jobs for every unemployed worker.[46] While lawmakers may wish to consider financial help to health care administrative workers who need to switch jobs as a result of the transition to a universal plan, there should be no shortage of alternative employment for these individuals to take up.

Administrative costs in the state plan

One advantage of following the Medicaid model is the program's relatively low administrative costs. In federal fiscal year 2022, the MaineCare program spent $167 million on administration.[47] This is equivalent to 4.4 percent of the program's total budget of $3.8 billion.[48] Administrative overhead in private insurance plans, by contrast, is generally around 13 percent.[49]

In state fiscal year 2023, the Office of MaineCare Services employed 265 full-time equivalent employees to administer a program with 419,000 enrollees.[50] The new state health plan, which aims to enroll an additional 977,000 Mainers, could be assumed to require the hiring of 618 state workers. The cost of these staff is included in the 4.4 percent administrative cost calculation.

In this analysis, it is assumed that administrative costs for the state plan will also amount to 4.4 percent above the cost of new health spending (see Appendix A for details).

Interaction with federal law

One challenge of envisioning a state-run universal health plan is that the federal government retains authority over many areas of health insurance provision.

The Employee Retirement Income Security Act (ERISA) limits states' abilities to regulate employer-sponsored health care plans, and in particular, prohibits states from either prohibiting employer-sponsored private plans, or from somehow "recapturing" the premiums currently paid by employers and redirecting them to a state-run plan.[51] The most practical solution to ERISA's preemption would be for Maine to make participation in the state-run plan voluntary, and to offer a plan which provides health care coverage at such an attractively low cost that employees and employers choose to forgo private insurance and to switch to the

public plan. By leveraging federal funding and reducing administrative expenses, a public plan can offer the same standard of care for a lower cost than the current system.

The Patient Protection and Affordable Care Act (ACA) contains a few provisions which are relevant to designing a new state plan. One advantage for Maine is that the ACA established state-run marketplaces (Maine's version is CoverMe.gov) to compare and purchase health care plans. The new state-run plan should retain the marketplace structure and allow Mainers to purchase the new plan through the existing infrastructure. This could also be used to assess Mainers' incomes, collect premiums and assess the appropriate subsidy level. The ACA also introduced the principle of a tiered subsidy for health insurance dependent on income, which a new state plan should retain.

Currently, the ACA provides subsidies to consumers to purchase commercial plans through the marketplace (known as After-Premium Tax Credits, or APTCs). Under the terms of the ACA, the state can apply for a waiver under section 1332 of the act, to allow it to convert the current total amount paid in subsidies each year into a lump sum for the state to apply towards a public plan. In 2023, for example, Mainers received $313 million in After Premium Tax Credits, which could be redirected to subsidies for the new state plan.[52] It is possible that this number could be increased if the state took steps to maximize marketplace enrollment before applying for a waiver.

One way to maximize enrollment would be for Maine to reinstate a provision of the ACA which has fallen dormant. Originally, the ACA required individuals to purchase health insurance or face a penalty. This was known as the individual mandate. But since January 1, 2019, the federal government has not assessed any penalties for people who do not purchase plans. Several states have since implemented their own individual mandates to encourage people to purchase insurance.[53] Maine could consider doing the same to nudge people into purchasing the new state plan and maximizing enrollment.

Finally, Maine would also need to apply for a waiver from the ACA's employer mandate, which requires employers with more than 50 full-time employees to offer a health insurance plan to their employees.[54] This would allow more Mainers to gain health insurance through the state-run plan independent of their place of employment. Some care may be necessary in phasing out the mandate to avoid adverse selection of employees in the new public plan.

Paying for the public plan

While there are potentially many different ways to structure a revenue package to pay for a universal public health care plan, the following proposal aims to do so in a way that:

- Continues to share costs between individuals and businesses, while no longer tying insurance to a particular job
- Asks those individuals and businesses with the greatest means to pay the highest rates
- Leaves most Mainers and businesses paying less than under the current system

The largest source of potential revenue is from the payment of premiums by individuals. The state of Maine could use the existing infrastructure of CoverMe.gov (the state's ACA marketplace) to assess a premium for each family unit and to cap a family unit's payment rate as a share of their income. Following the structure of subsidies under the affordable care act, families would pay on a sliding scale, with the poorest families (including those on Medicaid) paying nothing and other families paying up to 8.5 percent of their income (or the total premium cost, whichever is lower).[55]

> For example, imagine a family of four with an annual income of $90,000. The mother has federal coverage through the Veterans Administration, so her premium is assessed at $3,479. The father is assessed the standard adult premium of $10,321 and the children are each assessed standard premiums of $5,267. The family's total premium would be $24,334. But based on the sliding scale, they pay just 6 percent of their annual income, or $5,400 per year.

Individual premiums with a payment scale such as this would raise an estimated $3.6 billion.[56] For a description of the premium scale and method of calculating revenue, see Appendix B.

A second major source of revenue would be a payroll tax levied on businesses based on the number of employees they have.[57] A sliding scale on a per-employee basis would ensure that larger firms pay a larger share of their income towards the tax, while keeping the cost for small businesses very manageable. A tax which scaled gradually at a rate of 0.1 percent for each employee, up to a maximum of 10 percent for those with at least 100 employees would raise $2.6 billion in revenue each year.[58]

A large amount of revenue can be raised by broadening and modernizing Maine's sales tax, which currently focuses on taxing physical goods and does not tax many services. As the economy has moved more towards service provision, this has eroded the revenue generated by the sales tax. It has also meant that the tax has fallen more on lower income individuals than on higher income individuals and businesses, who are more likely to purchase services.[59] Broadening the sales tax to cover a wide variety of services (though not educational, social, or medical services) would raise an additional $1.7 billion in revenue each year. Of this, Maine Revenue Services estimates $1.2 billion would be assessed on businesses and $0.5 billion would be assessed on individual purchases.[60]

Potentially new taxable sales include:

- Amusement and recreational services, such as movie tickets, amusement park tickets and golf memberships
- Financial services, such as investment management fees and vehicle insurance
- Personal, household and business services, such as haircuts, moving services, and tax preparation
- Repair and maintenance services, such as household appliance and business equipment repair

- Information services, such as courier delivery, newspaper subscriptions and online services
- Transportation services, such as train tickets and auto repair
- Construction services, such as residential and commercial building and repair

In the final implementation of this policy, lawmakers may want to look carefully at which services in this category would be taxed and leave some exempt, but the general principle of sales tax broadening is sound.

The state could raise an additional $208 million each year with an expansion of the state's income tax.[61] This would include the addition of two new tax brackets for high earners (individuals earning over $100,000 per year and married couples over $250,000 per year; approximately the top 10 percent of households):

Table 7: Potential new income tax rate structure

Income for single filer	Current rate	New rate
< $23,000	5.8%	5.8%
$23,000 - $54,450	6.75%	6.75%
$54,450 - $99,999	7.15%	7.15%
$100,000 - $249,999	7.15%	9.5%
$250,000 and up	7.15%	10.5%

Maine's restaurant and lodging taxes could also be increased from their current rates of 8 percent and 9 percent, respectively, to 12 percent each. Doing so would raise another $204 million per year, which would mostly fall on out-of-state visitors.

Aligning Maine's tax treatment of Social Security benefits and private pensions with federal law would raise another $199 million per year.[62] Because federal law exempts Social Security taxes on the poorest recipients, and Maine's tax code is generally progressive, this change would primarily impact those with substantial private pensions or other non-Social Security income.

Similarly, Maine's cigarette and tobacco taxes could be increased to approximately twice the current levels, which would put them in line with a number of other states and raise $152 million a year.

Finally, a number of healthcare-related tax deductions would become obsolete under a universal state plan. These include the current deductions for purchasing insurance as a self-

employed Mainer, deductions for health savings account contributions, and the medical portion of itemized deductions. The value of these deductions is estimated at $20 million.[63]

It is possible that Maine could also recoup some of the savings from the current substantial deduction that is given to employers for providing health insurance to employees (valued at just under $200 million in 2023).[64] However, the scope of the recapture would depend on how employers react to the new health care plan. If, for example, those prior premiums are passed along as extra employee wages, or booked as corporate profits, most of the current cost of the deduction would become tax revenue. However, employers could also find ways to spend those premium dollars on newly deductible expenses, or they may be used to pay for the new employer-side payroll tax.

Table 8: Summary of revenues

Individual premiums	$3,615 million
Business premium tax	$2,571 million
Broaden sales tax	$1,706 million
Widen income tax	$208 million
Increase restaurant and lodging taxes	$204 million
Taxation of some Social Security and private pensions	$199 million
Increase tobacco taxes	$151 million
Obsolete medical deductions	$20 million
Total Revenue	**$8,675 million**

Example impacts on Maine households

A single mother, 38, earning $20,000 a year living with her two daughters

This family currently qualifies for MaineCare and has no monthly premiums. Their costs would not increase at all under the new plan. The increased rates paid for MaineCare would mean an expanded network of providers available to them. Currently, many services, including dental and mental health, are hard to access through MaineCare, because providers do not opt into the program. This family is unaffected by the income tax rate changes. They would see a small increase in sales taxes paid.

Lower-middle class parents with one child, earning $50,000 a year from their small business:

They purchase their insurance through the Affordable Care Act's online marketplace. Because of their relatively low income, they receive an After-Tax Premium Credit, which reduces their annual premiums to $1,500 per year. However, they have an annual deductible of $2,650 a year, and an out-of-pocket maximum spending of $7,500 per year. In a good year, they spend $2,075 on health care; in a bad year, they spend as much as $15,325 per year.[65]

Under the new plan, their baseline premium would be calculated as 2 adults at $11,042 each, plus one child for $5,635 for a total of $29,475 per year. However, because their income is equivalent to 201 percent of the federal poverty level, their individual premium or household contribution would be capped at 2.68 percent of their annual income, or $1,020 per year.

The changes to the tax brackets do not impact them, and they save between $1,055 and $14,305 in health care costs each year. They would see a small increase in sales taxes paid.

Upper-middle income two-person family, earning $75,000, with employer insurance:

The family is insured through a plan offered by one of their employers. The employer covers about three quarters of the cost of the premiums, but the family still contributes $3,600 a year. On top of that, they incur $3,500 in out-of-pocket expenses, for a total of $7,100 (9.5 percent of annual income).

Under the new plan, their baseline premium would be calculated as 2 adults at $11,042, for a total of $22,085 per year. Their income is equivalent to 380 percent of the federal poverty level, which means their individual premium or household contribution would be capped at 8.0 percent of their household income, or $6,000 per year.

They pay no additional income taxes, and the household would save an average of $1,100 per year. They would see a small increase in sales taxes paid.

Upper income two parent family with two children, earning $160,000, with employer insurance:

The employer plan covers most of the premium cost for the parents and their two children, leaving the family to pay $2,000 a year. Additionally, they incur $8,500 of out-of-pocket costs a year. Their total annual health care spending is $10,500, or 8.8 percent of their annual income.

Under the new plan, their baseline premium would be calculated as 2 adults at $11,042, plus two children at $5,635 for a total of $36,865 per year. Their income is over 400 percent of the federal poverty level, so their premiums would be capped at 8.5 percent of their income, or $13,600 per year.

As a married couple, they would not be impacted by the new income tax structure until their income exceeds $200,000 per year after adjustments.

Their average increased costs would be $3,100 per year.

Wealthy couple, earning $250,000 a year, with individual insurance.

The couple work as professionals with their own independent consulting businesses and purchase a platinum plan on the individual market. They currently pay $20,750 a year in premiums for a plan with minimal deductibles and a low out-of-pocket maximum.[66] Their costs range between $21,175 and $26,675 depending on their health needs. Their income is too large to qualify for ACA subsidies.

Under the new plan, their baseline premium would be calculated as 2 adults at $11,042 for a total of $22,085 per year. Their income is over 400 percent of the federal poverty level, so their premiums would be capped at 8.5 percent of their income, or $21,250 per year.

Their adjusted gross income (after standard deduction and personal income) is $212,900. Their current income tax liability is $14,292. Under the new rate structure, they will pay $16,901 — an increase of $2,609.

Depending on the year, they will either save up to $2,816 or pay an additional $2,816.

Very wealthy couple, with annual income of $550,000 a year

One person runs their own business, the other works independently as a hedge fund manager. They are covered through an employer-sponsored plan, and currently pay $5,000 a year in premiums, plus an average of $7,500 out of pocket every year, for a total cost of $12,500 each year.

Under the new plan, their baseline premium would be calculated as two adults at $11,042 for a total of $22,085 per year. Their income is over 400 percent of the federal

poverty level, so their premiums would be capped at $46,750 per year. Because the premium is lower than this amount, they would pay the full $22,085.

Their adjusted gross income (after standard deduction and personal income) is $462,900. Their current income tax liability is $24,796 per year. Under the new rate structure, their new liability is $55,276 per year — an increase of $30,480 per year.

On net, this couple pays an additional $40,065 in costs each year

Older couple on traditional Medicare

Both individuals are in their seventies and live on their Social Security payments, which total $45,000.[67] They currently receive Medicare treatment through parts A and B, but do not purchase any supplemental coverage plans. Their average out-of-pocket costs and premiums for Part B are $8,848 each year.[68]

Under the new plan, their baseline premium would be calculated as 2 older adults at $9,321 each, for a total of $18,642. Their income is equivalent to 228 percent of the federal poverty level, so their maximum premium would be 3.12 percent of their annual income, or $1,404. Their income is low enough that the changes to Social Security and pension deductions do not affect them.

This couple saves an average of $7,444 per year.

Older couple with a Medicare Supplemental Plan and a substantial income

Both individuals are in their seventies. They receive $45,000 of Social Security payments each year, plus $55,000 of benefits from a 401k plan. They currently purchase a Medigap plan to cover many of their out-of-pocket expenses. Their total spending on health care each year is $7,839.[69]

Under the new plan, their baseline premium would be calculated as 2 older adults at $9,321 each, for a total of $18,642. Their income level is above 450 percent of the federal poverty level, so their maximum premium would be 8.5 percent of their annual income, or $8,500.

The changes to Social Security taxation so that the state taxes benefits at the same rate as the federal government means that $19,430 of their benefits are taxable.[70] This increases their state income tax liability by $1,126.

All told, they pay an additional $1,788 each year.

Appendix A. Detailed breakdown of costs

	Group	Population	Annual cost per	State	Federal
	Children (0–18-year-olds)				
1	Increase rates for current MaineCare population	117,908	$1,246	$35.0 million	$111.9 million
2	Additional enrollment to 324 FPL	28,171	$5,635	$37.8 million	$121.0 million
3	Additional enrollment to 424 FPL	38,765	$5,635	$52.0 million	$166.5 million
4	Additional MC admin	n/a	4.4% of (2+3)	$8.2 million	$8.2 million
5	VA enrollees	1,844	$3,479	$6.4 million	$0
6	Indian HS enrollees	228	$2,329	$0.5 million	$0
7	TRICARE enrollees	9,226	$4,263	$39.3 million	$0
8	Remaining	69,848	$5,635	$393.6 million	$0
9	Admin costs	n/a	4.4% of (8)	$17.1 million	$0
10	**Total Children ((1) through (9))**	**265,990**	**n/a**	**$590.0 million**	**$407.6 million**
	Young adults (19–20-year-olds)				
11	Increase rates for current MaineCare population	1,614	$1,634	$0.6 million	$2.0 million
12	Additional enrollment to 324 FPL	16,046	$7,390	$28.2 million	$90.4 million
13	Additional enrollment to 424 FPL	13,118	$7,390	$23.1 million	$73.9 million
14	Additional MC admin	n/a	4.4% of (12+13)	$4.7 million	$4.7 million
15	VA enrollees	0	$3,479	$0	$0
16	Indian HS enrollees	0	$3,054	$0	$0
17	TRICARE enrollees	0	$4,263	$0	$0
18	Remaining	1,535	$7,390	$11.3 million	$0
19	Admin costs	n/a	4.4% of (18)	$0.5 million	$0
20	**Total Young Adults ((11) through (19))**	**32,313**	**n/a**	**$68.4 million**	**$170.9 million**

	Non-elderly adults (21–64-year-olds)				
21	Increase rates for current MaineCare population	157,332	$2,441	$76.4 million	$307.8 million
22	Additional enrollment to 221/215 FPL	22,966	$11,042	$60.1 million	$193.4 million
23	Additional enrollment to 321/315 FPL	110,186	$11,042	$443.8 million	$772.9 million
24	Additional MC admin	n/a	4.4% of (22+23)	$32.0 million	$32.0 million
25	VA enrollees	2,704	$3,479	$9.4 million	$0
26	Indian HS enrollees	1,439	$4,564	$6.6 million	$0
27	TRICARE enrollees	19,307	$4,263	$82.3 million	$0
28	Remaining	420,178	$11,042	$4,640 million	$0
29	Admin costs	n/a	4.4% of (28)	$201.9 million	$0
30	**Total non-elderly adults ((21) through (29))**	**727,136**	**n/a**	**$5,552 million**	**$1,306 million**
	Adults with disabilities				
31	Increase rates for current MaineCare population	47,845	$5,423	$90.8 million	$168.6 million
32	**Total adults with disabilities (31)**	**47,845**		**$90.8 million**	**$168.6 million**
	Elderly adults (65 and older)				
33	Increase rates for current full MaineCare population	47,053	$2,923	$50.2 million	$87.4 million
34	Part C + D subsidy, vision/dental/hearing	221,197	$9,321	$2,069 million	$0
35	Administrative costs	n/a	4.4% of (34)	$90 million	$0
36	**Total elderly adults ((33) through (35))**	**308,879**	**n/a**	**$2,209 million**	**$87.4 million**
37	**Grand total ((10)+(20)+(30)+(32)+(36))**			**$8,506 million**	**$2,141 million**

Note: Federal matching rate for administrative costs vary but is generally 50%. Administrative costs were estimated as 4.4% of total health care spending in Medicaid (state + federal), to get total administrative costs. These were then split evenly between state and federal sources.

Appendix B. Premium contribution scale and methodology

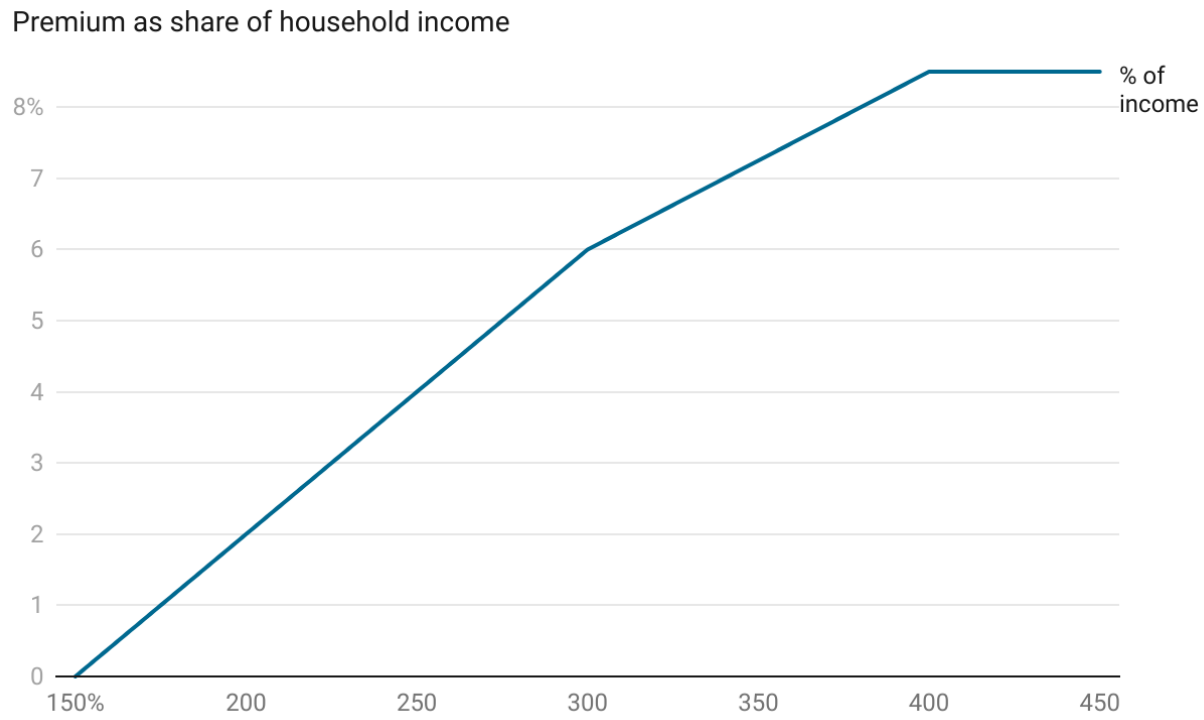
This premium contribution scale mirrors that which currently exists under the Affordable Care Act for plans purchased through the marketplace to determine eligibility for after-premium tax credits. Actual premiums assessed will vary based on household composition

Household income level as share of FPL	Income level for family of 3 in 2024	Required share of household income	Annual premium at maximum level
150% or less	$37,290	None	$0
200%	$49,720	2%	$994
250%	$62,150	4%	$2,486
300%	$74,850	6%	$4,491
400% and higher	$99,440	8.5%	$8,452

*The premium is assessed on a sliding scale with different gradients. Between 150 and 300 percent of the federal poverty level, the premium increases by 0.04 percentage points for each percentage point of the federal poverty level — so a household at 165 percent of the federal poverty level would pay a maximum premium of (165-150)*0.04 = 0.6* percent *of their household income. Between 300 and 400 percent of the federal poverty level, the premium increases by 0.025 percentage points for each percentage point of the federal poverty level. For example, a family with income at 375 percent of the federal poverty level would pay a maximum premium equal to 6+(375-300)*0.025 = 7.875* percent *of their household income.*

See chart on following page.

Chart 2: Premium cap at different ratios of household income to poverty level



The total estimated revenue generated by this premium structure is $3.6 billion. This calculation is based on microdata from the US Census Bureau's Current Population Survey, Annual Social and Economic Supplement for 2021 and 2022. These years were chosen because they represent the health care landscape in Maine after the implementation of Medicaid expansion (in 2019) and the COVID-19 pandemic (in 2020). The data was downloaded from the Integrated Public Use Microdata System (IPUMS) from the University of Minnesota, which includes variables to calculate "health insurance units" in addition to household-level groups. HIUs vary from households because HIUs only include related family members who would qualify for health insurance coverage on the same plan and exclude unrelated household members or extended family. The microdata contains 2,085 individual-level records in 1,152 HIUs.

For each individual in the sample, a baseline premium for the single-payer plan was assessed, depending on their age and current insurance status. For individuals currently enrolled in MaineCare of the Children's Health Insurance Program, the baseline premium was $0. For those currently enrolled in the Veterans Administration system, the premium was $3,664. For those currently enrolled in TRICARE, the baseline premium was $4,314. For those currently enrolled in the Indian Health Service, the premium was $4,2,34. For the remaining population over 65, the premium was $9,321. For the remaining population under 65 receiving social security income and reporting a disability, the premium was $0. For the remaining population

between 21 and 64, the premium was $11,042. For the population under age 21, the premium was $5,695.

After assigning baseline premiums, the individual records were grouped into HIUs. The total income for each individual in the HIU was taken as the HIU's total income. This was then compared to the federal poverty level for that year to produce a ratio of the FPL for the HIU.

For each HIU, their premium as a maximum share of their income was calculated using the method described above. Their actual annual premium was then assigned as the lower of the total benchmark premium and the maximum income-based premium (households whose benchmark premium was lower than their maximum share of income paid only the benchmark premium).

To calculate the total revenue raised, the assessed premium for each HIU was multiplied by the family weight of each HIU and the total was summed.

Notes

[1] James Myall, "Assessing the Costs and Impacts of a State-Level Universal Health Care System in Maine." *Maine Center for Economic Policy*. December 2019. Available at https://legislature.maine.gov/doc/3626

[2] US Bureau of Labor Statistics, Consumer Price Index for Medical Care, 2018 annual average vs 2023 annual average.

[3] US Census Bureau, American Community Survey and Current Population Survey data.

[4] US Centers for Disease Control, Behavioral Risk Factor Surveillance System data, 2021.

[5] Gerald F. Andersen, Peter Hussey, and Varduhi Petrosyan, "It's Still The Prices, Stupid: Why The US Spends So Much On Health Care, And A Tribute To Uwe Reinhardt." *Health Affairs*. Jan 2019. https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.05144

[6] "Number of Dual-Eligible Individuals, by Type of Medicare Coverage, 2020" *KFF*. https://www.kff.org/other/state-indicator/number-of-dual-eligible-individuals-by-type-of-medicare-coverage. Accessed April 2, 2024.

[7] US Centers for Disease Control, Behavioral Risk Factor Surveillance Survey for 2021, using the web enabled analysis tool, WEAT.

[8] Based on costs for rural men aged 19-64, adjusted to 2023 levels using CPI-M. See N. West and William B. Weeks, "Health Care Expenditures for Urban and Rural Veterans in Veterans Health Administration Care." *Health Services Research*. Volume 44, Issue 5 part 1. Oct 2009. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2754556/

[9] Based on a comparison between the national per-capita spending in the TRICARE program of $5,832 in 2023 and the estimated cost of an adult in the universal plan of $10,146. For national expenditure and beneficiary estimates in TRICARE, see "Annual Evaluation of the TRICARE Program: Fiscal Year 2023 Report to Congress." https://health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program

[10] Based on a comparison of per capita funding in 2017 for different public programs. See "How Increased Funding Can Advance the Mission of the Indian Health Service to Improve Healt h Outcomes for American Indians and Alaska Natives." *US Department of Health and Human Services, Assistant Secretary for Planning and Evaluation*. July 2022. https://aspe.hhs.gov/sites/default/files/documents/1b5d32824c31e113a2df43170c45ac15/aspe-ihs-funding-disparities-report.pdf

[11] Based on the average annual premium for a Part G plan in Maine for plan year 2024. See "A Consumer's Guide To… Medicare Supplement Insurance." *Maine Bureau of Insurance*. 2024. https://www.maine.gov/pfr/insurance/sites/maine.gov.pfr.insurance/files/inline-files/consumer-guide-medicare-supplement.pdf . Costs were weighted to reflect the prevalence of smoking among over-65s in Maine, according to the US CDC's Behavioral Risk Factors Surveillance Survey for 2021.

[12] Based on CBO analysis for a national proposal in 2019. See "Budgetary Effects of H.R. 3, the Elijah E. Cummings Lower Drug Costs Now Act." *Congressional Budget Office*. Dec 10, 2019. https://www.cbo.gov/system/files/2019-12/hr3_complete.pdf . Total estimated costs for 2026

were divided by projected Medicare enrollment of 70 million in 2026, per CBO's baseline budget projections as of May 2023. See https://www.cbo.gov/system/files/2023-05/51302-2023-05-medicare.pdf

[13] "Understanding the Extra Help with Your Medicare Prescription Drug Plan." *Social Security Administration*. Feb 2024. https://www.ssa.gov/pubs/EN-05-10508.pdf

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[15] Author's calculation from Maine Department of Education data.

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[57] A payroll tax is the most administratively simple way to raise revenue from businesses, but it does present a risk in that the tax is relatively easy for businesses to pass along to their employees in the form of lower wages. An alternative mechanism might be to use the state's corporate income tax, though that is paid by relatively few incorporated businesses.

[58] Calculation based on total employment and annual payroll reported in the Annual Survey of Business Owners, 2021. Payroll was adjusted to 2023 levels using the change in wages reported in the Quarterly Census of Employment and Wages for Q1 2021 and Q1 2023.

[59] For the benefits of broadening the sales tax, see Michael Mazerov, "Expanding Sales Taxation of Services: Options and Issues." *Center on Budget and Policy Priorities*. Aug 10, 2009. https://www.cbpp.org/research/expanding-sales-taxation-of-services-options-and-issues

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[61] For more information, see "The Prosperity Budget: A Blueprint for Shared Growth and Opportunity." *Maine Center for Economic Policy*. [Jan 2019]. https://www.mecep.org/wp-content/uploads/2019/01/Prosperity-Budget-Booklet.pdf. Total revenue has been updated to reflect current income tax receipts.

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[65] Based on a calculation from CoverMe.org run on 8/31/23. Two adults aged 35 and one child aged 5 living in Kennebec County. Figures are for the benchmark silver plan, "Anthem Clear Choice Silver X Tiered 5500 CSR 73."

[66] Based on a calculation from CoverMe.org run on 8/31/23. Two adults aged 50 living in Cumberland County. Figures are for the platinum plan "Health Options Clear Choice Platinum PPO NE."

[67] Based on the mean Social Security payment to Mainers with Social Security income in 2022 of $22,275. American Community Survey 2022, 1-year estimate.

[68] Based on Kaiser Family Foundation data for 2016 for average costs for Medicare recipients with no supplemental coverage. Adjusted to 2023 dollars using the CPI for Medical Services, which increased by 18.4 percent over the 2016-2023 period. See Juliette Cubanski et al., "How Much Do Medicare Beneficiaries Spend Out of Pocket on Health Care?" *KFF*. Nov 4, 2019. https://www.kff.org/medicare/issue-brief/how-much-do-medicare-beneficiaries-spend-out-of-pocket-on-health-care/

[69]Based on Kaiser Family Foundation data for 2016 for average costs for Medicare recipients with no supplemental coverage. Adjusted to 2023 dollars using the CPI for Medical Services, which increased by 18.4 percent over the 2016-2023 period. See Juliette Cubanski et al., "How Much Do Medicare Beneficiaries Spend Out of Pocket on Health Care?" *KFF*. Nov 4, 2019. https://www.kff.org/medicare/issue-brief/how-much-do-medicare-beneficiaries-spend-out-of-pocket-on-health-care/

[70] Using IRS instructions for form 1040, retrieved Feb 9, 2024. Assumes couple only takes the standard deduction for married couples.