Assessing the Costs and Impacts of a State-Level Universal Health Care System in Maine

James Myall, Policy Analyst
December 2019

Executive summary

In 2018, Maine AllCare contracted with the Maine Center for Economic Policy (MECEP) to conduct analysis related to the costs and economic effects of a state-based universal health care system that could cover all Maine residents. This report summarizes MECEP's findings regarding the structure, costs, and effects of a hypothetical proposal for a state-based universal system in Maine.

MECEP's findings provide a basic understanding of key factors to consider and are intended to inform Maine AllCare's exploration of next steps related to their health care advocacy. Any effort to proceed with the development of a Maine-specific universal plan would require more detailed policy development and analysis than could be delivered within the scope of this project.

Creating a single public plan that could cover all health care costs is difficult or even impossible at the state level, in part because many individuals are already covered by federally funded and administered health programs such as Medicare, the Veterans Health Administration, the Indian Health Service, and TRICARE. Others are covered by the joint federally and state-funded Medicaid program. It is unlikely that the federal government would cede its authority over these programs and their associated funding to any state government.

MECEP is unaware of any current detailed proposals to enact a state-level universal system in Maine. Therefore, this report describes a hypothetical system devised by MECEP as one way to publicly-funded, universal coverage at the state level. MECEP has not endorsed the plan described in this report, but has provided analysis of the effects such a plan would have on health care and the economy in Maine.

The plan outlined in this report would leave federal programs intact and provide a state-run program to cover the remainder of the population, including those who are currently uninsured or covered by private insurance. It features the following characteristics, which undergird the figures and statistics found throughout this report:

- Mainers enrolled in existing public programs would keep their coverage. The state would fund initiatives to fill coverage gaps and eliminate out-of-pocket costs for this group.
- Mainers currently enrolled in private plans and those who are uninsured would be enrolled in a publicly funded program modeled on Medicaid. MECEP assumed

mandatory enrollment, to preserve cost-savings and capture greater efficiency in the overall health care system.
- Enrollees in the publicly funded program would pay a coverage fee or tax that would be capped as a share of income. There would be no copays, coinsurance, or deductibles, and care would be free at the point of service.
- Reimbursement rates for providers within the state program would increase to match current Medicare rates.

Based on these assumptions, approximately 652,000 individuals, including 74,000 currently uninsured individuals, would obtain coverage through the new program. Net program costs are projected at $4.9 billion once federal subsidies and state-level savings are accounted for. Approximately 80 percent of these costs would be paid in the form of individual and employer taxes that would recapture funds currently being spent on premiums, deductibles, and out-of-pocket costs. The remainder — about $1 billion — would need to be paid for by raising taxes. In this report, MECEP has included several potential revenue sources.

Beyond the implications of a state-level universal plan for the state budget, MECEP attempted to model the effects of such a plan on family budgets, local governments, providers, and employment. Those effects can be summarized as follows:

- Family budgets: Most families, particularly those in the bottom 80 percent of households based on income, would experience a boost in household income as a result of this plan. For middle-income families, the average income gain would $3,500 per year (8 percent of annual income), because of savings on insurance and out-of-pocket health costs. Lower-income families would see proportionally bigger benefits.
- Providers: The net impact on health care providers would be neutral. Providers would see less patient revenue from patients who are currently privately insured and who would move to the new public insurance program with lower reimbursement rates. However, these losses would be offset by an increase in current Medicaid reimbursement rates, savings from reduced need to provide charitable care and write off bad debt, as well as business savings enjoyed by providers. Simplifying the insurance system would reduce administrative costs for providers, and health care employers would see reduced costs from health care and workers' compensation insurance premiums versus the status quo.
- Local governments: Local governments could see a net savings of just over $214 million, which is roughly equivalent to a property tax reduction of 1.5 mils.
- Employment: The significant reduction in administrative costs for hospitals, providers, and businesses would result in a loss jobs in health care administration. These would be partially offset by job gains in health care administration in state government, for a net job loss of 2,931. There may be additional jobs created through the economic stimulus associated with additional federal funds flowing into the state, but these have not been calculated in this report.

Other impacts related to the economic gains associated with a healthier workforce and increased entrepreneurship resulting from decoupling insurance coverage from employment were beyond the scope of this study but are important to consider. So too are the gains associated with redirecting dollars being spent on health insurance and health care administration to other productive purposes.

It is important to note that the outcomes depicted here are calculated based on the implementation of a state-level universal plan that reflects the assumptions cited previously. One challenge in evaluating these impacts is that they are not modeled against the impacts of maintaining the status quo. While we know what the current system yields in terms of coverage, costs, and outcomes, the picture is likely to get worse absent significant change at the state or federal level, as costs continue increasing to unaffordable levels.

This report explores one potential path toward meeting the broad goals of a universal health care system at the state level. MECEP hopes it will contribute to the identification of comprehensive and effective solutions that benefit all Mainers.

Health care in Maine today

Health care spending in the United States continues to rise faster than the cost of living.[1] Between 2017 and 2026, Mainers are expected to spend almost $178 billion on health care. In 2026 alone, the cost of health care is expected to reach $16,000 per capita.[2]

Health care has gone from being 17 percent of Maine's economy as recently as 2001, to 25 percent today. By 2026, health care will comprise more than 27 percent of the state's economy.[3]

Increasing health care costs reduce Mainers' ability to spend money on other goods and services. Between 1997 and 2018, Mainers went from spending an average of 14 percent to 17 percent of their consumer expenditures on health care services.[4]

Mainers are increasingly faced with trying to decide between health care, and other necessities such as food and rent. Health care is a necessity for all Mainers, yet 125,000 Maine adults didn't get the care they needed promptly because they couldn't afford it in 2018.[5]

The inability of Mainers to get the care they need is widespread and worsening. In 2006, slightly more than 1 in 10 Mainers between the ages of 18 and 64 skipped care because of costs. By 2018, that proportion had risen to 1 in 7.[6]

Reliance on private insurance tied to employment is not working

Having private insurance coverage does not necessarily mean one is able to afford care. In addition to the millions of Americans with no health insurance coverage, an estimated one in

five non-elderly adults is *underinsured*, meaning they face significant out-of-pocket costs and deductibles.[7]

This means that even Mainers with insurance can't always afford the care they need. One in eight non-elderly adult Mainers with private insurance had to skip care because of cost in 2016, a 33 percent increase over 2006 levels.[8]

Since the 1940s, the United States has developed a health care system that, for the most part, relies on employer-sponsored private health insurance to meet the costs of health care. As the cost of health care and insurance has risen, the cost to businesses of providing insurance to their employees has also risen. In response, employers have offered less generous plans, allowing fewer employees to qualify for these plans, and asking those who do qualify to contribute more.

Between 2006 and 2018:

- The average cost to insure an employee on an individual plan in Maine increased from $4,663 to $6,866, one-and-a-half times the increase in the cost of living over that period.
- The average annual employee contribution for someone on an individual plan increased from $1,100 to $1,461.
- The average annual employer contribution for someone on an individual plan increased from $3,600 to $5,403.
- The average individual deductible for an employer-sponsored plan increased from $800 to $2,447.
- The share of Maine employees eligible for a plan through their employer has fallen from 73 percent to 61 percent. [9]

Maine employees and employers are paying more for insurance that offers them less value. While employers have, on average, taken on a greater share of the increase in insurance premiums, workers absorb the full cost of the increase in deductibles and copayments. The fact that premiums have increased much faster than wages also means that low-wage workers are spending a greater share of their income on their share of monthly premiums.

For Mainers working in businesses that pay low wages, the average monthly premium for an employer-sponsored plan covering a single individual represents 9 percent of their paycheck. For workers in the highest paying industries, the average employee contribution represents 2 percent of their paycheck.[10] For workers who need family plans, the burden for low-income workers is even higher. The average cost of a family plan for the lowest-wage workers is the equivalent of a fifth of their paycheck.[11]

Publicly funded health care has proven more cost-effective

The status quo is costly and delivers poor value for its high cost. Compared to other wealthy nations, the United States spends twice as much on health care per person for average results, as illustrated by life expectancy rates in Table 1.[12]

Given the higher-than-average health care spending per capita and the relative lack of racial and ethnic diversity, life expectancy at birth should be greater in Maine than the national average. However, outcomes are virtually the same as those for the rest of the country.

Table 1: Per capita health expenditures and life expectancy comparison

	Maine	United States	OECD
Personal health expenditures per capita	$9,531	$8,015	$3,660
Life expectancy at birth	78.6	78.6	81.5

Source: MECEP analysis of Organization for Economic Co-operation and Development, 2017 data (health expenditures); Center for Medicaid Services National Health Expenditure data, 2014 (state health expenditures, adjusted for inflation to 2017 levels), Institute for Health Metrics and Evaluation (state life expectancy). Personal health expenditures exclude spending on investments, government administration, and public health preventative measures.

The disparity between health spending and outcomes in the US is partly because the provision of health care is inefficiently distributed within the country. Some people (especially the affluent and seniors), consume a lot of health care, while others (the less well-off) struggle to access basic services. Additionally, the price of care is significantly higher in the US than elsewhere.[13] Studies point to two major causes of this price inflation – the for-profit nature of parts of the health care sector, and the fragmentation within the United States' system, which creates administrative inefficiencies.[14]

The structural nature of these problems requires a structural solution. Many of the United States' peer countries deliver health care through a system that relies more heavily on publicly funded health care. The consolidation of funding into a single entity allows for greater efficiencies and administrative savings, while government oversight of the health care sector controls costs.

In recent years, several states have explored building similar universal health care systems, including California, Colorado, Michigan, Minnesota, New York, and Vermont. A national universal system (sometimes called "Medicare for All") has also been proposed at the federal level. This study draws from the experiences of those states.

Building a universal health care plan for Maine

A state-level universal health plan must account for existing federal health care programs in its development. Medicare, the Veterans Health Administration, the Indian Health Service, TRICARE, and the joint federally and state-funded Medicaid program cover almost half the

state's population. These programs have coverage gaps that would need to be addressed to ensure that participants do not face out-of-pocket costs. Maximizing enrollment in these programs while addressing coverage gaps is one pillar of an effective universal plan.

Another pillar of a comprehensive universal plan is the development of a state-level public program for non-Medicaid eligible uninsured individuals and individuals with private health coverage. Under the plan imagined in this analysis, such a plan would be modeled on the existing Medicaid (MaineCare) program. It would provide free care at point of service with no premiums, copays, or deductibles. In addition to the existing range of services, MECEP assumed in its analysis that this plan would also cover dental, vision, and hearing care for all enrollees. (MaineCare currently covers children's dental care only).

For this analysis, MECEP used Maine Department of Health and Human Services enrollment and cost data to calculate the baseline cost of care under the current MaineCare program. Estimates for the additional cost of dental, vision, and hearing care were based on estimates from the American Dental Association (for non-elderly adults)[15] and current spending through the Medicare part D program.[16]

As with MaineCare, the state would reimburse providers at fixed rates. MECEP assumes rates for the existing MaineCare program and the new public plan be set at Medicare reimbursement levels initially, with annual adjustments set by an independent board as necessary.[17]

According to the Maine Hospital Association, Medicare reimbursement levels represent 87 percent of the cost of delivering care in today's fragmented health care system.[18] However, MECEP estimates that the bottom lines of hospitals and other providers would be largely unaffected relative to the status quo with a uniform Medicare reimbursement rate. Any losses suffered through reduced revenues from privately insured patients would be made up for by the elimination of charitable care and bad debt, the increase in rates for current Medicaid patients, and the reduction in providers' administrative overhead (see Table 6).

Summary of existing federal health care programs incorporated in a universal care plan

Medicare covers Mainers aged 65 and older, as well as Mainers with serious disabilities. The lowest-income Medicare enrollees receive free care, by also being eligible for Medicaid, which covers the cost of their premiums and co-pays. Under a universal care plan, Medicare recipients who currently pay premiums and out-of-pocket costs would receive a credit from the state to offset that cost. This includes costs associated with dental, vision, and hearing care, as well as prescription drugs (Medicare Part D).

Veterans' Administration health care is available for some former servicemembers. The extent of coverage and the out-of-pocket costs payable by the Administration depends on whether the covered individual has a service-connected disability and on the severity of their health needs. Under a universal care plan, Mainers using Veterans' Administration healthcare would be eligible for wrap-around coverage to pay for out-of-pocket costs.

TRICARE provides subsidized private insurance plans to active-duty military and their families. Like Medicare, a basic level of care is provided for free, but many families purchase supplemental coverage to cover extra costs. Under a universal care plan, TRICARE enrollees would be eligible for a credit to purchase this supplemental insurance at no cost.

Indian Health Service is run by the federal Bureau of Indian Affairs and provides free-at-point-of-delivery care to members of recognized Indian nations (residents of reservations, as well as tribal members living off-reservation). The IHS has been underfunded for many years and provides only about half the care needed by tribal members. Under a universal care plan, the state would appropriate additional funds for Indian Health Service centers in the state to meet the unfunded need.

Medicaid is a joint state and federal program, known in Maine as MaineCare. MaineCare offers free care to low-income Mainers, Mainers with serious disabilities, and some Mainers with specific medical conditions, such as breast cancer or brain injuries. Under a universal care plan, all Mainers currently eligible for MaineCare, and its sister program, the Children's Health Insurance Program (CHIP), would be enrolled in the program. Maine would also apply to the federal government for permission to expand eligibility in CHIP to 312 percent of the federal poverty level and eligibility for parents to 200 percent of the federal poverty level. Under a universal care plan, the state would increase MaineCare reimbursement rates by 23 percent over current levels, to bring them to parity with Medicare payment rates.

Prescription drug pricing

The estimates in this analysis assume that Maine continues to control prescription drug costs using the same mechanism currently operating in the national Medicaid program. [19] Under this system, drug manufacturers rebate state governments a share of the total spending on drugs (on average, these rebates total 50 percent of prescription drug spending).[20] In exchange, Medicaid pledges to cover all FDA approved drugs by that manufacturer. The simplest mechanism would be for Maine to tie its rebates to the federal Medicaid program.

However, Maine could theoretically renegotiate prescription drug prices with manufacturers if it wished under the public plan. As a small state, Maine would inherently have less bargaining power in any price negotiations with pharmaceutical manufacturers than many jurisdictions. However, that does not mean that price regulation would be impossible in Maine. Internationally, many small counties regulate the price of prescription medicines. For example, all OECD counties have some form of price regulation, including Luxembourg (population 300,000), Iceland (population 500,000) and Estonia (population 1,300,000).

Were Maine to pay full retail price for prescription medicines covered by the plan, the cost would increase by approximately $300 million.[21]

Based on current enrollment levels, more than 600,000 Mainers would continue to be covered by existing federal programs, including Medicaid. Further expanding Medicaid eligibility and automatic enrollment in this and other federal programs would mean that more than 700,000 Mainers would be enrolled in federal programs under the universal health care model. The remainder of those who are uninsured or have private insurance coverage would be automatically enrolled in the new public plan. Table 2 summarizes the primary source of coverage for Mainers under the status quo and a universal care scenario.

Table 2: Primary source of health insurance for Mainers under status quo and universal plan

Primary source of insurance	Status Quo	Universal Plan
Total Population	1,335,907	1,355,907
Employer	604,779	0
Healthcare.gov	81,212	0
Medicare	307,749	307,749
Medicaid	269,890	364,091
Veterans Adm.	15,698	15,698
TRICARE	13,792	13,792
Indian Health	2,103	2,103
Uninsured	74,196	0
New State Plan	0	652,474

Note: For simplicity, populations are grouped by their primary source of insurance.[22] In reality, many Mainers have multiple sources of insurance.
Source: MECEP analysis of US Census Bureau, American Community Survey, 2017 data.

Paying for a universal care plan in Maine

The universal care plan in Maine modeled in this analysis would carry a net state cost of almost $4.9 billion. This would require a significant increase in state spending through the General Fund, but it would also result in a significant reduction in health care spending compared to current levels. More Mainers would have access to care at a lower total cost. In effect, the cost to the state's general fund represents a shift from individual to collective costs.

Covering more people for less money

Total spending on health care in Maine would decrease under the universal care plan, from an estimated $13.9 billion in 2017 under the status quo, to an equivalent of $12.4 billion under the proposed universal care plan.[23] These savings are achieved by reining in the cost paid for services, and through reductions in administrative costs at the public (state) and private level.

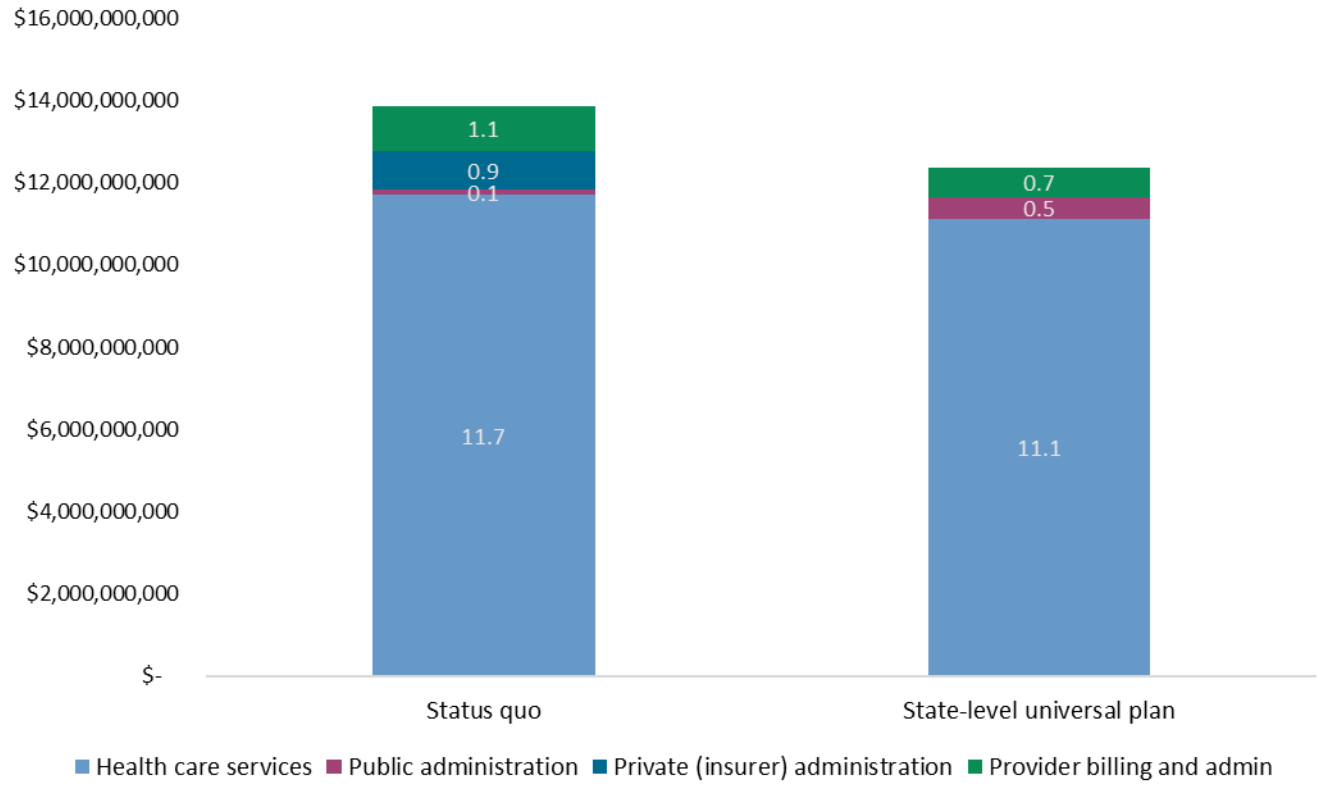
Spending on core health care services would decrease by approximately $600 million, primarily through lower average provider reimbursement rates. By effectively setting all payment rates at Medicare rates, providers would see more revenue from some patients (those on Medicaid, the uninsured who qualify for charity care, and underinsured who accrue bad debt), and less revenue from privately-insured patients.

Overall administrative and overhead costs would decline significantly. Currently, approximately $2.2 billion is spent on these costs, including $0.9 billion on the net cost of private insurance (insurer administrative costs, marketing, and profit),[24] $1.1 billion on billing and insurance-related administration in provider's offices,[25] and $0.1 billion to administer the MaineCare program.

Under the universal care proposal, total administrative spending would decrease to just under $1.3 billion, representing $0.8 billion in savings. This includes a 33 percent reduction in provider billing and insurance related administrative costs, plus the replacement of the net cost of private insurance with much lower administrative costs for a public plan.

Total health-related spending declines by $1.5 billion, of which $0.6 billion can be attributed to lower reimbursement, and $0.9 billion to administrative savings.

Chart 1: Total health care spending under the status quo and the universal care plan



Sources: MECEP analysis of US National Health Expenditure data, estimates of state spending; Maine Department of Health and Human Services budget data.

Table 3: Summary of costs

Baseline cost	$6,274,617,482
Federal funds	-$1,143,859,844
State savings	-$263,886,203
Net cost to general fund	$4,866,871,435

The baseline cost includes the full cost of health care and administration for additional enrollment and wraparound coverage for those enrolled in existing federal programs, plus full enrollment in the new universal care plan. This baseline estimate is inclusive of additional spending to fill in coverage gaps in existing programs, as well as raising the reimbursement rates for the MaineCare program. This figure also includes the cost of coverage for public employees currently covered by state health and dental insurance plans.

Federal funds would offset some of the cost of the Maine universal care plan. Maximizing Medicaid enrollment, and further expanding eligibility would draw down around $465 million in matching federal funds. The rate of federal match is assumed to be 65 percent for adults, and 75 percent for children.[26]

Additional federal funding estimated at $653 million is available in the form of pass-through money under the Affordable Care Act. Under the ACA, states can apply to the federal government to repurpose the funds that the federal government would normally spend to subsidize plans on the individual insurance market. With such a waiver, Maine could apply these funds to a state-run universal care plan. The estimate of $653 million assumes that Maine can enroll approximately 43,000 individuals who are currently uninsured but eligible for subsidies in the individual market.[27]

State savings represents the amount the state is currently spending on coverage for public employees, whose coverage under a potential universal care plan is already included in the baseline cost, as well as the state's existing workers' compensation insurance savings.[28]

Paying for the costs of a universal care plan would require new revenue, some of which would come from recapturing funds already being spent on health coverage by employers and individuals and directing them toward a universal care system. MECEP highlights one approach for securing the necessary revenue to pay for a universal care plan in Table 4.

Table 4: Summary of revenues

Individual premium recapture	$ 1,917,872,442
Employer premium recapture	$ 2,051,316,018
Income tax	$ 415,615,868
Restaurant & lodging tax	$ 141,750,628
Excise taxes	$ 150,000,000
Eliminating tax expenditures	$ 87,360,000
Sales tax for services	$ 78,171,985
Estate tax	$ 35,000,000
Total	$ 4,877,131,940

Individual premium recapture

Currently individuals pay premiums, deductibles, and out-of-pocket costs for health care. The universal care plan would eliminate these and replace them with a coverage fee or tax that would be capped as a share of income based on a family's relationship to the federal poverty level (i.e. household composition and income level). The federal poverty level for a family of four is $25,750 in 2019.[29]

Families would be assessed an annual premium depending on their family size, composition, and whether they have federal forms of insurance (see table 5). This "sticker price" would be capped at a share of family income, and most families would pay much less than the assessed premium.

Table 5: Baseline individual premiums

Federal insurance type	Baseline annual premium
Medicaid	$0
Medicare	$3,000
Veterans' Administration	$3,000
Indian Health Service (under 18)	$1,500
Indian Health Service (18 and over)	$2,500
TRICARE	$900
None (under 21)	$3,500
None (21 and over)	$6.000

The premium cap would be structured as follows:

- Families below 138 percent of FPL would pay nothing (same as current Medicaid recipients)

- Families between 138-399 percent FPL would pay between 2 and 5 percent of household income (under the ACA these families typically pay 4.7-9.5 percent of income for Healthcare.gov plans)
- Families between 400-499 percent FPL would pay between 5 and 6 percent of household income (currently ineligible for subsidies under the ACA)
- Families between 500-599 FPL would pay between 6 and 7.5 percent of household income
- Families at or above 600 FPL would pay 7.5 percent of household income

For example, a family of two adults and a child, with a family income of $60,000 is at 289 percent of the federal poverty level for their household size. They would make an annual payment or periodic payments capped at 3.8 percent of their family income, or $2,280/year, to cover health care costs. Such payment could be made when filing taxes or through a separate premium payment system established by the state.

The individual premium recapture would raise just over $1.9 billion, or 39 percent of the total net cost to the state. This is significantly less than the $3 billion that Maine families currently spend on premiums and out-of-pocket costs.[30] The remaining cost would be covered by businesses, out-of-state visitors, summer residents, and the wealthiest Mainers.

Employer premium recapture

A further almost $2 billion would be raised through a coverage tax on employers' payrolls. This would take the place of the employer share of premiums currently paid toward health insurance.

Private-sector employers would pay an estimated $1.8 billion through the new payroll tax,[31] somewhat less than the $2.1 billion they currently contribute to their workers' health insurance premiums.[32] (Public-sector employers, including the state and local governments, would contribute the remaining $238 million in payroll taxes).[33] In addition to saving on health insurance contributions, employers would also save from a 50 percent reduction in workers' compensation premiums,[34] estimated at just under $155 million.[35]

Overall, Maine's private sector businesses would see net savings of just under $313 million.

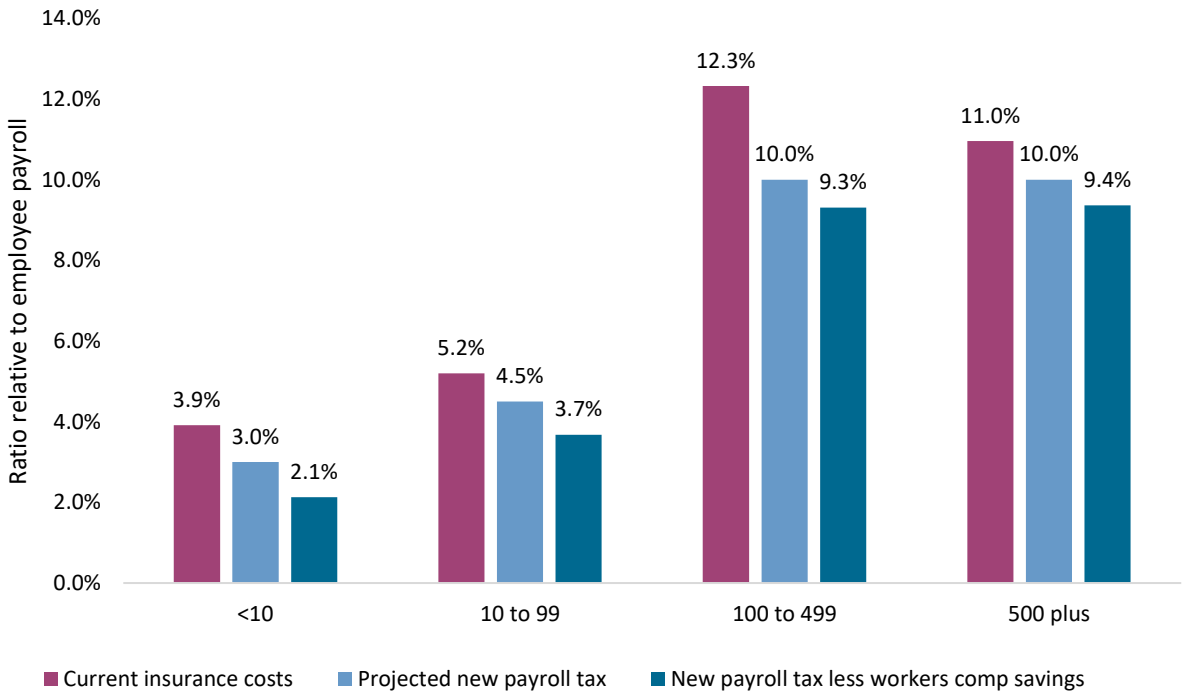
To account for the fact that small businesses are less likely under the status quo to offer insurance to their employees, the coverage fee would vary depending on the size of the business. The fee structure used for this analysis follows:

- Businesses with fewer than 10 employees would pay coverage fee equivalent to 3 percent of payroll
- Businesses with 10-99 employees would pay a coverage fee equivalent to 4.5 percent of payroll

- Businesses with more than 100 employees would pay a coverage fee equivalent to 10 percent of payroll

On average, businesses of all sizes would save money under this structure (see Chart 2). Private sector businesses would have to choose whether to pass these savings along to workers in the form of wages or other benefits or record them as additional profit. However, health insurance and workers' compensation insurance premiums are tax-deductible, so any savings booked as profit would be subject to state and federal income taxes.

Chart 2: Distribution effect for businesses



Note: Chart does not include the impact on businesses of reducing tax expenditures for business incentives, though these are believed to disproportionately benefit large corporations.
Source: MECEP analysis of data from US Census Bureau, Annual Survey of Entrepreneurs, 2016. Employment and payroll estimates in the ASE were adjusted to 2018 levels using the Bureau of Labor Statistics, Quarterly Census of Employment and Wages data, 2018 annual average. Current employer insurance premiums were calculated using US Department of Health and Human Services, Medical Expenditure Panel Survey, 2018 data. Savings for reduced workers' compensation premiums were apportioned on a per-employee basis using mean costs for State of Maine employees derived from the Maine Open Checkbook.

Examples of effects on large corporations[36]

Just as family budgets and health expenses can vary dramatically, so too do businesses' health insurance expenses under the status quo. However, on average, MECEP estimates that most businesses would experience savings under the proposed universal care system and employer premium recapture model outlined above.

In general, businesses who currently provide more comprehensive, more expensive plans, will save most under the universal care model. For example:

A big-box retailer with 1,000 employees which provides minimal health insurance to its employees currently spends $4.8 million on premiums every year.[37] With annual payroll of $40 million, their new tax liability at 10 percent is $4 million. The business saves $800,000 compared to the status quo.

A manufacturing business with 1,000 employees pays good insurance benefits to its workers. It currently spends $8.9 million annually on insurance premiums.[38] With an annual payroll of $50 million, their payroll tax liability at 10 percent is $5 million. The business saves $3.9 million compared to the status quo.

New coverage taxes

To cover the remaining balance of the costs to implement a universal care plan in Maine, the state would need to raise additional revenue by increasing existing taxes or instituting new ones. Below are tax increases identified for this analysis that would generate enough revenue to close the gap between total program costs and the amount generated from the individual and employer premium recaptures.

- Income taxes: Changes to the income tax code account for $416 million in new revenue. These include: Two new tax brackets – a 10.15 percent bracket for couples earning over $200,000, and a 12.15 percent bracket for couples earning over $500,000; elimination of obsolete state tax deductions for medical deductions, health savings accounts, and self-employed health insurance costs; elimination of all other itemized deductions on state income taxes; and counting retirement income as regular income for income tax purposes.[39]
- Restaurant and lodging taxes: $142 million from an increase to the restaurant tax from the current 8 percent to 12 percent and the lodging tax from the current 9 percent to 12 percent.[40]
- Excise taxes: $150 million from increases to tobacco and alcohol excise taxes. These increases would put Maine's excise taxes in line with other states with high tobacco and alcohol taxes.[41]
- Eliminating tax expenditures: $87 million from elimination of inefficient state subsidies for businesses that primarily benefit wealthy corporations and do not promote job growth.[42]
- Broadening the sales tax: $78 million from broadening the sales tax to include certain services, particularly recreational services.[43]
- Restoring the estate tax: $35 million from rolling back the estate tax to pre-2012 rates. This would affect a few hundred of the wealthiest estates in Maine.[44]

Assessing the effects of a universal care plan in Maine

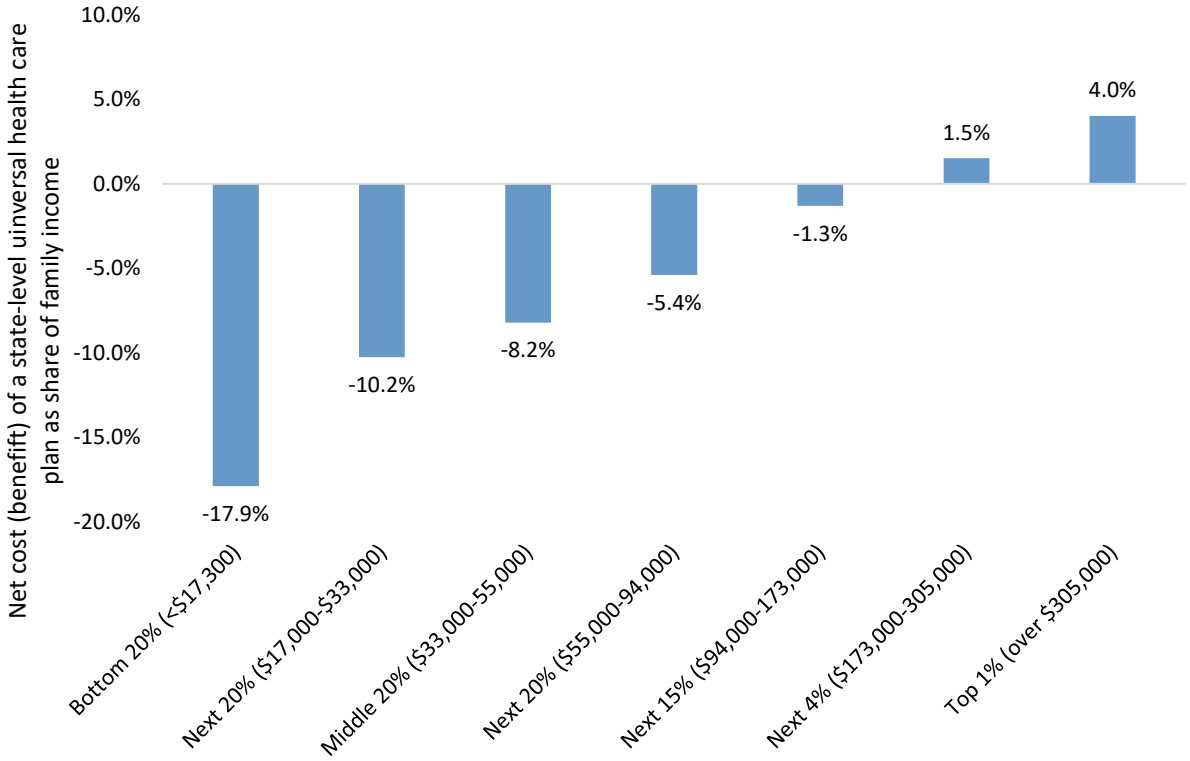
Implementation of a universal care plan would have far-reaching effects. For this analysis, MECEP attempted to evaluate the direct impacts on family budgets, providers, local government, and employment. These effects are summarized below and addressed in more detail in following sections.

- Family budgets: Most families, particularly those in the bottom 80 percent of households based on income, would experience a boost in household income as a result of this plan. For middle-income families, the income gain would be 8 percent, on average, from savings on insurance and out-of-pocket health costs, with average savings being even higher for the lowest-income families.
- Providers: The net effect on health care providers would be neutral. Providers would see less patient revenue from patients who are currently privately insured and who would move to the new public insurance program with lower reimbursement rates. However, these losses would be offset by an increase in current Medicaid reimbursement rates, savings from reduced need to provide charitable care and write off bad debt, as well as business savings enjoyed by providers. Simplifying the insurance system would reduce administrative costs for providers, and health care employers would see reduced costs from health care and workers' compensation insurance premiums versus the status quo.
- Local governments: Local governments could see a net savings of just over $214 million, which is roughly equivalent to a property tax reduction of 1.5 mils.
- Employment: The significant reduction in administrative costs for hospitals, providers, and businesses would result in a loss jobs in health care administration. These would be partially offset by job gains in health care administration in state government, for a net job loss of 2,931. There may be additional jobs created through the economic stimulus associated with additional federal funds flowing into the state but these have not been calculated in this report.

Effect on family budgets

The cost of the premium assessment and the revenue-raising measures contained in this report would be outweighed by the savings from no longer paying private insurance premiums and out of pocket health care costs. On average, the net result would be positive or neutral for Maine families in the bottom 95 percent of the income distribution (see chart 3).

Chart 3: Distribution effect for families



Note: Does not include impact of business effects on households of business-owners.
Source: MECEP analysis based on US Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2011-2018 microdata via IPUMS. The impact of increases to sales and excise taxes were calculated using data from the Institution for Taxation and Economic Policy. Distributional effects of the end to itemized deductions were calculated using IRS Statistics of Income data, 2016.

Impacts based on family characteristics

The following examples are drawn from survey data.[45] Readers should bear in mind that individual experiences vary greatly, depending on health and insurance status. In general, individuals in good health currently spend much less of their income on health care costs than average, while the sickest individuals spend much more than average.

A single mother, 38, earning $10,000 a year living with her two daughters, 9 and 4: The family currently qualifies for MaineCare, with no monthly premiums. However, it's not uncommon for families like this to incur out-of-pocket expenses for services not covered. For example, the mother needs a tooth extracted, or one of the daughters needs to replace a pair of lost eyeglasses. These out-of-pocket expenses totaled $1,200, or 12 percent of the family's annual income.

Under the universal care plan, the range of MaineCare services would be expanded to eliminate the need for additional out-of-pocket costs. Increased reimbursement rates would also help families who may have coverage for services like dental, but who cannot find a provider who takes MaineCare.

Many low-income Mainers also suffer from unpredictability of income. Perhaps they work seasonal jobs, or jobs with varying schedules. This can make them eligible for MaineCare for a short period of time, before losing it as their income increases. A universal care system will bring stability to these families.

Based on consumer expenditure patterns, the increases to sales and excise taxes would cost this family an additional $160 per year, for net savings of $1,040 per year (10 percent of annual income).

Senior retired couple, 73 and 69, with $25,000 a year in Social Security payments: Both are enrolled in Medicare, with a Medicare Advantage plan. Currently they pay $1,300 in premiums and $1,900 out-of-pocket every year, 12.3 percent of their income.

Under the universal care plan, they would no longer need to purchase a Medigap plan, and the out-of-pocket copayments would be eliminated. They would also have access to services like dental and hearing care which are not covered under basic Medicare. Their universal care premium would be capped at 4.2 percent of their annual income, or $1,050 a year.

This couple would be unaffected by the changes to taxable retirement income, since their taxable income would still be zero after accounting for exemptions and the standard deduction.

Based on consumer expenditure patterns, the increases to sales and excise taxes would cost this family an additional $200 a year. Their net savings under the universal care plan would be $1,950 (8 percent of annual income).

Lower-middle class parents with one child, earning $40,000 a year from their small business: They purchase their insurance through the Affordable Care Act's online marketplace. Because of their relatively low income, their annual premiums are capped at $2,500 per year (6 percent of income). However, their plan has a high deductible, and their total out-of-pocket expenses for the year are $4,000. All told, they spent 16 percent of their income on health care this year.

Under the universal care plan, their premium is capped at 2.8 percent of their income, or $1,120, with no deductibles or copays. Their additional sales tax liability would be $280, and the loss of itemized deductions increases their state income tax liability by $100.

Their small business has two employees and the 3 percent payroll tax increase costs them an additional $1,500 a year. They save $500 in reduced workers' compensation premiums.

The family saves $4,000 (11 percent of annual income) under the universal care plan.

Upper-middle income two parent family with one child, earning $75,000, with employer insurance: The family is insured through a plan offered by the mother's employer. 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 universal care plan, their baseline premium would be $15,500 ($6,000 for each adult, plus $3,500 for the child), but based on their income, the premium would be capped at 4.7 percent of annual income, or $3,525 per year.

Their additional sales and excise tax liability would be $450 (0.6 percent of income); the loss of itemized deductions would increase their state income taxes by $75.

On net, the family saves $3,950 per year (5.3 percent of annual income)

Upper income two parent, two children family, earning $120,000, 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 universal care plan, their baseline premium would be $19,000 ($6,000 per adult, plus $3,500 per child). Based on their income, their premium is capped at 6.0 percent of annual income, or $7,200 per year.

Their additional annual sales tax liability would be $480 (0.4 percent of annual income). The end of itemized deductions increases their state income taxes by $960 (0.8 percent of annual income). Total cost of the universal care system for this family would therefore be $8,640.

On net, the family saves $1,860 per year (1.5 percent of annual income).

Wealthy couple, earning $210,000 a year, with individual insurance. The couple work as professionals with their own independent businesses and purchase a plan on the individual market. They currently pay $3,600 a year in premiums, and incur $6,300 in out-of-pocket costs, for a total of $9,900 annually (4.7 percent of income).

Under the universal care plan, the baseline premium would be $12,000 ($6,000 per adult). As a high-income family, they are liable for the full cost of the premium.

Their additional annual sales tax liability would be $630 (0.3 percent of annual income). The end of itemized deductions increases their income tax liability by $360 (0.17 percent of annual income).

The creation of the new income tax bracket at $200,000 does not impact this family, after adjusting for deductions.

This family pays an additional $3,090 under the universal care plan (1.5 percent of annual income).

Suppose the family receives a one-time inheritance worth $1.2 million. Under the modified estate tax, the family would have to pay $16,000 from this inheritance in taxes.

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 (2 percent of annual income).

Under the universal care plan, their base premium is $12,000 per year ($6,000 per adult).

Their additional annual sales tax liability would be $5,500 (0.1 percent of annual income). The end of itemized deductions increases their income tax liability by $1,870 (0.34 percent of annual income).

The creation of the new income tax brackets at $200,000 and $500,000 increases their state income tax liability by just under $9,900 a year.

All told, this family pays an additional $16,770 under the universal care plan compared to the status quo (3.0 percent of annual income).

The business-owner currently offers a health insurance plan to some of her 40 employees, at a total cost of $90,000 a year to the business. Under the universal care plan, her business would instead pay a 4.5 percent payroll tax on her employee payroll of $1.5 million. Her total payroll tax liability is $67,500 a net saving of $22,500 compared to providing insurance under the status quo. Additionally, her workers' compensation premiums are reduced by $321 per worker per year, or $12,840. Total business savings are therefore $35,340. She could either pass these savings along to workers as higher wages, reinvest them in her business, or keep the savings as additional profit.

Effect on Maine's seniors

Approximately one in five Mainers is 65 years old or older.[46] While nearly every senior qualifies for coverage under Medicare,[47] that coverage is not comprehensive:

> Part A covers hospital treatment, and most seniors are eligible at no monthly premium. However, there is a deductible for each hospital admission ($1,364 for 2019).
>
> Part B covers outpatient services and doctors' visits. It requires a monthly premium ($135.50 in 2019 for those with incomes under $85,000). Enrollees are subject to an annual deductible ($185 in 2019) and 20 percent copays for each visit.
>
> Part D covers prescription drugs. These plans are administered through private insurers and usually have annual deductibles, out-of-pocket costs, and co-pays for prescription drugs (which are capped at a share of prescription drug costs depending on your total annual drug spending).
>
> In addition, many Medicare enrollees also purchase either a Medigap plan (to cover the deductibles and out-of-pocket costs in regular Medicare) or a Medicare Advantage plan (Part C). Both are offered through private insurers. Medicare Advantage plans cover services not covered by regular Medicare, including dental, vision, and hearing, or medical equipment.

Low-income seniors qualify for financial help to cover some of these costs, through MaineCare (Medicaid). Most of these categories are subject to an asset test:[48]

> Seniors with a qualifying disability or those below 100 percent of the federal poverty level (approximately $18,000 for a household of 2 in 2019) qualify for full-benefit MaineCare.
>
> Seniors enrolled in Medicare with incomes below 175 percent of the federal poverty level can qualify for the Medicare Savings Program, providing some assistance for the Medicare out-of-pocket costs.
>
> Seniors who need nursing care are covered through MaineCare if their income is below 300 percent of the federal poverty level. However, the state will recover long-term care costs from the patient's estate when they die.
>
> Maine also has a Drugs for the Elderly and Disabled program for individuals with disabilities and those over the age of 62 if their income is below 175 percent of the federal poverty level.

Of the approximately 270,000 seniors in Maine, just under 60 percent have some sort of private coverage to supplement their Medicare plan (including Medigap, Medicare Advantage and Part D plans). Most of these individuals will be better off under the universal care plan.

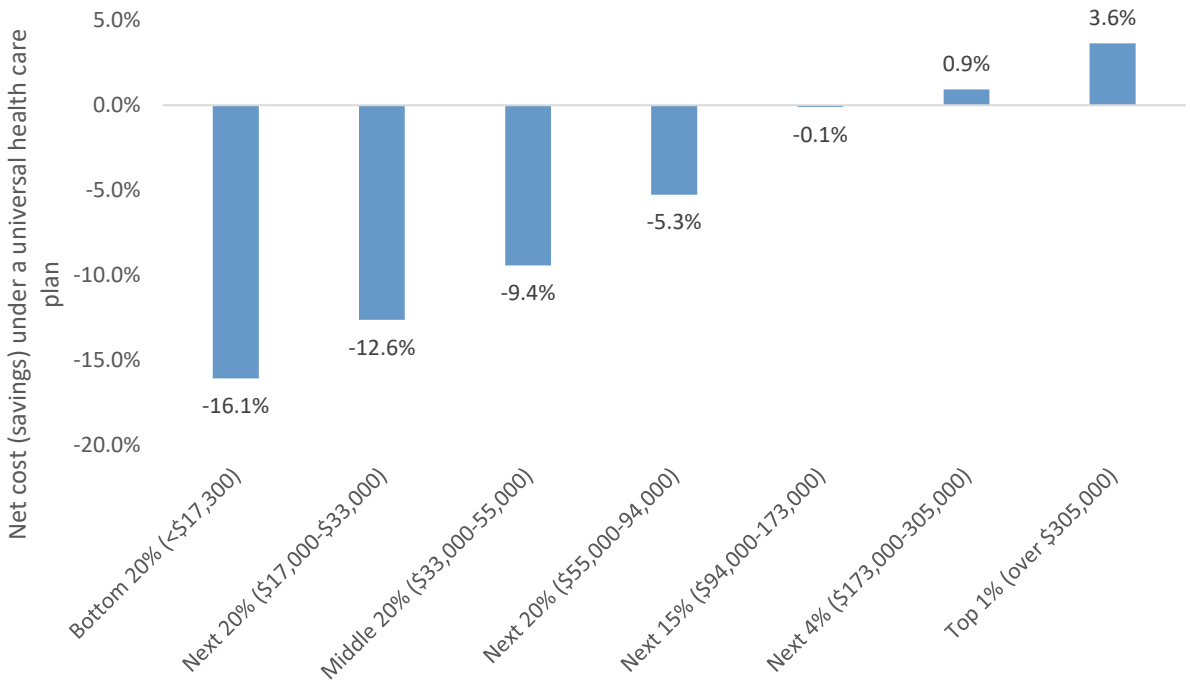
The plan proposes to charge Medicare enrollees an annual premium of $3,000 per year, capped at a portion of their annual income. For those who are currently eligible for Medicaid, the premium will be $0.

Maine's seniors will be affected by elimination of the pension tax deduction, and making Social Security income taxable. Together these will raise just over $194 million from seniors. However, the lowest-income seniors will be unaffected by the changes because their taxable income will still be zero, even after including their retirement income. For example, a married couple over 65 is currently entitled to a total of $35,400 in deductions and exemptions from their taxable income under Maine's state income tax.[49] This far exceeds the median Social Security payment among Maine seniors, which is just $12,100 per person.[50]

Indeed, these changes will raise revenue from Mainers who currently draw substantial pensions and investment income in addition to their Social Security benefits.[51]

As a result, the distributional effects for seniors (see chart 3) are similar to those for all Mainers. On average, seniors in the bottom 80 of households by income will be better off under the universal care plan, even after accounting for new sources of revenue.

Chart 4: Net impact of the universal care plan on households with seniors



Note: Does not include impact of business effects on households of business-owners.
Source: MECEP Analysis of US Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2011-2018 microdata via IPUMS. The impact of increases to sales and excise taxes were calculated using data from the Institution for Taxation and Economic Policy. Distributional effects of the end to itemized deductions were calculated using IRS Statistics of Income data, 2016.

Effect on providers

On net, providers' finances would be minimally impacted by the transition to a universal care plan.

Under the plan modeled for this analysis, provider revenue would decrease by just over $945 million, or 7 percent.[52] However, the reduction in revenue would be offset by savings, including a reduction in charitable care and bad debt; reduced costs to providers as employers; and reduction in administrative waste.

Comprehensive information for all health care providers in Maine is not available. The following analysis applies to Maine's hospitals, which report data annually to the Manie Health Data Organization. Hospitals accounted for 38 percent of all medical spending in Maine in 2014.[53] Their share of the anticipated loss of revenue would be just under $362 million annually.

By law, Maine hospitals must provide free (charity) care to uninsured low-income individuals. In 2017, Maine's hospitals gave free care worth $241 million.[54] Additionally, providers routinely write off bad debt that cannot be recovered from individuals who were billed for services they cannot afford. In 2017, Maine hospitals wrote off $325 million of bad debt.[55] Based on the

experience of other states, Maine's hospitals are expected to see a 41 percent reduction in total annual uncompensated care costs,[56] leaving a remaining $334 million in billable services. Under a universal care plan, hospitals would receive just under $186 million for these services.

As with other employers, hospitals and other health care providers would no longer have to pay health insurance premiums for their employees. MECEP estimates Maine hospitals pay $228 million annually in insurance premiums,[57] and would save just over $15 million in workers' compensation premiums.[58]

Billing and insurance-related administration consumes 13 percent of revenues in physicians' offices and 8.5 percent of hospital revenues.[59] For Maine's hospitals, that's over $464 million.[60] Based on existing research, MECEP estimates a universal care system would reduce billing and insurance administrative costs by 33 percent, for a savings of $151 million annually.[61]

Hospitals and other providers would have to pay the new employer-side payroll tax. MECEP estimates Maine hospitals would be liable for just under $198 million in new payroll taxes.[62]

Under these assumptions, total net revenue for Maine hospitals would decline by roughly $21 million under the universal care plan.

Note that in the 2017 fiscal year, Maine's hospitals recorded surplus revenues of just under $239 million.[63]

The transition to a universal care system would impact different hospitals in dramatically different ways, depending on the profile of their patients. Under the universal care system, hospitals would receive significantly lower rates for patients who are currently insured through private providers but would receive higher rates for patients who are currently insured through Medicaid. In general, well-resourced hospitals in Maine's more affluent regions would see the biggest decline in revenue.

For example, Maine Medical Center and its subsidiaries received 66 percent of its 2016 revenues through commercial insurers, [64] and ran a net surplus of $94 million. Calais Regional Hospital received roughly 33 percent of its 2018 revenues from commercial insurers,[65] and ran a net loss of $600,000 in that year.[66]

The hospitals which would see the biggest decline in revenues may also have significant reserves to draw upon in the short term. For example, Maine Medical Center and its subsidiaries held just under $933 million in unrestricted net assets in 2016.[67]

This analysis does not assume a significant increase in utilization of health care services. While some cost estimates of universal care plans have assumed that utilization rates will increase, academic studies of health care system expansions don't support this view. The recent experience of states with Medicaid expansion has shown changes in utilization patterns, but not necessarily increased overall use. Instead, patients are more likely to seek preventative

care, and less likely to use emergency care.[68] A recent study of 13 universal coverage expansions in wealthy nations over the course of 80 years confirmed that utilization rates do not necessarily surge following expansion of access to care.[69]

Table 6. Summary of provider cost-benefit analysis for hospitals

Lost patient revenue	-$361,897,937
Employer premium recapture	-$197,774,475
Administrative savings	$151,386,888
Reduction in uncompensated care	$185,919,558
Employee health insurance savings	$262,504,544
Workers' compensation savings	$15,033,072
Total net savings	$55,201,650

Sources: Maine Health Data Organization, Hospital Financial Report, 2017; Centers for Medicaid and Medicare Services, National Health Expenditure Survey, 2014; US Census Bureau, American Community Survey, 2017; CMS, Medical Expenditure Panel Survey 2017

Effect on local governments

The employer payroll tax would be assessed on local government payroll. However, the state cannot impose payroll taxes on the federal government.[70]

On balance, local government units would save money through the implementation of a universal care system, even after paying the payroll tax. MECEP estimates local government tax liabilities would total just under $166 million.[71] But local governments would no longer be liable for health insurance, an estimated expense of just under $367 million (including education staff),[72] and would save an estimated $13 million through reduced workers' compensation premiums. [73]

The net impact would be savings of just over $214 million for local governments, equivalent to 8.4 percent of current property tax revenues.[74] This would be the equivalent of a property tax reduction of 1.5 mils.[75]

The impact on individual government units would vary depending on the number of employees and current expenditure levels.

Impact on employment

The complexity of the US health care system results in significant administrative waste. An estimated 8.5 percent of hospital revenue and 13 percent of revenue at physicians' offices goes to billing- and insurance-related administrative costs,[76] just over $1 billion annually in Maine.[77] A statewide universal care system would reduce this $1 billion in administrative costs by an estimated 33 percent, [78] for a total of $151 million in Maine's hospitals, and $98 million in providers' offices.

However, achieving these savings would result in the loss of jobs in health care administration. A 33 percent reduction relative to 2017 levels would be 1,868 jobs in hospital administration,[79] and 1,513 in providers' offices.[80]

Maine businesses spend an estimated $39 million annually on administering health insurance benefits.[81] The implementation of a universal care plan is estimated to reduce these expenses by 10 percent, resulting in savings of just under $4 million annually. However, achieving these savings would result in the loss of 61 jobs.

Total estimated job loss in health care administration and the insurance industry is therefore 3,442 jobs.

There would be some additional job losses associated with a decline in demand for private health insurance. However, the number of job losses is difficult to estimate. The Bureau of Labor Statistics does not separately count the number of insurance workers who work in the health insurance industry. Additionally, there is no direct correlation between the number of insured lives in Maine and the number of Mainers employed in the health insurance industry.

The job losses in private sector health care administration would be somewhat offset by the increase in jobs in the Office of MaineCare services, estimated at 511.[82] Total net impact on jobs would therefore be a reduction of 2,931.

The impact of these job losses could be offset through wage replacement and retraining subsidies for laid-off workers. These supports could be structured in a variety of ways. [83] One example could include a year's worth of wages, plus a $10,000 retraining or relocation stipend, approximately $50,000 per displaced worker.[84] This would represent an additional one-time cost of $171 million for 3,422 displaced workers.

There would also be additional economic expansion and potential job creation as Maine families have more disposable income that is no longer being spent on health care waste, and Mainers are more productive at work. These benefits are harder to quantify and are not included in this estimate.

Potential additional benefits

Implementing a state-wide universal care system would have several indirect benefits that have not been calculated for this analysis. The expansion of Medicaid eligibility in more than 30 states has allowed researchers to catalog many benefits to low-income Americans from the availability of public-run health care. These include:

- Better access to diagnostic and preventative services such as mammograms and smoking cessation programs;
- Improved treatment of mental health conditions, including substance use disorder;
- Improvements in self-reported health

- Significant reductions in mortality, especially among those aged 55-64
- Improved financial stability for families, with reduced unmet health needs, and less medical debt.[85]

It seems likely that many of these benefits would also apply to the expansion of public health care to the remainder of the population. However, differences between the low-income population affected by Medicaid expansion, and the middle- and higher-income population who would be covered by a universal care plan make it impossible to estimate these impacts with certainty.

Additionally, Maine spends approximately $126 million on public health initiatives,[86] ranging from tobacco cessation to drug education. The dramatic increase in access to care under a universal care system would likely improve public health outcomes and reduce the need for state spending on these initiatives.

Increased access to preventative care results in less need for more expensive late-stage treatments. It is not necessarily true, however, that increased use of preventative care reduces *total* health care costs. Earlier health interventions increase life expectancy, which necessitates more spending on older residents.[87] This does not negate the case for preventative and early-stage health interventions. In fact, prolonging Mainers' lifespans and improving their quality of life will allow them to be more economically active, ultimately producing more revenue to fund health care services.

Poor health is a significant obstacle to work for many Mainers. In 2018, almost 71,000 Mainers weren't working because of a health problem or disability, including 31,000 prime-age workers (25-54 year-olds).[88] Improved access to health care should lead to a greater number of Mainers able to participate in the labor force, and greater productivity for those who are currently working, but struggling with physical or mental health limitations.

Maine families could also see reduced consumer costs in areas such as auto and home insurance. Currently, the cost of these insurance premiums is partly driven by the cost of medical care covered under these policies. Bodily injury claims, which accounted for nearly 40 percent of all auto insurance costs in Maine in 2015-16,[89] would be greatly reduced under a free-at-point-of-service health care system. Some early studies have shown that the Affordable Care Act reduces auto insurance rates for young Americans.[90]

Medical losses account for a much smaller portion (2 percent in 2017) of losses for homeowners' insurance policies,[91] but could also see a reduction under a universal care system.

While rising health insurance costs have been found to limit wage growth for American workers, there is much less evidence to show that lowering costs would lead employers to increase wages. In fact, the evidence from the 2017 Tax Cuts and Jobs Act, which drastically

reduced corporate tax liability, would suggest that employers are more likely to keep any savings as profits, rather than pass them along to workers in the form of higher wages.[92]

Implementation considerations

This analysis focuses on the costs and savings associated with implementing a state-level universal care health plan for Maine and how to pay for it. The details of transitioning to such a plan are beyond the main scope of this study. However, there are important considerations.

In transitioning to a universal care plan, there are strong arguments both for haste and caution. On the one hand, the more people enrolled in the plan, the bigger the administrative and efficiency savings could be. On the other hand, a shift of this magnitude has the potential to cause significant upheaval in the economy. It also requires a significant expansion of government services, and the hiring of many new employees, which would take time.

The easiest group to enroll in the new state plan are those Mainers eligible for subsidized individual insurance through the Affordable Care Act. The analysis in this study assumes that Maine applies for a federal waiver to redirect the individual market subsidies to fund the new state plan. Those who currently purchase individual insurance through the ACA marketplace would have only the new state plan available to them, although it should be noted the state plan premiums would be lower than those of plans on the ACA marketplace, and the benefits more comprehensive.

In implementing a universal care plan, policymakers would have to determine the extent to which coverage under the new plan is to be mandatory or voluntary.

Enrollment in the new public plan could be mandatory and automatic. Health care would effectively be provided as a government service, and the premiums would be assessed as a tax. For this analysis, MECEP assumed mandatory enrollment, which would be more cost-effective and would capture greater efficiencies by simplifying the payer mix.

Alternatively, enrollment in the new plan could be strongly encouraged through the creation of a state-level individual mandate to carry health insurance. In the wake of the federal government's decision to effectively eliminate its mandate in 2017, several states have already enacted such a mandate. Under this scenario, Mainers would have the option of purchasing private coverage instead, but the state plan would likely provide greater value.

Lastly, enrollment in the new plan could be entirely voluntary, and structured as a buy-in program. The risk with this approach is that sicker Mainers would be more inclined to buy into the program, and the costs would exceed the revenues to fund the plan. This risk could be mitigated by gradually extending the eligibility to buy into the plan to different demographic groups. For example, the plan could be offered to those aged 55-64 and children under 18 at first, with one very healthy pool of residents subsidizing the costs of a less healthy population.

Any implementation scheme would have to contend with the federal Employee Retirement Income Security Act (ERISA) which reserves authority over employer-sponsored insurance plans to the federal government. States do not have the legal authority to regulate employer plans. Maine could not, for example, compel employers to purchase a new public plan on behalf of their employees. Some experts even suggest that courts could take issue with any state plan which taxes businesses to pay for a public health care plan, on the basis that it creates an overwhelming financial incentive for employers to drop their own health insurance plans.[93] This legal question has not been tested in court, and could prove a significant challenge to creating a state-level universal health care plan.

Conclusion

Enacting a state-level universal health care for Maine has the potential to deliver significant benefits to the state and its people. However, it would require a significant change in the way Mainers currently pay for health coverage. While a state-level universal public plan could substantially decrease overall health care costs in the state, it would require a significant increase in state revenue.

For this analysis conducted on behalf of Maine AllCare, MECEP attempted to provide information on the costs, benefits, and potential funding mechanism of a hypothetical health care reform plan that achieves the goals of a universal care system, while recognizing the need to accommodate the federal government's current role in Maine's health care system.

Any effort to proceed with the development of a Maine-specific universal health care plan would require more detailed policy development and analysis to address key implementation considerations and firm up cost estimates. The fact that public systems elsewhere in the world have delivered better outcomes at less cost than Maine or the United States health care system suggest that the pursuit of more cost-effective alternatives is a worthwhile endeavor.

Endnotes

[1] Between 2008 and 2018, the cost of medical care within the US Bureau of Labor Statistics Consumer Price Index grew by an average of 2.9 percent annually, compared to an average increase in the overall CPI of 1.6 percent annually. Median hourly wages increased by an average of 1.9 percent over the same period. US Bureau of Labor Statistics, Occupational Employment Survey data, 2008-2018.

[2] MECEP analysis using US Centers for Medicare and Medicaid Services, National Health Expenditure Survey data for 2014 (the final year of state-level data available). https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsStateHealthAccountsResidence.
Per-capita costs were inflated using US Centers for Medicaid and Medicare Services national projections through 2026. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html

[3] Ibid.

[4] MECEP analysis of Bureau of Economic Analysis, Personal Consumer Expenditure Survey data, 1997-2018. Retrieved by James Myall using BEA's Interactive Data Application. https://apps.bea.gov/itable/index.cfm (November 25, 2019).

[5] US Centers for Disease Control, Behavioral Risk Factors Surveillance Survey, 2018. Retrieved by James Myall using the Web Enabled Analysis Tool. https://nccd.cdc.gov/weat/ (November 25, 2019).

[6] Ibid.

[7] Collins, Sara et al., "How Well Does Insurance Coverage Protect Consumers from Health Care Costs?" *Commonwealth Fund*, Oct 2017. https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_issue_brief_2017_oct_collins_underinsured_biennial_ib.pdf

[8] MECEP analysis of US Centers for Disease Control, Behavioral Risk Factors Surveillance Survey data, 2006-2016. Retrieved by James Myall using the Web Enabled Analysis Tool. https://nccd.cdc.gov/weat/ (November 25, 2019).
MECEP analysis of US Census Bureau, American Community Survey data, 2010-2016. Retrieved by James Myall using American Factfinder. https://factfinder.census.gov/ (November 25, 2019).
MECEP analysis of US Census Bureau, Current Population Survey data (2006-2009). Retrieved by James Myall using the Current Population Survey Table Builder. https://www.census.gov/cps/data/cpstablecreator.html (November 25, 2019).
The BRFSS only reports affordability of cost by general health insurance coverage. Estimates of affordability for the privately insured population were generated by assuming that the unaffordability rate for Medicaid was 0 percent, and that 18- to 64-year-olds insured by the Veterans' Administration and Medicare had the same unaffordability rate as the senior population (which is almost entirely insured through Medicare). Estimates for the share of the population primarily insured through these public programs were obtained from the American Community Survey for years 2010-2016 and the Current Population Survey for years 2006-2009.

[9] MECEP analysis of US Department of Health and Human Services, Medical Expenditure Panel Survey data, 2006 and 2018. https://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables.jsp

[10] MECEP analysis of US Department of Health and Human Services Medical Expenditure Panel Survey, 2017 data. https://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables.jsp
US Census Bureau, County Business Patterns, 2017 data. Retrieved by James Myall using American Factfinder. https://factfinder.census.gov/ (November 25, 2019).

MEPS reports average employee contributions for health insurance premiums by the wage quartile of the employer. MEPS does not disclose the cutoff thresholds for wage quartiles, but the approximate bounds can be estimated using data from the Count Business Patterns survey. This dataset was also used to calculate the average wage within each quartile.

[11] Ibid.

[12] "Health at a Glance 2017: OECD Indicators," *Organization for Economic Co-operation and Development*, 2017. https://www.oecd.org/unitedstates/Health-at-a-Glance-2017-Key-Findings-UNITED-STATES.pdf

[13] Anderson, Gerard et al., "It's Still the Prices, Stupid: Why the US Spends So Much on Health Care, And A Tribute to Uwe Reinhardt," *Health Affairs*, Vol 38, No. 1, Jan 2019. Available at https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.05144

[14] Kumar Sameer et al., "Examining quality and efficiency of the US healthcare system" *International Journal of Health Care Quality Assurance*, Vol. 24, Issue 5, (2011): pp.366-88. https://www.ncbi.nlm.nih.gov/pubmed/21916090

[15] Yarborough, Cassandra et al., "Estimating the Cost of Introducing a Medicaid Adult Dental Benefit in 22 States," *American Dental Association*, March 2016. http://www.ada.org/~/media/ADA/Science%20and%20Research/HPI/Files/HPIBrief_0316_1.ash

[16] "An Overview of the Medicare Part D Prescription Drug Benefit," *Kaiser Family Foundation*, Oct 12, 2018. https://www.kff.org/medicare/fact-sheet/an-overview-of-the-medicare-part-d-prescription-drug-benefit/

[17] "Taking the Financial Pulse of Maine's Hospitals: An Overview," *Maine Hospital Association,* 2017, pp. 6-7. http://www.themha.org/Finance/Publications/MHA-Financial-Report_22017.aspx
Maine's Medicaid program currently reimburses hospitals for 72 percent of their calculated cost of treatment, while Medicare reimburses 87 percent of the costs of care.

[18] Ibid, p6.

[19] For an overview, see Dolan, Rachel, "Understanding the Medicaid Prescription Drug Rebate Program," *Kaiser Family Foundation*, Nov 12, 2019. https://www.kff.org/medicaid/issue-brief/understanding-the-medicaid-prescription-drug-rebate-program/.

[20] "Medicaid Drug Spending Trends," *Medicaid and CHIP Payment and Access Commission*, Feb 2019. https://www.macpac.gov/publication/medicaid-drug-spending-trends/

[21] Nationally, the Medicaid program spent $64 billion on prescription drugs before rebates in federal fiscal year 2017. With 74 million enrollees, the average spending per enrollee was $865. Manufacturers' rebates cover approximately half this cost, or $433 per-person. Therefore, paying full price for the 652,000 enrollees in the new state plan would incur an additional cost of up to $282,195,005.

[22] Determining the "primary" source of insurance relied on the following hierarchy: Medicare > Medicaid > Veterans' Administration > Indian Health Service > Employer-Sponsored > TRICARE > Healthcare.gov. Those with none of the forgoing were identified as uninsured.

[23] MECEP calculations using US Centers for Disease Control, National Health Expenditures state-level estimates, 2014 data, adjusted for inflation.

[24] US Centers of Disease Control, National Health Expenditures, 2017 data. Calculated using net cost of private insurance as a share of total national private health spending. Net cost of insurance is excluded from NHE state-level estimates.

[25] Based on estimated billing and insurance related administrative costs of 8.5 percent of hospital revenues, 13 percent of revenues at physicians' offices, and 10 percent at other health service providers. Baseline revenues were derived from 2014 state-level National Health Expenditure data, adjusted to 2017 levels. For estimates of billing and insurance related costs, see Yong, P.L. et al (eds.), "Excess

administrative Costs," in "The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary," *Institute of Medicine (US) Roundtable on Evidence-Based Medicine* (Washington, DC: 2010). https://www.ncbi.nlm.nih.gov/books/NBK53942/

[26] Based on 2019 federal matching rates for adults and pre-ACA rates for CHIP.

[27] US Centers for Medicare and Medicaid Services, Healthcare.gov Effectuated Annual Enrollment data, February 2018.

US Census Bureau, American Community Survey, 2017 data. Retrieved by James Myall using American Factfinder. https://factfinder.census.gov/ (November 25, 2019).

Mainers received $481,270,752 in After Premium Tax Credits for plans on Healthcare.gov in 2018. MECEP estimates an additional $172,425,716 would be available to 42,789 uninsured 21-64 year-olds with incomes between 138 and 399 percent of the federal poverty level.

[28] Existing state costs for health and dental insurance, as well as workers' compensation insurance were calculated using Maine Open Checkbook data for State Fiscal Year 2017.
http://opencheckbook.maine.gov/transparency/index.html

[29] "Federal Poverty Guidelines for 2019," *US Department of Health and Human Services*.
https://aspe.hhs.gov/2019-poverty-guidelines

[30] MECEP analysis of US Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2011-2018 microdata. Analyzed by James Myall using the Integrated Public Use Microdata System. https://cps.ipums.org/cps/

[31] MECEP analysis of US Census Bureau, Annual Survey of Entrepreneurs, 2016 data. Retrieved by James Myall using American Factfinder. https://factfinder.census.gov/ (November 25, 2019).

MECP analysis of US Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2018 annual average. Analyzed by James Myall using the BLS data finder https://data.bls.gov/ (November 25, 2019).

[32] MECEP calculation based on US Department of Health and Human Services, Medical Expenditure Panel Survey, 2018. https://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables.jsp

[33] MECEP analysis of US Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2018 annual average. Analyzed by James Myall using the BLS data finder https://data.bls.gov/ (November 25, 2019).

Calculated as a 7 percent payroll tax on total state and local government payroll of $3.39 billion.

[34] Freund, Richard et al., "Annual Report on the Status of the Maine Workers' Compensation System," 2018, p. B1.
https://www.maine.gov/wcb/Departments/administration/2018_TROIKA_Annual_Report_2018.pdf

50 percent of the expense of workers' compensation claims in Maine is due to medical costs. A free-at-point-of-service universal care system would eliminate this cost from Maine's Workers' Compensation system.

[35] Calculated using a mean per-employee savings of $321 for 482,014 Maine private-sector payroll employees reported in the Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2018. Analyzed by James Myall using the BLS data finder https://data.bls.gov/ (November 25, 2019).

[36] MECEP analysis of US Department of Health and Human Services, Medical Expenditure Panel Survey, 2018. https://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables.jsp

[37] Based on a per-employee cost of $11,000 per year, with the employer paying 66 percent of the premiums, and assuming 66 percent of employees sign up.

[38] Based on a per-employee cost of $11,000 per year, with the employer paying 90 percent of the premiums, and assuming 90 percent of employees sign up.

[39] US Internal Revenue Services, Statistics of Income, 2016. State income tax data. https://www.irs.gov/statistics/soi-tax-stats-historic-table-2
"Maine State Tax Expenditure Report 2020-2021 and Maine Tax Incidence Study," *Maine Revenue Services*, Feb 15, 2019. https://www.maine.gov/revenue/research/tax_expenditure_19.pdf
Estimated revenues include $164 million from the 10.15 percent bracket and $36 million from the 12.15 percent bracket, $10 million from the obsolete deduction for self-employed health insurance plans, $2 million from the obsolete deduction for medical expenses, $9 million from eliminating the remaining itemized deductions, $31 million from ending the pensions tax deduction, and $164 million from taxing Social Security as regular income.
[40] MECEP estimates using Maine Revenue Services, monthly taxable sales data, 2017. https://www.maine.gov/revenue/research/sales/homepage.html.
[41] MECEP estimate using Revenue Forecasting report, March 2018. http://legislature.maine.gov/ofpr/revenue-forecasting-committee/9302
[42] "Maine State Tax Expenditure Report 2020-2021 and Maine Tax Incidence Study," *Maine Revenue Services*, Feb 15, 2019. https://www.maine.gov/revenue/research/tax_expenditure_19.pdf
[43] "Governor Paul LePage 's 2018-2019 Biennial General Fund Budget Proposal," *Maine Bureau of the Budget*, part E, Jan 6, 2017. https://digitalmaine.com/cgi/viewcontent.cgi?article=1009&context=bob_docs
[44] Maine Revenue Services estimate provided for LD 518 (129th legislature).
[45] MECEP analysis of US Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2011-2018 public-use microdata. Analyzed by James Myall using the Integrated Public Use Microdata System. https://cps.ipums.org/cps/
[46] US Census Bureau, American Community Survey, 2018 1-year data. Retrieved by James Myall using data.census.gov (November 25, 2019).
[47] Undocumented immigrants are not eligible for Medicare. Those with a short work history can buy into the program.
[48] "MaineCare Eligibility Guide," *Consumers for Affordable Health Care & Maine Equal Justice Partners*, June 14, 2018. https://www.mejp.org/sites/default/files/MaineCare-Eligibility-Guide-June2018.pdf.
[49] "State of Maine – Individual Income Tax 2019 Rates," *Maine Revenue Services*, Oct 30, 2018. https://www.maine.gov/revenue/forms/1040/2019/1040_RateSched_2019.pdf.
The total deductible income includes two personal exemptions at $4,200 each, plus two additional exemptions of $1,300 for over-65s, and a standard deduction of $24,400 for married couples.
[50] MECEP analysis of US Census Bureau, American Community Survey data, 2017. Retrieved by James Myall using American Factfinder. https://factfinder.census.gov/ (November 25, 2019).
[51] Van de Water, Paul N., "Taxing Social Security Benefits Is Sound Policy," *Center on Budget and Policy Priorities*, Sept 6, 2019. https://www.cbpp.org/research/social-security/taxing-social-security-benefits-is-sound-policy
[52] MECEP analysis of US Centers for Medicare and Medicaid Services, National Health Expenditure Survey 2014 data for Maine, adjusted for inflation. Total spending on health care services (excluding capital expenditures, administration and non-patient revenues) in Maine is estimated at $12.8 billion in 2017. The total non-administrative cost of the universal care plan in this report would be $5.9 billion, a $1.4 billion reduction compared to current private-sector spending by Maine residents ($6.8 billion).
[53] Centers for Medicare and Medicaid Services, National Health Expenditure Survey, Spending by State of Provider, 2014.
"Hospital Financial Information, 2013-2017," *Maine Health Data Organization*. https://mhdo.maine.gov/_pdf/Report%201_2017_Final.pdf

Share calculated as a share of total personal health expenditures, less uncompensated care, non-patient hospital revenues and state hospital tax payments.

[54] "Hospital Financial Information, 2013-2017," *Maine Health Data Organization,* p.39. https://mhdo.maine.gov/_pdf/Report%201_2017_Final.pdf

[55] Ibid., p.38.

[56] Dranove, Daivd et al., "The Impact of the ACA's Medicaid Expansion on Hospitals' Uncompensated Care Burden and the Potential Effects of Repeal," *The Commonwealth Fund*, May 3, 2017. https://www.commonwealthfund.org/publications/issue-briefs/2017/may/impact-acas-medicaid-expansion-hospitals-uncompensated-care

[57] MECEP analysis of US Census Bureau, American Community Survey, 2017 data. Retrieved by James Myall using American Factfinder. https://factfinder.census.gov/ (November 25, 2019).
MECEP analysis of US Department of Health and Human Services, Medical Expenditure Panel Survey, 2018. https://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables.jsp
The ACS estimates there are 46,832 hospital employees in Maine. Total cost was calculated using the MEPS data for provision, eligibility, take-up, cost, plan selection and employer cost-sharing of health insurance plans using the mean rates for employers with more than 500 employees in Maine.

[58] Calculated using a per-employee savings of $321, based on State of Maine data on workers' compensation premiums using Maine Open Checkbook.

[59] Yong, P.L. et al (eds.), "Excess administrative Costs," in "The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary," *Institute of Medicine (US) Roundtable on Evidence-Based Medicine* (Washington, DC: 2010). https://www.ncbi.nlm.nih.gov/books/NBK53942/

[60] Maine Health Data Organization, Hospital Financial Report, 2017, pp 36-37

[61] Liu, Jodi L., "An Assessment of the New York Health Act," *RAND Corporation*, 2018, pp.32-33. https://www.rand.org/pubs/research_reports/RR2424.html

[62] US Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2017 annual average. Analyzed by James Myall using the BLS data finder https://data.bls.gov/ (November 25, 2019).
Total wages for hospitals in Maine were just over $2 billion. Nearly all hospitals in Maine employ more than 500 employees and would pay the tax at the 10 percent rate.

[63] "Hospital Financial Information, 2013-2017," *Maine Health Data Organization,* p.10. https://mhdo.maine.gov/_pdf/Report%201_2017_Final.pdf

[64] "Maine Medical Center and Subsidiaries Independent Auditors' Report…Year Ended September 30, 2018," *KPMG.* Accessed by James Myall from the Federal Audit Clearinghouse, https://harvester.census.gov/facdissem/Main.aspx (Nov 25, 2019).

[65] "Calais Regional Hospital by the Numbers," May 2019. https://www.calaishospital.org/wp-content/uploads/2019/05/Community-Benefit-Report-05-2019.pdf

[66] Ibid.

[67] "Maine Medical Center and Subsidiaries Independent Auditors' Report…Year Ended September 30, 2018," *KPMG.* Accessed by James Myall from the Federal Audit Clearinghouse, https://harvester.census.gov/facdissem/Main.aspx (Nov 25, 2019).

[68] Antonisse, Larisa et al., "The Effects of Medicaid Expansion under the ACA: Updated Findings from a Literature Review," *Kaiser Family Foundation*, Aug 15, 2019. https://www.kff.org/medicaid/issue-brief/the-effects-of-medicaid-expansion-under-the-aca-updated-findings-from-a-literature-review-august-2019/

[69] Gafney, Adam et al., "The Effect of Large-scale Health Coverage Expansions in Wealthy Nations on Society-Wide Healthcare Utilization," *Journal of General Internal Medicine* (2019), pp1-12. https://doi.org/10.1007/s11606-019-05529-y

[70] This does create an issue in terms of providing coverage for federal workers. Since the state cannot assess a payroll tax, the state would need to identify a different mechanism for recouping costs associated with providing coverage for federal employees.

[71] US Bureau of Labor Statistics Quarterly Survey of Employment and Wages, 2018. Analyzed by James Myall using the BLS data finder https://data.bls.gov/ (November 25, 2019).
Total wages paid by local government equaled $2,367,949,104. Disaggregation of local government employment by size of employer is not available for Maine. Instead, an average 7 percent payroll tax rate (the average tax rate for private-sector businesses across all size classes) was assumed.

[72] US Bureau of Labor Statistics Quarterly Survey of Employment and Wages, 2018. Analyzed by James Myall using the BLS data finder https://data.bls.gov/ (November 25, 2019).
Maine Department of Education data. Analyzed by James Myall using the MDOE's data warehouse. https://www.maine.gov/doe/data-reporting/reporting/warehouse.
Local government employed 58,739 workers in 2018. Maine Department of Education data shows that 22,578 of these positions are partially funded through Maine's school funding formula, the Essential Programs and Services model. Total wages for non-education staff were just under $1.468 billion. Assuming that health insurance costs equivalent to 19 percent of wages, local government spent approximately $279 million on private health insurance in 2018 for non-education staff.
The total cost of health insurance for employees funded through EPS was calculated using Maine Department of Education data on teacher positions, salaries and benefit levels for state fiscal year 2018-19. Overall, the state is liable for 55 percent of the costs, and local governments the remaining 45 percent, just under $88 million.

[73] Based on Workers' Compensation insurance savings of $321 per employee per year (using State of Maine employee data). Total savings include $321 per non-education local government employee (36,161), plus 45 percent of $321 per educational employee (22,578).

[74] "Municipal Valuation Return Statistical Summary," *Maine Revenue Services*, 2017. Total statewide property tax commitments equaled $2,549,487,648.

[75] "Municipal Valuation Return Statistical Summary," *Maine Revenue Services*, 2017. Total statewide taxable property valuation $159,381,711,584. The estimated average statewide taxation rate was therefore 16.0 mils.

[76] Yong, P.L. et al (eds.), "Excess administrative Costs," in "The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary," *Institute of Medicine (US) Roundtable on Evidence-Based Medicine* (Washington, DC: 2010). https://www.ncbi.nlm.nih.gov/books/NBK53942/

[77] MECEP estimate from National Health Expenditure Survey by state of provider, 2014.
Total spending for hospitals and physicians' offices, adjusted to 2017 dollars with a 3 percent annual rate of inflation.

[78] Liu, Jody et al., "National Health Spending Estimates Under Medicare for All," *RAND Corporation*, 2019. https://www.rand.org/pubs/research_reports/RR3106.html

[79] MECEP analysis of US Census Bureau, American Community Survey, 2017 Public Use Microdata. Analyzed by James Myall using the Integrated Public Use Microdata System. https://usa.ipums.org/cps/
Based on a 33 percent reduction in the total number of financial and administrative workers employed in hospitals in Maine.

[80] MECEP analysis of US Census Bureau, American Community Survey, 2017 Public Use Microdata. Analyzed by James Myall using the Integrated Public Use Microdata System. https://usa.ipums.org/cps/ Based on a 33 percent reduction in the total number of people employed as financial and administrative workers in the offices of physicians, offices of dentists, offices of chiropractors, offices of optometrists, outpatient offices, and offices of other health care providers.
[81]MECEP Analysis of US Bureau of Labor Statistics, Occupational Employment Survey 2017 data. Represents a 20 percent reduction in the total compensation of benefit managers and specialists, plus human resource managers, specialists, and assistants.
[82] Based on Maine Department of Health and Human Services data for FY 2016-17. Based on enrollment of 290,000 in the MaineCare program, with total staffing of 161 positions. This represents one staff position per 1,803 enrollees.
[83] For one example, see Pollin, Roberty, et. al., "Economic Analysis of Medicare for All," *University of Massachusetts, Amherst, Policy Economy Research Institute*, Nov 30, 2018, pp. 112-118. https://www.peri.umass.edu/publication/item/1127-economic-analysis-of-medicare-for-all
[84] MECEP analysis of US Census Bureau, American Community Survey, 2017 Public Use Microdata. Analyzed by James Myall using the Integrated Public Use Microdata System. https://usa.ipums.org/cps/ The mean wage earnings of administrative and financial workers in hospitals and providers offices in Maine was $39,553 in 2017.
[85] Antonisse, Larisa et al., "The Effects of Medicaid Expansion under the ACA: Updated Findings from a Literature Review," *Kaiser Family Foundation*, Aug 15, 2019. https://www.kff.org/medicaid/issue-brief/the-effects-of-medicaid-expansion-under-the-aca-updated-findings-from-a-literature-review-august-2019/
[86] "America's Health Rankings," *United Health Foundation*, 2018, Maine. https://www.americashealthrankings.org/explore/annual/measure/PH_funding/state/ME
[87] Goodall, S. et al., "Cost Savings and Cost-Effectiveness of Clinical Preventative Care," *Robert Wood Johnson Foundation*, Sept 1, 2009. https://www.rwjf.org/en/library/research/2009/09/cost-savings-and-cost-effectiveness-of-clinical-preventive-care.html
[88] US Census Bureau, Current Population Survey monthly data, January-December 2018, 12-month average. Analyzed by James Myall using the Integrated Public Use Microdata System. https://cps.ipums.org/cps/
[89]"Auto Insurance Database Report,2015/16," *National Association of Insurance Commissioners*, 2018. https://www.naic.org/prod_serv/AUT-PB-15.pdf
[90] Kadiyala, Srikanth and Paul Heaton, "The Effect of Health Insurance Coverage Expansions on auto Liability Claims and costs," *RAND Justice Infrastructure and Environment/Institute for Civil Justice,* June 2017. https://www.rand.org/content/dam/rand/pubs/working_papers/WR1200/WR1214/RAND_WR1214.pdf
[91] "Facts + Statistics: Homeowners and renters insurance," *Insurance Information Institute*, (Accessed 25 November 2019). https://www.iii.org/fact-statistic/facts-statistics-homeowners-and-renters-insurance
[92] Gravelle, Jane and Donald Marples, "The Economic Effects of the 2017 Tax Revision: Preliminary Observations." *Congressional Budget Office*, May 22, 2019. https://www.everycrsreport.com/files/20190522_R45736_8a1214e903ee2b719e00731791d60f26d75d35f4.pdf
[93] Jodi Liu et al., "An Assessment of the New York Health Act: A Single-Payer Option for New York State," *RAND Corporation*, 2018, p18. https://www.rand.org/content/dam/rand/pubs/research_reports/RR2400/RR2424/RAND_RR2424.pdf