Funding Universal Health Care in the Commonwealth of Massachusetts

January 2026

Replacing an inefficient, inequitable, and destructive health care finance system with a fair system that will promote economic efficiency and better health.

Co-authored by Auden Cote-L'Heureux and Gerald Friedman

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The economic analyses and the revision of the written portion of this report were conducted by Auden Cote-L'Heureux, relying on advice from, past analyses conducted by, and previous versions of the report written by Gerald Friedman. Portions of this version of the report are directly adapted from previous versions of the report written by Dr. Friedman, who also established the structure of the economic analysis.

Auden Cote-L'Heureux
Master's student in economics
University of Bonn, Bonn, Germany
acotelhe@uni-bonn.de / audenemil@gmail.com

Gerald Friedman
Professor of Economics
University of Massachusetts Amherst, Amherst, Massachusetts, USA
gfriedma@econs.umass.edu

Funding and Acknowledgements

Research support was provided to Dr. Friedman by the Unfinished Business Foundation and to Auden Cote-L'Heureux by the Universal Health Care Education Fund.

Dr. Friedman is grateful for research assistance from Tai Spargo Pasquale and Saul Bezner. Dr. Friedman benefitted from discussions with Diane Archer, Michael Ash, Travis Campbell, Ben Day, Jim Kahn, Joseph Kane, Richard Master, Stephanie Nakajima, and Dr. Friedman also benefited from comments from Heather Clark, Frank Farkas, Alice Swift, Nancy Talanian, and Maria Idali Torres.

Both Dr. Friedman and Auden Cote-L'Heureux are grateful for thoughtful and necessary discussions with Jon Weissman and Lyn Newkirk.

Auden Cote-L'Heureux is grateful to Dr. Friedman for his dedicated guidance and to David Chin (PhD, Assistant Professor of Health Policy and Management, University of Massachusetts Amherst) for his introduction to the project and critical comments, as well as to Dr. Hannah Larsen for her sharp eye in reviewing the report.

This version of the report is the responsibility of Auden Cote-L'Heureux and David Chin.

Executive Summary

Funding Universal Health Care in the Commonwealth of Massachusetts explores the expenses and revenue of the single payer health plan that *An Act Establishing Medicare for All in Massachusetts* (filed in January 2025) would enact, as if it took effect in 2026. This bill would establish the Massachusetts Health Care Trust (hereafter, the Trust) to pay health care costs.

Savings and Costs of Expansion

The net effect of a single payer is to lower health care spending by $29.87 billion (23% of current spending) in the first year alone with savings increasing each subsequent year, while saving lives, expanding care, reducing practitioner burnout, and promoting the solvency of community hospitals and health centers.

We calculate current annual health care expenditures at $128.57 billion. Switching to single payer would eliminate $54.53 billion of unnecessary spending (over 42% of current spending) by reducing burdensome billing expenses, administrative waste in the insurance industry, monopolistic pricing of drugs and medical devices and in hospitals, and fraud.

About half of that savings, $24.67 billion, would be used to finance health care improvements: expanding coverage to the uninsured, removing barriers to access, and correcting the underpayment of Medicaid and Medicare services.

Eliminating unnecessary spending: $54.53 billion
Savings used to improve health care: -$24.67 billion
= Savings returned to the economy: $29.87 billion

Of the savings used to improve health care, $11.76 billion will go towards expanding coverage to uninsured individuals and improving the coverage of under-insured individuals. In Massachusetts, only 82.85% of medical expenses are covered by private insurance on average, and privately insured individuals have to pay the rest out of pocket. In contrast, 96% of medical expenses would be paid by insurance under the planned single payer system. The remaining savings used to improve health care primarily goes towards raising Medicare and Medicaid price rates.

The savings returned to the economy is money that would be spent on health care in the current system. In the first year alone, the proposed Act would bring down total health care costs from $128.57 billion to $98.70 billion in 2026.

Current health care expenditures: $128.57 billion
Savings returned to the economy: -$29.87 billion
= Expenditures under a single payer system: $98.70 billion, about 23% less than current spending.

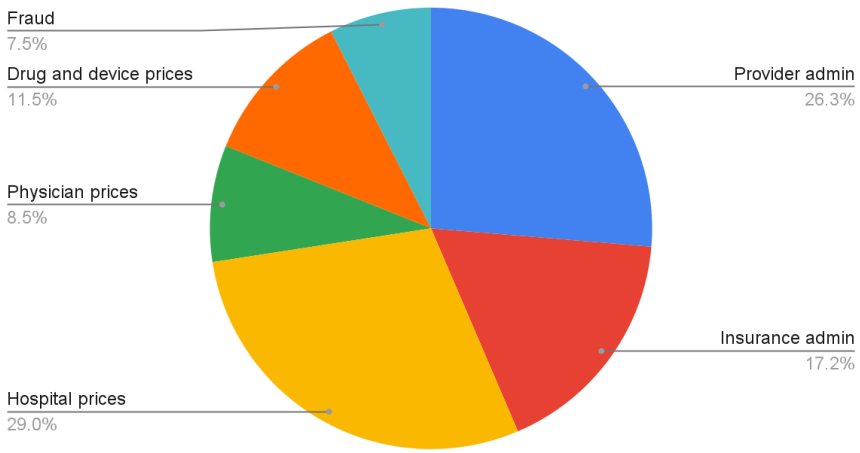

Figure ES1. Savings from eliminating unnecessary spending ($54.53 billion total) comes from six main sources.

The gross savings comes from six main sources (Figure ES1). The Act will reduce private insurance's administrative costs to current Medicare levels, saving about $9.40 billion in insurance administration and $14.35 billion in provider administration, double the amount needed to pay for expanding coverage alone. The Trust will negotiate provider prices. Our methodology assumes the Trust will on average pay 110% of current Medicare rates. Additional savings would result from simplified billing and payment processes, allowing providers to avoid the high administrative burdens associated with private insurance. Though average payment rates would be lower than those currently paid by private insurers, physicians' incomes are expected to increase due to rates above Medicare and Medicaid levels and higher service use, particularly among individuals who are currently uninsured or under-insured.

Lowering hospital prices to Medicare rates plus 10% would save $15.81 billion dollars in 2026, compelling hospitals to lower inflated managerial salaries and make for-profit hospitals less beholden to shareholders by reducing room for profit making. We also anticipate saving $4.65 billion by reducing physician prices to Medicare rates plus 10%.

Lower pharmaceutical drug prices would provide another area of savings. A single agency negotiating prices for seven million residents, just like the Veterans Administration, should be able to obtain dramatically lower prices. Bringing drug and medical device prices down by about 45% would save $6.25 billion.

Revenue

The Massachusetts Health Care Trust would be financed with existing Federal and State revenue (Medicare, Medicaid, and other programs, totaling $63.09 billion) plus four new taxes that replace and are much lower than current insurance premiums, co-pays, deductibles, and other out-of-pocket payments. This includes the health insurance premiums that are part of

auto, homeowners, other property insurance, and Workers Compensation. Each tax has a $20,000 exemption.

- Employers will pay 7.5% of payroll (8% if employing 100 or more).
- Employees will pay a 2.5% tax on wages and salaries. Employers could agree to pay this tax without it being income to employees.
- The self-employed will pay 10% of net income.
- Certain non-payroll income (e.g., capital gains, dividends, and interest) will be taxed at 10%.

These health care taxes raise $46.01 billion. The total amount raised would be $109.1 billion, more than enough to cover the cost of a single payer health care system. This leaves the Trust with a $10.4 billion surplus for contingencies in 2026.

This taxation system also leaves everyone earning less than $500,000 per year able to save a substantial percentage of their yearly income that they would otherwise spend on health care, plus an additional income of about $5,000 in the first year (and increasing in subsequent years) from added productivity due to better health (resulting from a more streamlined system of care) and macroeconomic feedback effects. While the largest savings would go to working households earning less than $75,000, over 98% of Massachusetts households would spend less on health care under the Act than they do now.

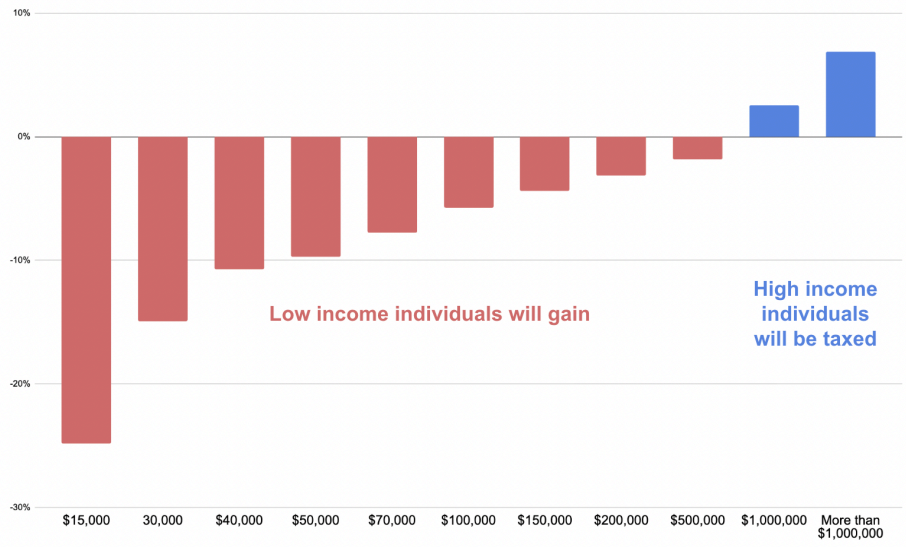

Figure ES2. Amount currently wasted in individual health care spending relative to projected individual health care spending after implementation of single payer. Red bars indicate that low-income individuals currently spend more on health care than what they would spend under single payer, and blue bars indicate that high-income individuals' will spend more on health care than they currently do, due to taxation. The bin labeled "$30,000" includes only individuals earning between $15,000 and $30,000 annually; the bin labeled "$40,000" includes only individuals earning between $30,000 and $40,000, *etc*.

Introduction: paying for health care

This economic analysis explores the implications of the single payer health plan proposed by *An Act Establishing Medicare for All in Massachusetts* (filed in January 2025) as if it took effect in 2026. The Act would replace the Commonwealth's current multi-payer system in which individuals, private businesses, and government entities pay public and private insurers for health care coverage. It would establish the Massachusetts Health Care Trust to finance medically necessary care including dental, vision, doctor visits, hospitalization, long-term care, medical devices, mental/behavioral health, prescribed occupational and physical therapy, prescription drugs, rehabilitative care, and preventive care. The Trust would offer this comprehensive coverage to all residents and to all non-residents who work 20 or more hours in Massachusetts. It would pay for it with current government spending and broad-based levies assessed on payrolls and on non-payroll income.

The Trust would finance medical care with substantial savings compared with the existing multi-payer system of public and private insurers. By reducing administrative and other waste, including health insurance company profits and excessive prices for drugs, hospitals, and medical devices, the plan would increase real disposable income for the vast majority of Massachusetts residents. Some of these savings would be used to extend coverage to uninsured and under-insured residents. Other savings would be reinvested in the health care system to improve coverage and access for the growing number with inadequate coverage and loss of providers.

By reducing barriers to access to health care, the plan would eliminate the financial penalty associated with health problems; it would also reduce economic inequality by replacing the current regressive system of health insurance finance with a system where contributions are proportional to income and ability to pay. By reducing the burden of health care costs on Massachusetts business, the Trust would also improve the Commonwealth's business environment. In addition, by improving access to health care and improving the health of Massachusetts residents, the Trust would promote higher labor productivity because healthier workers are more productive. In short, by encouraging investment and improving health, the Trust would promote faster growth in income. By removing health insurance from bargaining, the Trust would also promote more amicable labor relations, reducing discord and improving worker morale.

A single payer system would also greatly reduce the costs from time spent shopping for insurance, fighting claims, or switching between jobs and potentially between providers as well. A study showed that individuals who had recently undergone a change in health insurance status experienced higher psychological distress than individuals whose insurance coverage remained constant.[1] Further, individuals with private health insurance report poorer access to and less satisfaction with health care than individuals with publicly sponsored health insurance.[2]

[1] Ward and Martinez 2015; Korenman and Hyson 2023
[2] Wray, Khare, and Keyhani 2021

It's the prices

We spend more on health care in the United States because the price of care is higher in the United States.[3] For decades, policy has missed this fundamental point. Instead of addressing prices and underlying inefficiencies, it has tried to slow rising costs by reducing the utilization of health care with rising deductibles and other forms of cost sharing.[4] While this approach has had some success in slowing the growth in health care spending, it has done so at the expense of reducing access to care (see Figure 1). No other country has performed so badly and developed so much waste in its health care finance system.[5] The United States is unique with the fastest increase in costs with relatively small increases in life expectancy (see Figure 2). By reducing access to needed care, rising cost sharing has increased mortality (see Figure 3).[6]

Massachusetts has done more than other states to expand access to health care for poor and marginalized groups by implementing policies that have the potential to raise life expectancy by 2.8 years for women and over 2.1 years for men.[7] In Massachusetts, over the last few years, aggressive public action has helped to restrain the rate of increase in health care spending, holding it down to the rate of increase in state income (see Figure 4).[8] Unfortunately, this has been accomplished in part by increasing cost sharing to discourage health care utilization (e.g. raising deductibles; see Figure 5).[9] Since 2002, the average deductible on a private-sector employment-based health insurance plan, for example, has been increasing at an annual rate of over eight percent a year. As a result, Massachusetts exhibits the same pattern observed nationally: higher mortality in counties where residents cannot afford to access medical care (see Figures 6 and 7). Notably, despite the Commonwealth's low uninsured rate and our highly regarded hospitals and other health care facilities, the relationship between affordability of medical care and mortality is stronger in Massachusetts than in the nation overall.[10]

[3] G. F. Anderson et al. 2003; G. F. Anderson, Hussey, and Petrosyan 2019; Reinhardt 1989; Reinhardt, Krugman, and Frist 2019; International Federation of Health Plans 2024; Wagner and Cox 2024
[4] Rae, Cox, and Levitt 2019; Kaiser Family Foundation 2023; Abelson 2020; Case and Deaton 2015; Case and Deaton 2020; Sparks et al. 2025; Gunja et al. 2023
[5] Friedman 2020; El-Sayed and Johnson 2021; Barber et al. 2017; Emanuel 2020; D. W. Johnson 2019; D. W. Johnson 2021; Gale 2020
[6] Collins et al. 2015; Collins, Bhupal, and Doty 2019
[7] Montez et al. 2020
[8] Center for Health Information and Analysis 2025
[9] Rising cost sharing lowers health care spending by discouraging utilization. It also lowers the spending reported in the Commonwealth CHIA which does not include out-of-pocket spending.
[10] The coefficient on the proportion in a county who cannot afford medical care is twice as high in Massachusetts as it is in the United States as a whole, and the R squared on the regression is higher in Massachusetts indicating that the relationship is strong and significant.

Economic analysis of transitioning to the Massachusetts Health Care Trust[11]

Savings from eliminating unnecessary spending

The existing system of fragmented private health insurance

Estimates of the potential savings and costs of health care with universal access through a public program begin with estimates of the cost of coverage under the existing system (see Table 1). For each type of expenditure, such as hospitals or pharmaceuticals, we use estimates from the Centers for Medicare and Medicaid Services (CMS) available at the state level through 2019,[12] and we extrapolate spending for each type of expenditure and source of funds (Medicare, Medicaid, and private health insurance).[13] To this we add insurance administrative costs, also extrapolated from CMS data.

Provider administration

American health care providers (hospitals, physicians, etc.) spend significantly more time on administrative tasks than do their counterparts in countries with universal coverage systems. Physicians in the U.S., for example, devote one-sixth of their work hours on administration, including bill processing, and four times the time spent by their Canadian counterparts.[14] Updating electronic health records (used not only for patient care but for billing) requires an average of 16 minutes of physician time per patient visit (even while the primary load of handling insurance claims falls on administrative staff).[15] It costs much more to process bills in our system, where doctors report “wasting time on billing and insurance claims,” primarily in negotiating with payers for prior authorizations, more than in other countries. Even other countries that rely on private health insurers, like Switzerland or the Netherlands, reduce the administrative burden for providers through regulations that standardize benefit packages and payment systems.[16]

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[11] The methods and data sources used for all estimations can be found in the attached Appendix.
[12] “Health Expenditures by State of Residence, 1991-2020” CMS does not include administrative costs in its estimates, including costs within the insurance industry.
[13] We also extrapolated health expenditure using CHIA estimates of total health expenditure increases, which reflect higher post-COVID rates of growth. See Appendix for details.
[14] Swagel 2020; Shrank, Rogstad, and Parekh 2019; Himmelstein, Campbell, and Woolhandler 2020; Himmelstein et al. 2014; Jiwani et al. 2014; Berwick and Hackbarth 2012; Woolhandler and Himmelstein 2014; Woolhandler, Campbell, and Himmelstein 2003; Holmgren et al. 2021
[15] Overhage and McCallie 2020; Holmgren et al. 2021; Downing, Bates, and Longhurst 2018
[16] Schneider et al. 2017; Shrank, Rogstad, and Parekh 2019; Blanchfield et al. 2010; Emanuel 2020. This does not include the substantial administration costs on the side of employers and plan enrollees for time spent processing bills to the insurance industry (Pfeffer et al. 2020). Failures in the implementation of such standardization, such as the incentives for medically unnecessary treatment induced by the “DRG” system in Germany, should be learned from and avoided (Auffenberg 2022).

Based on provider administrative rates in a 2020 study of data from 2017,[17] we estimate that if Massachusetts hospitals, providers, and health care administrative staff were to spend, proportionally, only as much on administration as do physicians in Canada, they would save $14.35 billion dollars on administrative costs.

Savings from provider administration will be captured by the Health Care Trust through lower reimbursement rates; however physician incomes remain secure with a 10% increase on current Medicare prices.[18] Physicians will benefit from higher Medicaid reimbursements (raised to current Medicare prices plus 10%) as well as higher utilization, especially from those now uninsured or under-insured.[19]

Insurance administration

In the current system, we estimate that 8.23% of total spending is on the administration of the insurance system, including private insurance and employer-sponsored self-insured plans (which are administered much like private insurance) as well as government insurance programs. Private health insurers account for the bulk of this spending; we project that they will spend 11.07% percent of premiums on administrative activities, including redundant bill reviews, medical review programs, and other overhead, plus profit.[20] Salaries are also much higher for managers in private health insurers. The director of the Centers for Medicare and Medicaid Services, responsible for health insurance programs covering nearly half the population of the United States, is paid a bit less than $250,000; by contrast, the CEOs of seven large health insurers averaged over $19 million a year in compensation in 2023. The average health insurance CEO is paid more in a week than the CMS head is paid in a year.[21]

Private insurers also waste resources in other ways. Competition leads them to spend money on advertising and marketing their competing plans, spending that cures no illness and provides no health care. Many insurers are too small to realize the scale economies possible with a large billing network. Traditional Medicare operates with a medical loss ratio (MLR) of over ninety-eight percent, meaning that less than two percent of its spending is for administrative activities, saving about ten percent compared to private insurance. Despite the greater efficiency

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[17] Himmelstein, Campbell, and Woolhandler 2020; see also Kahn et al. 2005; Downing, Bates, and Longhurst 2018; Tseng et al. 2018; and Sahni et al. 2021.

[18] This approach may have the unintended effect of maintaining higher reimbursement levels for less efficient providers while placing relatively efficient providers at a comparative disadvantage due to their lower billing-related costs.

[19] Neprash et al. 2021

[20] Even under the ACA, government measures of insurance company MLR leave extensive scope for insurance companies to pass off administrative costs as medical costs. Allowable expenses include "educational outreach to members, utilization management, case management, disease management, and quality management." In addition, the time period allowed for medical expenses, net premiums, and re-insurance recovery are not consistently defined, leaving room for companies to inflate their MLR; *Medical Loss Ratios: Evidence from the States* 2008; The Affordable Care Act sets limits on administrative waste with minimum MLR of 85% for group plans and 80% for individual plans. Nationally, health insurers refunded over $2.6 billion in excessive administrative charges under the ACA in 2020 to nearly 8 million subscribers; a California estimate is that the MLR there is only 82%; Kahn et al. 2005

[21] Brusie 2025

of public programs, the private system of administrative waste has spread to the public sector through the Medicare Advantage plans and to Medicaid (through managed care programs), in large part due to deliberate policy decisions towards privatization in the late 20th century and following the passage of the Affordable Care Act.[22] Beyond this, maintaining a dual public-private system has further drawbacks. It inflates the public costs because it requires eligibility checks for access to public programs. For Medicare, this can be done relatively cheaply by checking birth certificates, comparable to what would be required under a single payer system. Public safety-net programs like Medicaid and CHIP, however, spend significant funds policing eligibility. The dual system is further flawed in that the limited range of public insurance undermines efficiency by leading individuals to seek supplemental private coverage. Overhead costs are even higher in this supplemental insurance market, including the Medigap policies purchased by many seniors to cover insurance costs not covered by Medicare.

We project that in 2026, Medicaid and Medicare overall administrative rates (non-benefit expenditures) will amount to 8.66% and 6.55% of total expenditures, respectively. We estimate that raising the MLR to the level of traditional Medicare, ninety-eight percent, would save Massachusetts $9.40 billion dollars in 2026. Employees would also save the time and stress involved in dealing with the problems accessing benefits through the insurance industry.[23]

Price adjustments: eliminating monopoly profit[24]

Hospitals and other providers

In his seminal article on health economics, Nobel-prize winning economist Kenneth Arrow warned that health care markets have a tendency toward monopoly because of the combination of asymmetric information -- where the sick lack information about the proper treatment of their illnesses -- and economies of scale in medical facilities, like hospitals.[25] Until the 1970s, monopoly pricing was restrained by state regulations, by the force of professional mores, and by the culture of not-for-profit communities.[26] The demise of rate setting and the replacement of mores and non-profit values with financial incentives have allowed the managers of hospitals and pharmaceutical and equipment manufacturers to use monopoly power to raise prices and profits and to expand their power through forming alliances.[27]

The exercise of monopoly power has raised prices for Americans using health care. Public attention has been focused on pharmaceutical and drug prices; the first Trump Administration

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[22] Gruber 2017
[23] While they could be captured through employment fees, these savings are not included in our estimate of the funding program. They are left as benefits to employers and their workers; Pfeffer et al. 2020; Nearly a third of American adults report expense and trouble dealing with their private health insurer; Schoen et al. 2010
[24] Referring to the profits made by a monopoly that it would otherwise not be able to make by producing the same products if it were in competition with other hospitals or providers.
[25] Arrow 1963; Reinhardt 1989
[26] McDonough 1997; G. Anderson and Herring 2015
[27] There is always a danger that providers will gain control over rate setting. To some degree this has happened for medical specialists; see Laugesen 2016

charged that drug prices are about twice as high in the United States as elsewhere.[28] But the attention paid to pharmaceutical prices should not distract from other areas of monopoly pricing. Over a decade ago, the Massachusetts Attorney General warned that elite hospitals were charging prices four to five times as high as other providers for the same service.[29] Similar findings show that the consolidation of hospital networks and physician practices have pushed up hospital prices and inflated managerial salaries. The median charge for inpatient procedures in California districts with market consolidation is nearly double that in districts with less market concentration.[30]

The Trust, through its power to negotiate prices, would place strong limits on opportunities for such monopoly pricing. In contrast, individual health insurers lack the market clout to resist the demands of networks and elite hospitals. They acknowledged this during the debate over the Affordable Care Act when insurance industry lobbyists -- notably Karen Ignagni of America's Health Insurance Plans (AHIP) -- supported Obama Administration initiatives in alliance with Administration economists who sought to strengthen insurance companies against hospitals and drug companies.[31] These efforts largely failed, and most insurers do little to resist the demands of monopoly providers who will, in some cases, charge four or more times the charge in other hospitals for the same services.[32]

Only one insurer currently has market power to balance that of elite hospitals with control over provider networks: the Centers for Medicare and Medicaid Services (CMS). Using its market power, CMS has been able to restrain hospital price increases, and the smaller increases in physician prices, holding down the rate of inflation in health care.[33] This has created a growing gap between the high prices charged to private health insurers and the prices hospitals charge Medicare (although there is evidence that Medicare rates may be as much as nine percent below the actual cost of providing hospital services[34]). In the case of Medicaid, reimbursement rates are substantially lower than Medicare, making it difficult for Medicaid recipients to find physicians willing to provide services at these low rates.[35] The Trust will therefore need to raise both Medicare and Medicaid prices. For this report, we assume that the Commonwealth is able to negotiate all hospital and physician prices to, on average, 110% of Medicare rates. This will have the greatest benefit for hospitals and community health centers serving lower-income individuals, which rely more heavily on Medicare and Medicaid income than larger hospitals serving privately insured clients.

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[28] Their recommendation is to raise prices elsewhere; see "Reforming Biopharmaceutical Pricing at Home and Abroad – The White House" 2018

[29] "Investigation of Health Care Cost Trends and Cost Drivers" 2010; "Examination of Health Care Cost Trends and Cost Drivers" 2010

[30] "Consolidation in California's Health Care Market 2010-2016: Impact on Prices and ACA Premiums" 2018; Bai and Anderson 2015; Abelson 2020; Meier, Craven McGinty, and Creswell 2013; Lopez et al. 2020; "Underpayment by Medicare and Medicaid Fact Sheet" 2019

[31] Starr 2013

[32] Meier, Craven McGinty, and Creswell 2013; "Investigation of Health Care Cost Trends and Cost Drivers" 2010

[33] Jiang, Jiang, and Bai 2025

[34] Lopez et al. 2020; Whaley et al. 2024; Berenson et al. 2015; Koller and Khullar 2019

[35] "Medicaid-to-Medicare Fee Index" 2024; Rickert 2025

Lowering hospital prices to Medicare rates, with a ten percent increase in Medicare rates, would save $15.81 billion in 2026, the largest area of savings. This would compel hospitals to lower inflated managerial salaries and make for-profit hospitals less beholden to shareholders by reducing room for profit making.[36] It may be difficult for hospitals to unwind these activities quickly, however.[37] We present estimates, therefore, under two separate assumptions: an immediate price reduction and a proposed gradual reduction over a four-year period with prices reduced by twenty-five percent of the total savings each year.[38] We anticipate saving an additional $4.65 billion from reducing physician prices; this smaller figure reflects the discrepancy between the high rate of recent growth in hospital prices and the more modest growth of physician prices.[39]

Prescription drugs and medical devices

A 2024 report by RAND using data from 2024 found that drug prices are about 278% higher in the United States than in 33 comparable countries, though the situation varies between brand-name drugs and their generic counterparts.[40] More recent studies, including by the Trump Administration, suggest that this now understates the penalty Americans now pay because drug prices may now be double those paid elsewhere. Because of higher prices charged in the United States, 46% of pharmaceutical company revenue for multinational pharmaceutical companies comes from the United States,[41] and direct comparisons of particular drugs shows American prices are often dramatically higher (see Figure 8).[42] Prices in the United States for common cancer drugs and insulin are up to five times as high as Canadian prices (see Figure 8). The International Federation of Health Plans found that, for eleven common drugs, the price in the United States is on average over three times the average price in Germany, Greece, South Africa, or Spain. For example, a treatment of cancer drug Herceptin costs $6,819 in the United States, but only $1,360 in the UK, and an acid reflux drug Nexium costs $215 in the United States, but only $23 in the Netherlands.[43]

Inflated drug prices reflect the market power of companies whose brand reputation is reinforced by patent protection and the lack of an effective check by our fragmented insurance industry. Inflated prices derived from market power are charged by producers who could still profit from providing the same product even at a much lower price.[44] Producers further take advantage of

[36] Francis and Lublin 2014
[37] Cai and Kahn 2025
[38] This gradual reduction is the approach followed by the CBO in Swagel 2020
[39] Cooper et al. 2019
[40] *International Prescription Drug Price Comparisons* 2024; Angrisano et al. 2007; International Federation of Health Plans 2024; Kesselheim, Avorn, and Sarpatwari 2016
[41] Jenei, Prasad, and Lythgoe 2022
[42] International Federation of Health Plans 2024
[43] International Federation of Health Plans 2024
[44] At $1000 per pill in the United States, $84,000 for a full course of treatment, Gilead Science's Hepatitis C drug Sovaldi has produced more profit in one year than Gilead spent on R and D for over a decade. Almost half of all revenue to Gilead in 2014 was profit. Despite large sales elsewhere, 84% of Sovaldi revenues were in the United States because of hard bargaining by foreign governments and insurers to secure lower prices than are paid by Americans; Belk 2015; Pollack 2014

the patent system by reformulating old drugs to subvert patent expiration. When market power is reduced with the removal of patent protection, for example, patients can buy the same drug for much lower prices. When a drug goes “off patent,” the entry of two new producers typically lowers prices by half, and prices fall by over eighty percent when there are eight or more producers.[45]

Some Americans pay less for drugs. Negotiating directly to buy drugs in bulk, the U.S. Department of Veterans Affairs (VA) is able to provide drugs at half the price paid by other Americans,[46] and the Congressional Budget Office estimates that Medicare part D is charged almost three times as much as Medicaid prices.[47] With a population of seven million, the Commonwealth of Massachusetts is comparable in size to the number of veterans receiving health care from the VA (about nine million).[48] A single agency negotiating prices for seven million residents should negotiate dramatically lower prices. Bringing drug and medical equipment prices down to Medicaid levels would save $6.25 billion.[49]

Waste and fraud

Fraudulent and mistaken billing -- including duplicate billing and billing for services not rendered -- accounts for between three and ten percent of health care spending in the United States, including an error rate in Federal programs of over nine percent.[50] A single payer authority would reduce fraud and mistakes in the billing process in three ways. Eliminating multiple payers would immediately eliminate the possibility of duplicate billing. It would also simplify the process of tracking bills. In addition, public authorities have greater subpoena and prosecutorial powers, giving them more power to stop fraud. By reducing fraud and accidental overcharging, Massachusetts could, conservatively, save 3.22% of total current expenditures, or $4.07 billion.[51]

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[45] “Generic Competition and Drug Prices” 2024; Baker 2004

[46] Frakt, Pizer, and Feldman 2012; Blumenthal and Squires 2016; Bagalman 2014b

[47] “A Comparison of Brand-Name Drug Prices Among Selected Federal Programs” 2021

[48] Bagalman 2014a; a study of 11 countries found those with single payer insurance system had lower drug prices and bargaining power largely explains higher drug spending in the United States; Morgan et al. 2009

[49] Angrisano et al. 2007; as is done with the VA, the state would establish a formulary list of covered drugs and negotiate prices with producers. It would then make these drugs available at the reduced prices to pharmacies and other private vendors

[50] “Medicare and Medicaid Fraud, Waste, and Abuse: Effective Implementation of Recent Laws and Agency Actions Could Help Reduce Improper Payments | U.S. GAO” 2011; “Testimony of the National Health Care Anti-Fraud Association to the House Insurance Committee” 2010; Shrank, Rogstad, and Parekh 2019 puts the number a bit lower,

[51] This savings estimate is made after taking account of increases in utilization due to the universal coverage plans, extension of coverage, and removal of copayments and deductibles. The estimate of savings from fraud reduction is conservative compared with, for example, the Lewin Group, which regularly assumes that 5% of claims are fraudulent. We assume that twenty percent of these errors would be detected with enhanced subpoena powers without taking account of the reduction in duplicate claims under a system like that proposed here.

Cost of coverage

Access to care can be assured for residents of the Commonwealth only if costs can be controlled. These costs can be controlled while access is increased only if the price of care can be contained, which can only happen if health care can be provided more efficiently or if we can squeeze monopoly profits out of the health care system.

Costs of Expanding Coverage

We make two adjustments to current expenditures to account for universal coverage and universal access. First, we assume that those who are currently uninsured will increase their utilization of health care. While this includes 2.67% of the population, it will increase spending by less than this figure because the uninsured tend to be relatively young and healthy, and because they are already using health care, either from charitable support or out-of-pocket.[52] For this reason, covering an additional 2.67% of the population would be associated with an increase in spending of only 1.54%.

In addition, we assume that removing most cost sharing will increase utilization. While this will have real benefits in health and economic efficiency, and may lead to some reductions in complications and cost in the future, it will involve immediate expenses.[53] An experimental study by Brot-Goldberg et al. found that moving to a high-deductible plan with significant cost sharing in a self-insured firm was associated with a reduction in spending of between eleven percent and fifteen percent.[54] We estimate that in Massachusetts, where about one-third of the population now has a high deductible plan, moving to the proposed Trust with an actuarial value of 96% (the percentage of total average costs that an insurance plan will pay) will result in an increase in utilization of 7.65% through induced demand. In total, expanding coverage for under-insured individuals increases health care expenditures by $11.76 billion.

Integrating Medicare and Medicaid into a universal program

To ensure that physicians and hospitals are receiving fair payment after price reductions from high private insurance rates, we allow for an increase in Medicare costs of 10%. Including the cut in price reductions from private health insurance levels and additional increase in Medicaid prices this entails (see below) on top of the added expenditures for current Medicare services, this amounts to a cost of $4.22 billion dollars, with an increase in traditional Medicare prices alone accounting for $1.97 billion of this total. If, for example, a 15% increase in prices were necessary to ensure bargaining power with providers, the total cost would be $6.34 billion dollars. Table 1 assumes a 10% increase in prices.

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[52] Hadley 2004; Euhus and Mathers 2025

[53] Experience has been that new systems of universal coverage have had relatively small effects on total utilization. It may be that physicians have reallocated their time to needy patients previously unable to access care by reducing low value care provided relatively affluent patients. Cheng and Chiang 1997; Enterline et al. 1973; Fruge, Marshall, and Robert 2012; Chollet 2012

[54] Brot-Goldberg et al. 2017

Medicaid currently reimburses at rates as low as seventy percent of Medicare rates.[55] This is inequitable for Medicaid providers who are paid less than other providers for the same services. It also makes it more difficult for Medicaid recipients to access care. This selection will no longer be necessary when all residents are in the same health plan. Therefore, we include the costs of raising all Medicaid prices to Medicare levels plus 10%, an additional $10.93 billion in 2026.

Currently, Medicare recipients who are not dual eligible (i.e., who are not also on Medicaid) may enroll at their own expense in Medicare Part B at a cost of $185 per month.[56] Since the Trust will cover all medically necessary costs for eligible individuals by default, there is no reason to maintain the Part B system. However, unless the Part B premiums are paid, the Trust would lose access to Medicare Part B funds from the federal government. The Trust, therefore, will have to pay these premiums, which is projected to be $3.02 billion in 2026.[57] This figure is included in the calculation of total current expenditure, and is not counted as an additional cost.

Paying for a better system

Revenue from existing sources

After taking account of the additional costs associated with universal access and the savings coming from improved administration and the reduction of monopoly profits, Massachusetts would spend $98.70 billion in 2026 with the full implementation of the Massachusetts Health Care Trust.[58] Existing revenue sources will supply $63.09 billion in 2026 (see Table 2).

There are a few particular issues to note:

- The Act expects the Trust to receive Medicare's Massachusetts spending via a contract called a Medicare Waiver. Medicare in that case understands that the Trust will pay all medical bills of Medicare enrollees. But Medicare might deny the Waiver and insist on continuing to pay those bills. In that case, the Act's "Wraparound Coverage" section requires that the Trust pay whatever Medicare does not. That includes premiums for Medicare B, C, and D. But any loss of Medicare revenue to the Trust also means lower Trust expenses.
- Medicaid payments will increase with higher reimbursement rates and higher enrollment under the program. Under the current system, the federal government would fund 50% of these additional Medicaid costs (as they fund 50% of all Medicaid costs). Though we do not include this in our calculations, the federal contribution would amount to $8.5 billion.
- The VA will remain separate with its own funding and program.

[55] "Medicaid-to-Medicare Fee Index" 2024
[56] "What Does Medicare Cost?" 2025
[57] An alternative would be to make Part B premium payments a requirement for access to Trust benefits. This would mean that seniors would be the only ones charged a premium for access to the Trust.
[58] We assume an actuarial rate of 96% with 4% of health care spending remaining out-of-pocket, including over-the-counter medications and some non-medically necessary services, such as cable-television in hospital rooms or procedures of dubious value.

- We include existing revenue from “Other state public health activities,” which corresponds to the NHE category “Other Third Party Payers and Programs and Public Health Activity,” including “worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs, Substance Abuse and Mental Health Services Administration, other state and local programs, and school health.”[59] We have estimated revenues under this heading as the same share of total spending as is the case nationally minus medical spending under workers compensation and worksite health care, on the assumption that these will be paid by the Trust.
- We distinguish between traditional “out-of-pocket” costs, such as premiums paid to health insurance companies, and “remaining out-of-pocket” costs, which are expenditures in which health insurance traditionally plays no role. The Trust would eliminate the former entirely, replacing these costs, for most individuals at a fraction of the former cost, with taxation. These remaining out-of-pocket costs comprise the 4% of coverage not included in the target 96% actuarial value of the Trust. and fall into two categories: minor spending items such as on off-the-shelf drugs like aspirin, and expensive medically unnecessary treatments. These costs are included in the estimations of the “existing revenue” of the Trust (Table 2) only because they are also included in the estimates of the total expenditures of the Trust (i.e., they are cancelled out in the calculations). We find it worth reporting these costs in Table 2, however, because in the future the first category of minor remaining out-of-pocket costs (e.g. aspirin) may be covered by the Trust as well, while staying well within the bounds of the estimated surplus. Medically unnecessary treatments will not be covered by the Trust, and will remain out of pocket expenditures.

New revenue sources

The rest of the required revenue must be raised from the Commonwealth’s residents from sources like those itemized in Table 4.[60] In addition, we have estimated needed and available revenue over ten years under two alternative assumptions: immediate implementation of full savings including price reductions, and reduction of hospital prices over four years (see Table 3).

The proposed legislation has four taxes, each with the first $20,000 of relevant income exempt from taxation. Employers will pay 7.5% of payroll (8% if employing 100 or more); employees will pay a 2.5% tax on wages and salaries (employers could agree to pay this tax without it being income to employees); self-employed will pay 10% of net income; and certain non-payroll income (interest, dividends, capital gains, S corporations, and partnerships; the Act excludes other non-payroll income sources such as unemployment benefits, retirement plan income, social security disability insurance, and supplemental security income) will be taxed at 10%. The resulting revenue is shown in Table 5.

[59] “National Health Expenditure Data” 2023

[60] Since various data sources provide different estimates for projected tax revenues, we provide three estimates from three different data sources in Table 4, only some of which were used to produce the figures in Table 1.

This funding is progressive in three ways. First, moving from fixed lump-sum premium payments to one where payments are related to income will inevitably benefit lower and middle-income households because these households spend a higher proportion of their income on health care and a fixed payment is a higher share of their income.[61] In addition, progressivity is integrated into the tax program here through the fixed exemption and by taxing non-payroll income at a higher rate.[62]

Because of the financial savings to be achieved through implementing the Massachusetts Health Care Trust, it will be possible to provide universal access to health care for all residents of the Commonwealth at a lower cost than the current system (see Table 1 and Figure 9). So great are the savings that the additional revenues to be raised to finance the program are substantially less than the premiums and other cost sharing that Massachusetts employers and family members now pay for health care. Indeed, the revenue program included in the Trust budget will be more than sufficient to finance the Trust, yielding a surplus of $10.4 billion in 2026 (see Figure 10 and Table 5), that may be needed for contingencies or refunded.[63]

The progressive nature of the program here is demonstrated in Figure 11 which shows the change in net income, that is, income after paying for health care and any new health care taxes, from tax programs under the assumption that prices will be adjusted immediately and the proposed tax program is implemented.

Other considerations: productivity and health

Establishing the Massachusetts Health Care Trust will benefit Massachusetts businesses and workers and municipalities by lowering the cost of health care, removing the burden of unfunded and unpredictable retiree health care costs, and eliminating “job lock” where workers are compelled to remain at a particular employment to maintain their health insurance.[64] Lowering the cost of operation will allow Massachusetts businesses to compete more effectively on national and international markets, increasing employment and income in the Commonwealth. Businesses will also benefit directly by removing the cost of selecting and implementing health insurance programs for their workers.

As is demonstrated in Figures 6 and 7, improving access to health care will lead to reduced mortality and improved population health.[65] These are ends in themselves. In addition, however, they have ancillary benefits. A healthier population is a more productive population. Healthy workers miss fewer days due to illness and lower stress is associated with better concentration

[61] Saez and Zucman 2019
[62] Nonwage income is a much higher share of income at higher income levels. Further progressivity may be introduced by making the exemption related to income, higher for lower income and lower for higher income households.
[63] This is true even with a phased introduction of the Act’s price reductions for hospitals. At least some of the surplus revenue should be used to accumulate reserves for unexpected expenses or for economic downturns with a reduction in revenues.
[64] “Medicare for All: Comparison of Financing Options” 2020
[65] Borgschulte and Vogler 2020

and higher productivity.[66] Not only is Years of Potential Lives Lost (YPLL)[67] associated with access to health care, but increases are associated with lower labor productivity.[68] Putting these effects together, lowering the share of Massachusetts residents who cannot afford to see a doctor from seven percent down to five percent would be associated with a reduction in PYLL that would lead to an increase in labor productivity of ten percent, equivalent to almost a decade of productivity and income growth.[69] The effect of such an increase on Massachusetts income is shown in Figure 12.

The positive association between productivity and health care access creates a virtuous cycle where treating people better is itself productive, beneficial not only to those who directly benefit but to the entire community.[70] Even those whose taxes will rise will benefit from living in a healthier community with more productive workers. And higher productivity and income will have the effect of allowing lower tax rates than those given here under the static assumption of no increase in employment, income, and productivity. Should this increase be realized, it would allow a reduction in the taxes needed to fund the Trust.

[66] "Medicare for All: Comparison of Financing Options" 2020; Wilkinson and Pickett 2010
[67] PYLL is the sum for all deaths in a year of the number of remaining years to live up to a selected age limit
[68] Vargas et al. 2025; Rumisha et al. 2020; Najafi et al. 2016; Rahotă et al. 2024
[69] Gordon 2017
[70] Friedman 2020

Figures

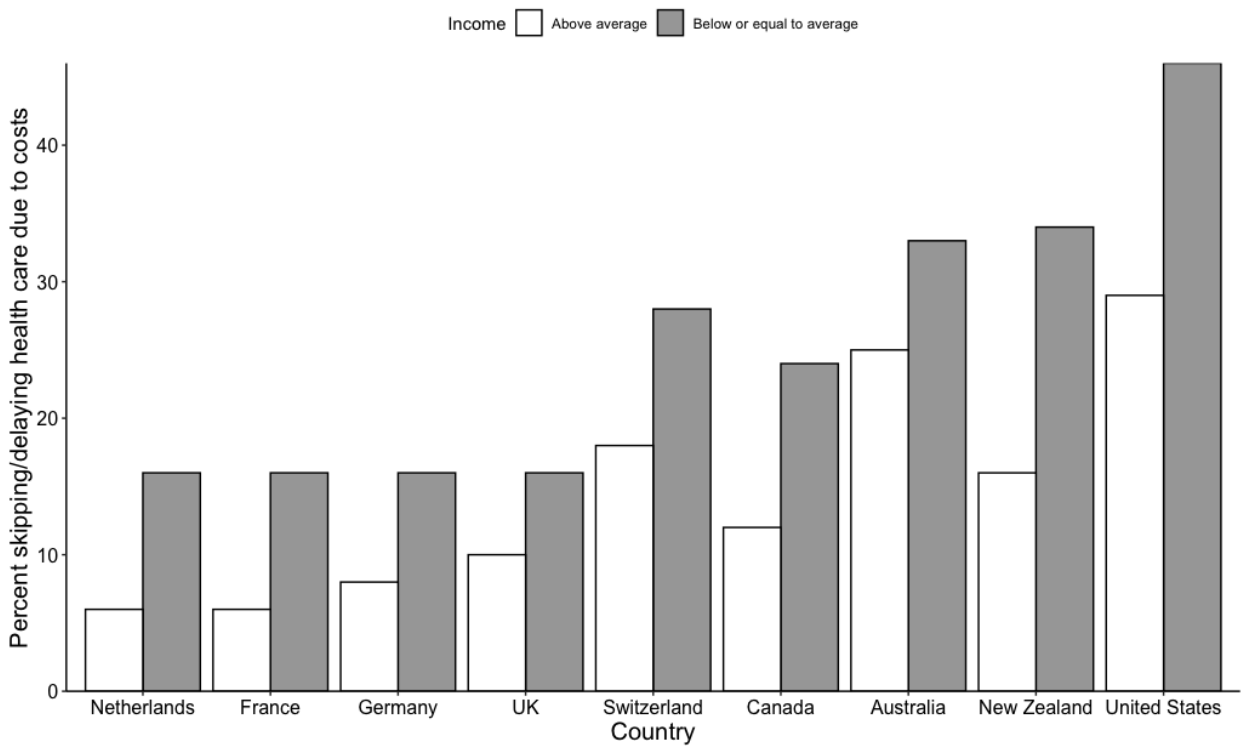
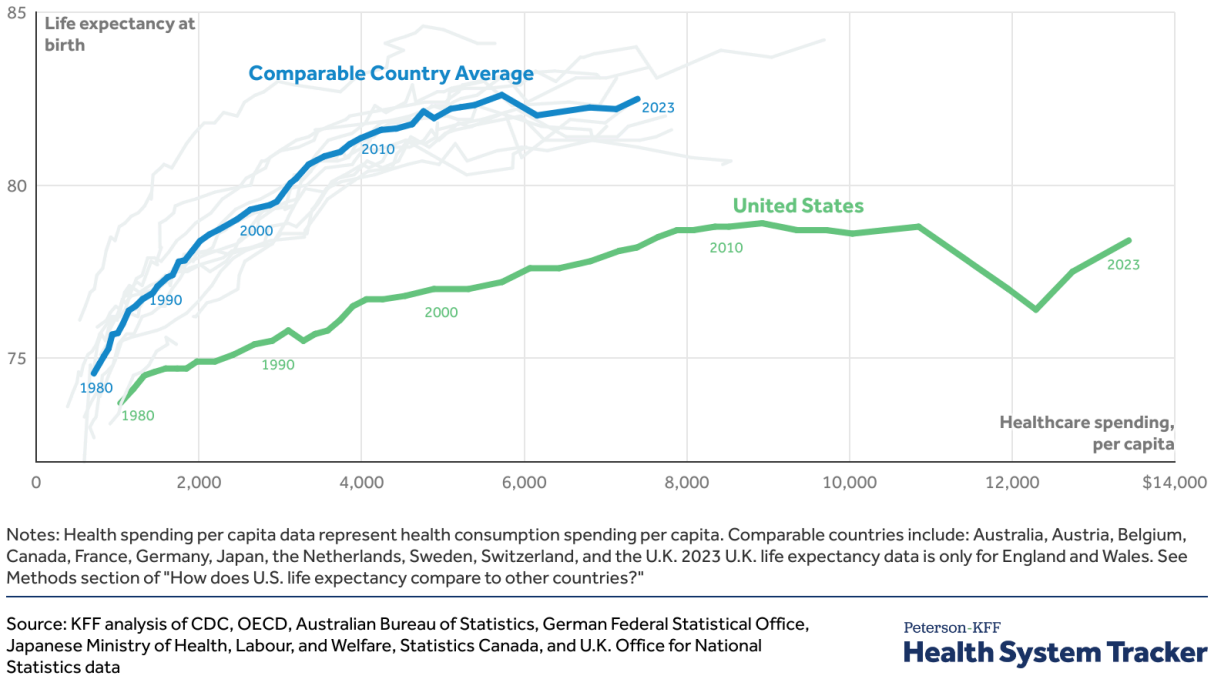


Figure 1. Proportion reporting that they did not receive medical care in the past year because of cost.[71]

[71] Source: https://www.commonwealthfund.org/publications/surveys/2023/nov/cost-not-getting-care-income-disparities-affordability-health



Notes: Health spending per capita data represent health consumption spending per capita. Comparable countries include: Australia, Austria, Belgium, Canada, France, Germany, Japan, the Netherlands, Sweden, Switzerland, and the U.K. 2023 U.K. life expectancy data is only for England and Wales. See Methods section of "How does U.S. life expectancy compare to other countries?"

Source: KFF analysis of CDC, OECD, Australian Bureau of Statistics, German Federal Statistical Office, Japanese Ministry of Health, Labour, and Welfare, Statistics Canada, and U.K. Office for National Statistics data

Peterson-KFF Health System Tracker

Figure 2. Life expectancy and health care spending per capita, 1980-2023.[72] Values on the horizontal axis are given in USD.

[72] Source: https://www.healthsystemtracker.org/chart-collection/u-s-life-expectancy-compare-countries/#Life%20expectancy%20and%20healthcare%20spending%20per%20capita,%201980-2023

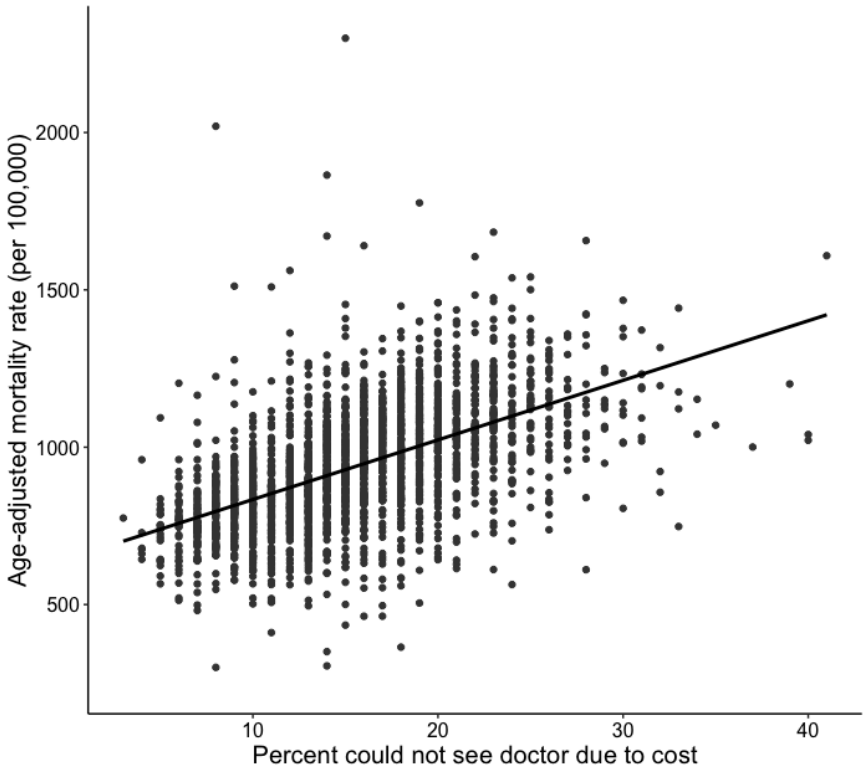


Figure 3.[73] Age adjusted mortality and uninsurance, all U.S. counties. Data on access to doctors from 2014; age-adjusted mortality averaged from 2019-2023. The number of deaths per 100,000 increases by 19 for every increase of 1% in the proportion of the population that cannot afford to see a doctor, with $R^2 = 0.29$.

[73] Age-adjusted data sourced from "HDPulse: An Ecosystem of Minority Health and Health Disparities Resources" (National Institute on Minority Health and Health Disparities, https://hdpulse.nimhd.nih.gov); medical access data from County Health Rankings & Roadmaps (https://www.countyhealthrankings.org/health-data/methodology-and-sources/data-documentation/national-data-documentation-2010-2023).

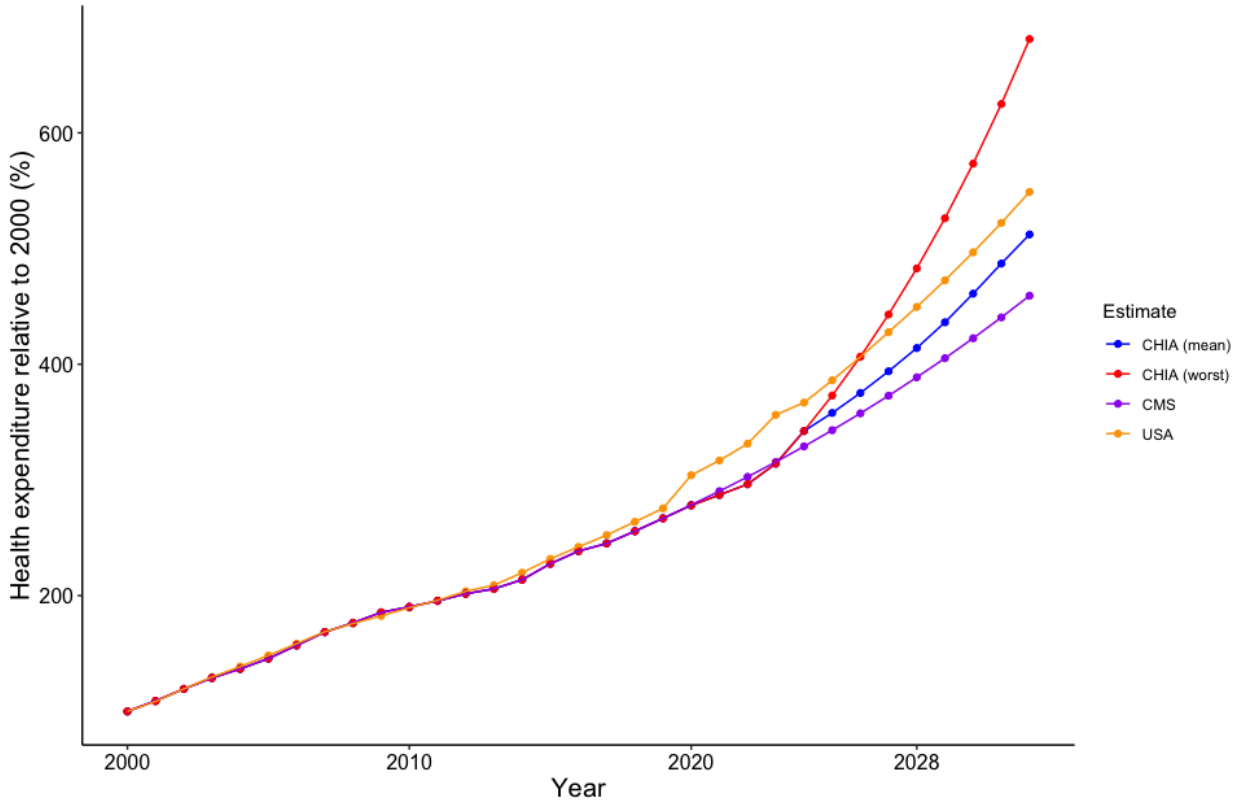


Figure 4. Increase in health expenditures, nation- *vs.* statewide. CMS and CHIA estimates are statewide, using alternative estimations for projection. Statewide estimates are projected past 2019, and nationwide estimates are projected past 2023. See appendix for details.

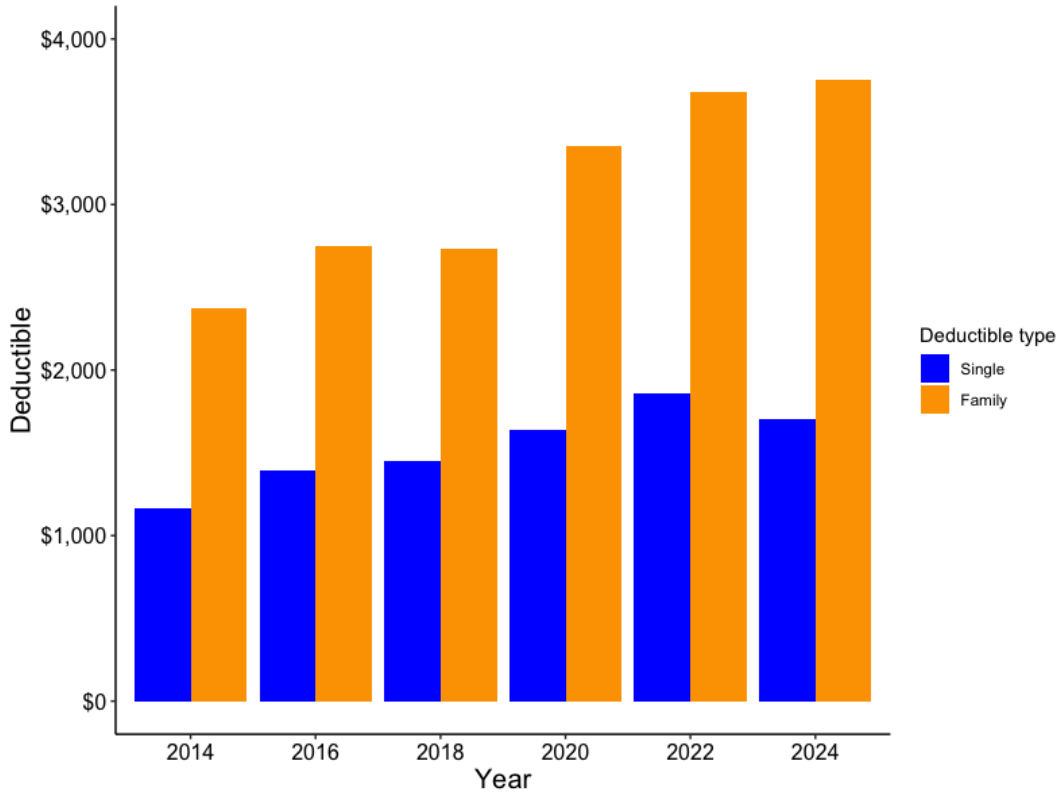


Figure 5. Average Deductible, private-sector employer-provided health insurance, Massachusetts[74]

[74] Data from https://www.kff.org/private-insurance/state-indicator/average-annual-deductible-per-enrolled-employee-in-employer-based-health-insurance-for-single-and-family-coverage/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

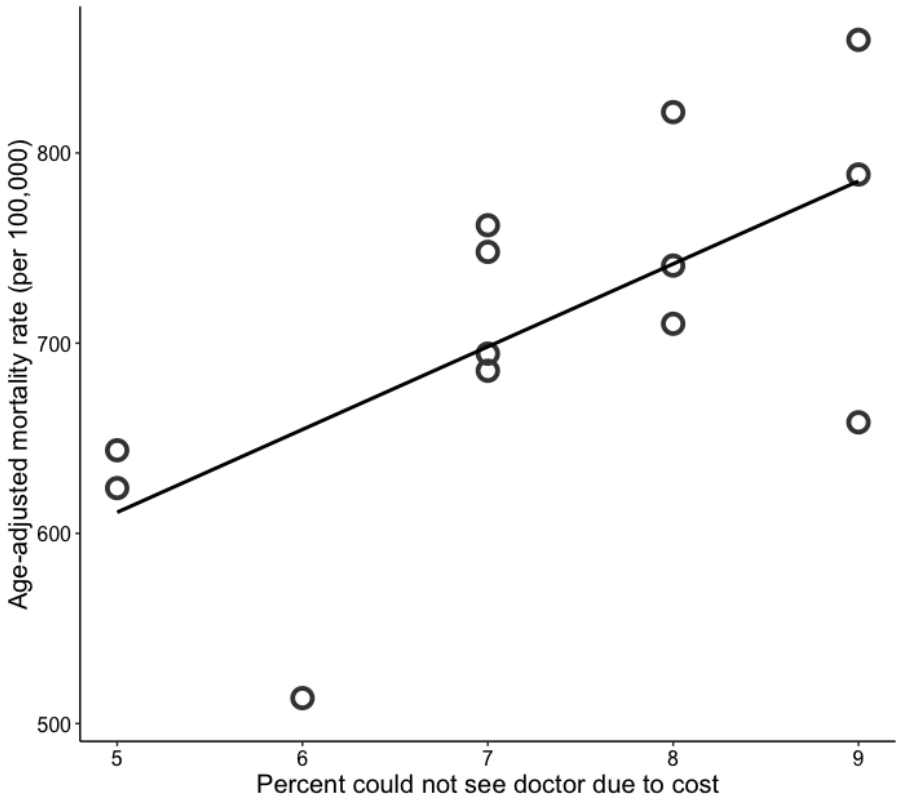


Figure 6. Effect of access on mortality, Massachusetts counties. This shows the relationship between the proportion who report they could not afford to see a doctor in 2014 and the age-adjusted mortality in Massachusetts counties in 2019-2023. It also shows the regression of mortality on access with the age-adjusted mortality rate increasing by 44 per 100,000 for every increase of 1% in the proportion of the population that cannot afford to see a doctor, with an R^2 value of 0.38. This relationship is even stronger in Massachusetts than in the nation as a whole (Figure 3) where the coefficient on ability to afford to see a doctor is 19 and the R^2 is .29.[75]

[75] Data sources are the same as for Figure 3

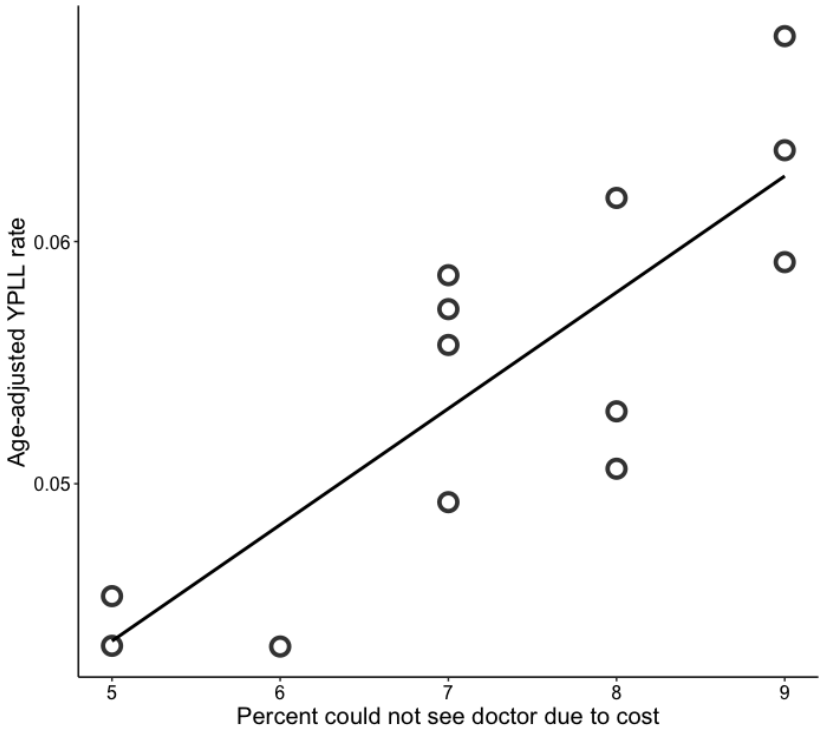


Figure 7. Effect of access to health care on estimated years of potential life lost, Massachusetts counties, 2014.[76]

[76] All data from County Health Rankings & Roadmaps (https://www.countyhealthrankings.org/health-data/methodology-and-sources/data-documentation/national-data-documentation-2010-2023).

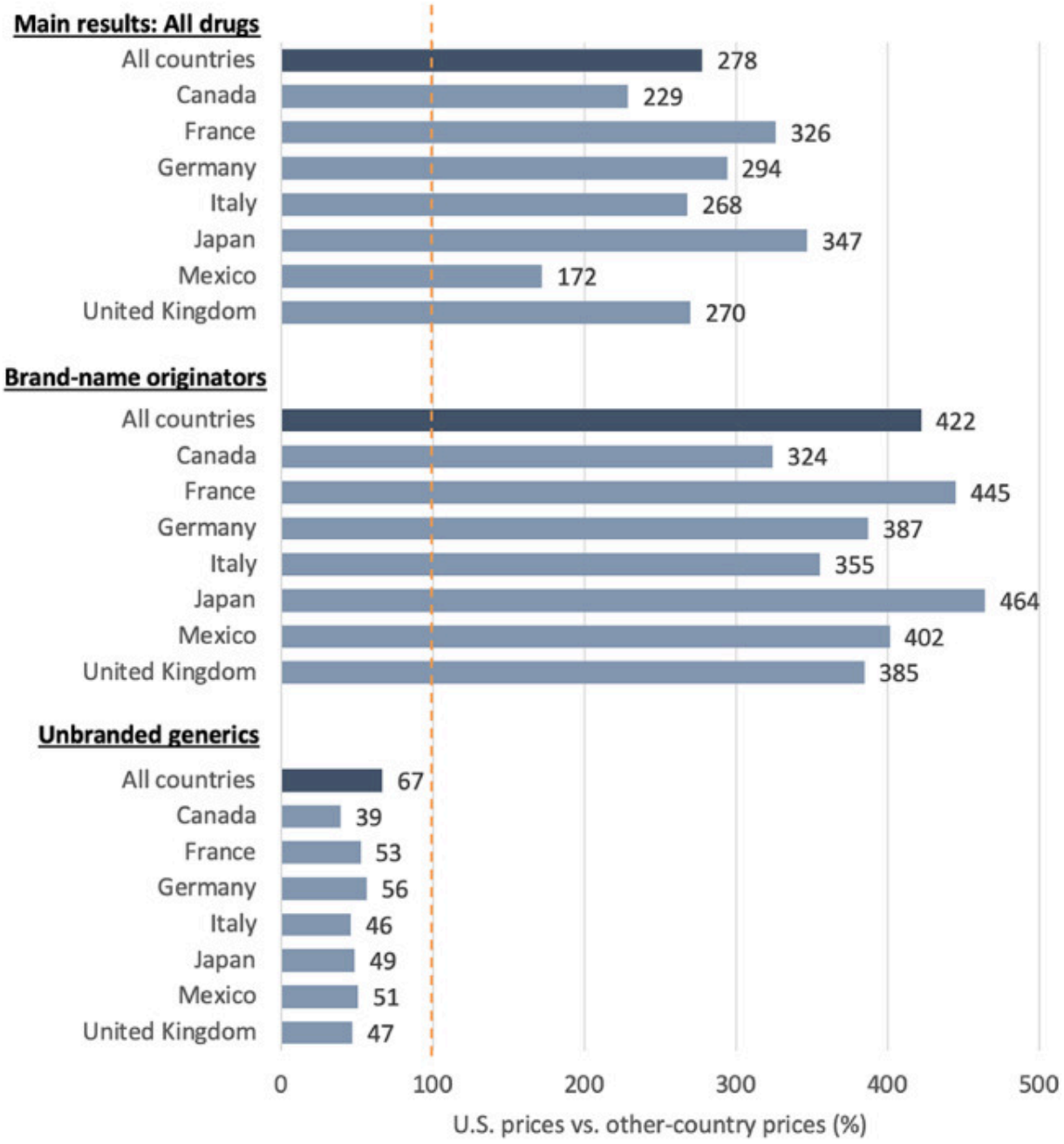


Figure 8. U.S. Manufacturer Gross Prescription Drug Prices as a Percentage of Prices in Selected Other Countries, All Drugs, 2022.[77]

[77] Figure copied from Mulcahy, Schwam, and Lovejoy 2024

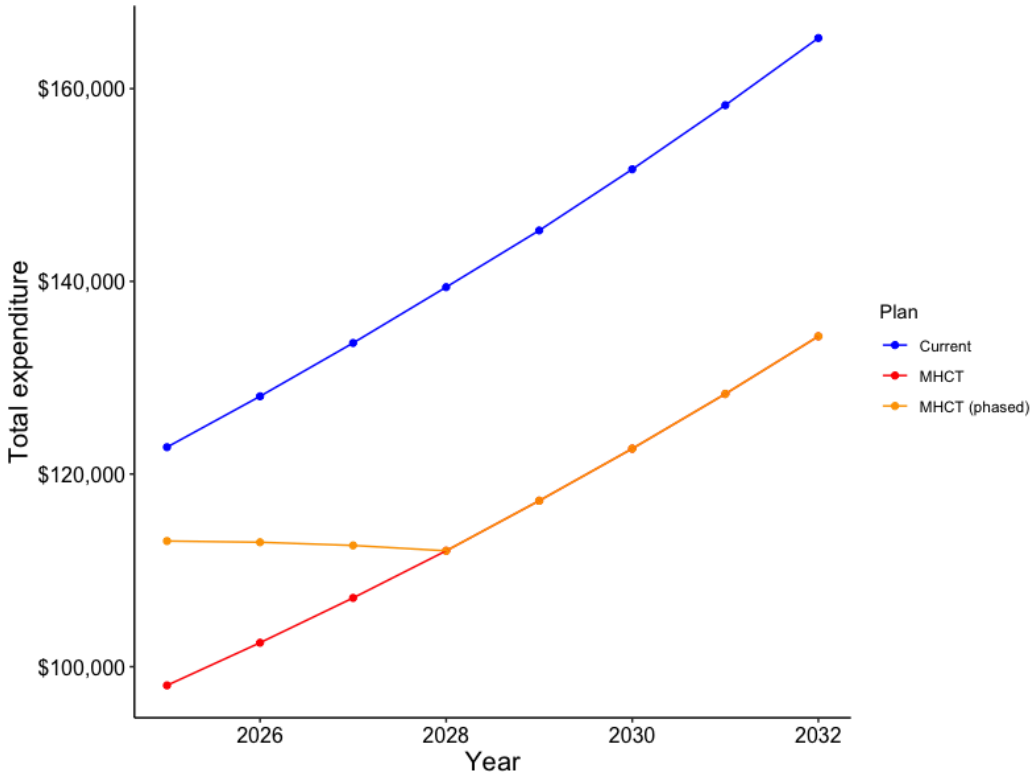


Figure 9. Comparison of Health Care Spending: current system and the Trust. Expenditures are in millions of dollars.

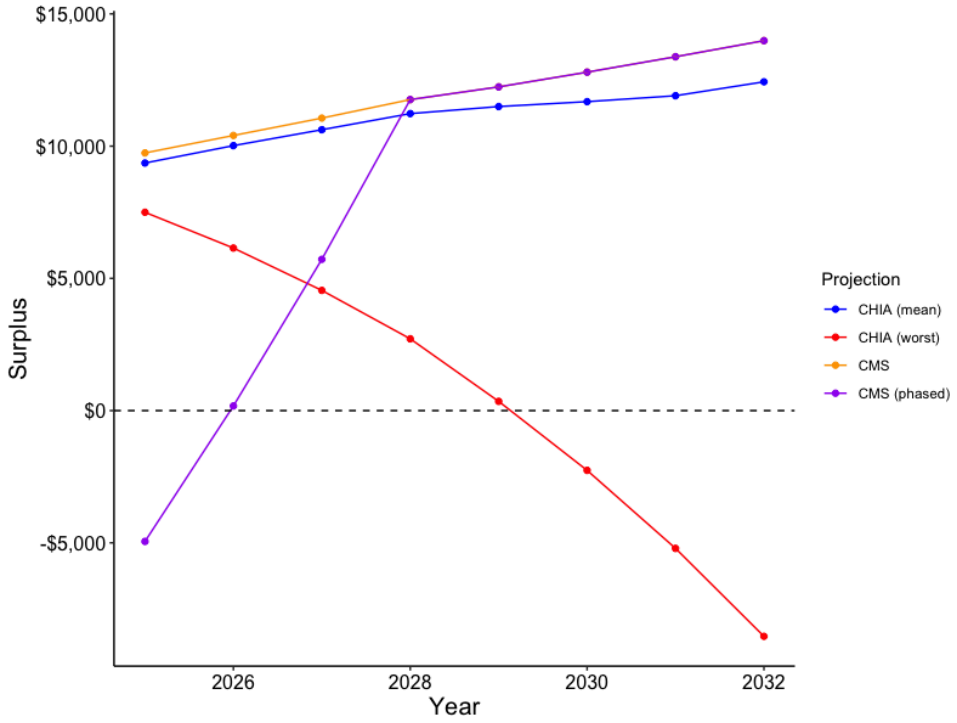


Figure 10. The Massachusetts Health Care Trust is sustainable over time, surplus revenue with immediate implementation of hospital price reduction and reduction over four years. The only projection with a decreasing surplus over time is the CHIA (worst) model, which uses a very high rate of expenditure increase (8.60%) while assuming that the price ratio between PHI and Medicare remains constant (see appendix for details). Surplus is in millions of dollars.

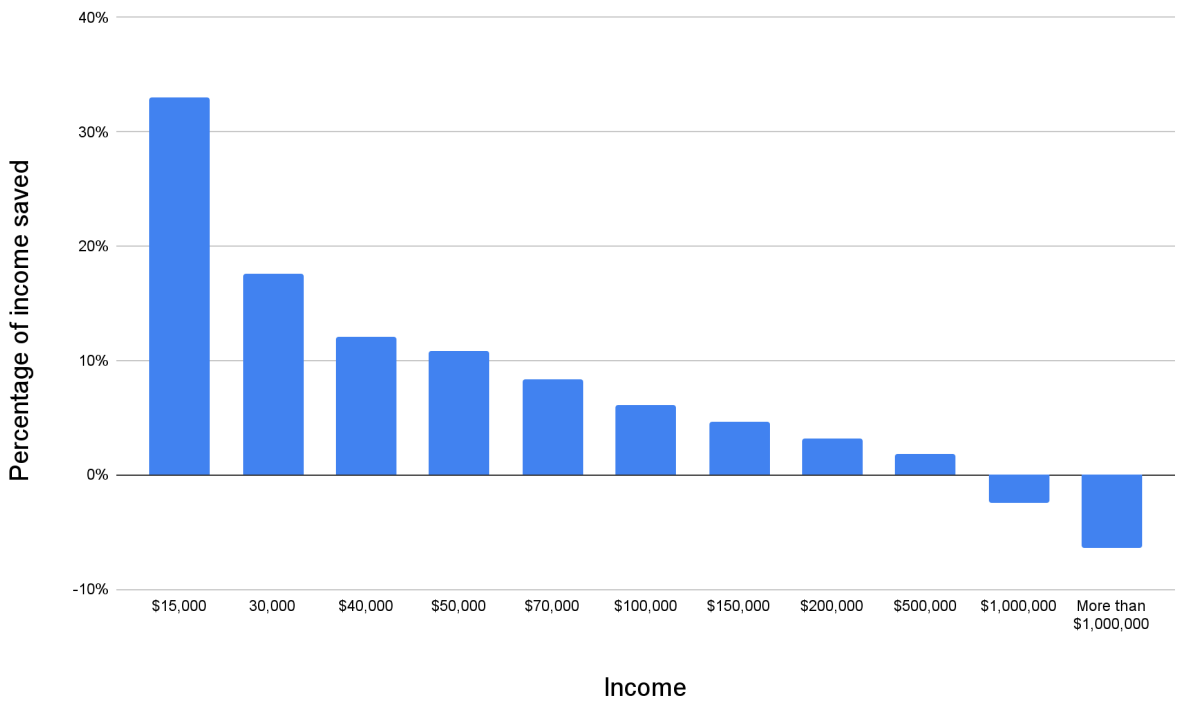


Figure 11. Net effect of Massachusetts Health Care Trust on income after taxes in 2026 (vertical axis represents the percentage of the income that would normally be spent on health care, but will instead be saved [or taxed, in the case of high earners]). For example, individuals earning between $70,000 and $100,000 per year currently spend about 7.5% of their income on health care, but under the Trust only 1.5% of their income will be taxed to fund the Trust, saving them 6% of their income annually.[78]

[78] Data from IRS (see appendix) and the Bureau of Labor Statistics Consumer Expenditure Surveys (https://www.bls.gov/cex/tables/calendar-year/mean-item-share-average-standard-error.htm#cu-income)

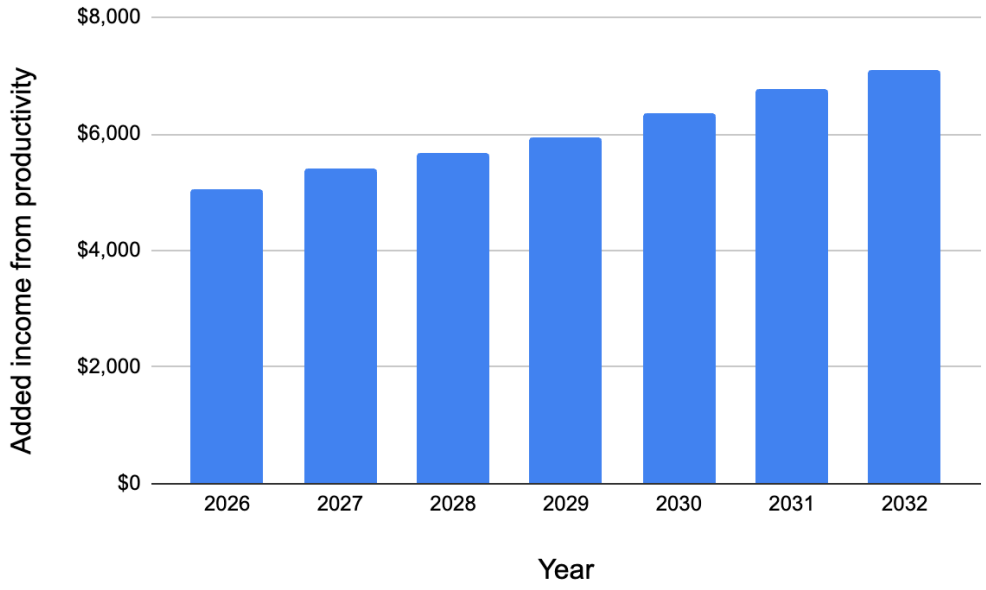


Figure 12. Mean added income per year from increased productivity due to improved health, plus macroeconomic feedback effects, as estimated by the Penn Wharton Budget Model.[79]

[79] "Medicare for All: Comparison of Financing Options" 2020

Tables

Expenditures, current utilization		**2026**
	Personal health care	$119,060
	Insurance administration	$9,506
	Total	$128,566
Savings from eliminating unnecessary spending		
	Provider administration	-$14,354
	Insurance administration	-$9,402
	Hospital price adjustment	-$15,808
	Physician price adjustment	-$4,646
	Prescription drugs and medical devices price adjustments	-$6,245
	Fraud	-$4,073
	Total savings	-$54,528
Expanding coverage costs		
	Improved access	$11,760
	Medicare price adjustment	$1,970
	Medicaid price adjustment	$10,930
	Total costs	$24,660
Net spending, Mass. Health Care Trust, full utilization		$98,698
Funding of the Massachusetts Trust		
Existing revenue sources		$63,092
New revenue sources		
	7.5% on small employers	$9,305
	8% on large employers	$18,395
	2.5% on employees	$7,466
	10% on self-employed	$1,839
	10% on non-payroll income	$9,004
	Total new revenue	$46,009
Total revenue sources		$109,101
Surplus		$10,403

Table 1. Projected cost of health care, Massachusetts 2026, current system and with universal coverage at high actuarial value (estimates are in millions of dollars).

Source of revenue	2026
Medicare	$26,084
Medicaid	$22,233
Other state public health	$9,529
Remaining out-of-pocket	$3,948
ACA subsidies	$1,298
Total	$63,092

Table 2. Existing revenue sources, projected 2026 (estimates are in millions of dollars).

Year	Immediate price adjustments	Price adjustments over 4 years
2025	$94,490	$113,045
2026	$98,698	$112,921
2027	$103,116	$112,588
2028	$107,756	$112,029
2029	$112,693	$117,230
2030	$117,819	$122,635
2031	$123,207	$128,318
2032	$128,872	$134,297

Table 3. Projections of total spending on health care per year under Massachusetts Health Care Trust plan from 2025-2032. Two alternative plans for price adjustments are given, one in which prices are reduced immediately and one where the price adjustments are implemented gradually (estimates are in millions of dollars).

Based on Census (without 20k exemption)	**2026**
Small employers (<100 employees) pay 7.5% of payroll	$9,577
Large employers (≥100 employees) pay 8% of payroll	$18,404
Employees pay 2.5% tax on wages/salaries	$8,943
Based on Census (with 20k exemption)	
Small employers (<100 employees) pay 7.5% of payroll	$9,305
Large employers (≥100 employees) pay 8% of payroll	$18,395
Employees pay 2.5% tax on wages/salaries	$7,168
Based on BEA (without 20k exemption)	
Employees pay 2.5% tax on wages/salaries	$9,635
Self-employed pay 10% on income	$4,665
Based on BEA (with 20k exemption)	
Employees pay 2.5% tax on wages/salaries	$7,466
Self-employed pay 10% on income	$1,839
Based on IRS (without 20k exemption)	
Employees pay 2.5% tax on wages/salaries	$7,570
Non-payroll income	$9,792
Based on IRS (with 20k exemption)	
Employees pay 2.5% tax on wages/salaries	$6,101
Non-payroll income	$9,004

Table 4. Alternative estimates for revenue sources from Massachusetts personal income, projected 2026 ($ millions). Since different data sources give alternative estimates for tax revenue, we provide estimates using income data from the decennial census, the Bureau of Economic Analysis (BEA), and the Internal Revenue Service (IRS). In Table 1 and in our final analysis, we use the census estimates for tax revenue from taxes on employers, the BEA estimates for the 2.5% tax on employees, and the IRS estimates for non-payroll income, all with the $20,000 exemption (estimates are in millions of dollars).

Year	Revenue	Surplus: price adjustments over 4 years	Surplus: immediate price adjustment
2025	$43,500	-$6,701	$9,689
2026	$46,009	-$1,414	$10,403
2027	$48,668	$4,310	$11,309
2028	$51,487	$10,546	$12,177
2029	$54,476	$11,120	$12,833
2030	$57,644	$11,784	$13,582
2031	$61,004	$12,483	$14,370
2032	$64,566	$13,218	$15,198

Table 5. New revenue sources and the resulting surplus based on projected spending. Results are given for two different price adjustment plans, one with immediate price adjustment and another with price adjustments implemented gradually over four years (estimates are in millions of dollars).

Appendix

Extrapolating spending under current and expanded system

We tested three alternative methods for extrapolating the total health care spending in Massachusetts under the current insurance system. The first (which we refer to as “CMS”), which is used to derive the numbers presented in the main report, uses the NHE by State data from CMS.[80] Within each source of funds and type of expenditure, using the data from 2012 to 2019 we project growth in total state spending using the GROWTH function in Excel. For the second method (which we refer to as “CHIA mean”), we use state-wide annual rates of growth in health expenditures as estimated by CHIA[81] from 2016 to 2023 (using CHIA’s “Annualized Trend” for the years 2020 and 2021), projecting into the future using a sliding average by, to predict any given year, taking the average of the rates over the last seven years. The third method, which we refer to as “CHIA worst,” is similar to the second except after 2023, the same rate of increase (8.6%) is used for all years. All projections in all analyses for this report exclude the years 2020 and 2021 as data from these years is likely to be not representative of future trends due to the COVID-19 pandemic. Since the very high rate of increase in health spending in recent years, represented by the “CHIA worst” model, is likely due to artificial price increases as a result of increased monopolization and other similar factors, and we nonetheless assume a constant price ratio between PHI and Medicare in future years, the “CHIA worst” model likely dramatically underestimates the savings that would be achieved with a single payer option.

We estimate current insurance administrative rates for Medicare, Medicaid, PHI, and other third party payers by dividing the “Net Cost of Health Insurance” in NHE Table 04 by the National Health Expenditures within each source of funds, and extrapolating using the TREND function in Excel.

We estimate the future uninsured rate (under the current system) by assuming that the proportion of the population that is uninsured will remain constant at the average rate from 2016 to 2023, as calculated by KFF.[82] We further estimate that the uninsured population currently spends 22.42% as much on health care as the insured population using data from MEPS,[83] and that if insured this population would spend 80% as much on health care as the currently insured population.[84] We calculate induced demand at a given actuarial value by fitting a quadratic curve

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[80] Available at https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/state-residence

[81] Available at https://www.chiamass.gov/annual-report/

[82] Available at https://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

[83] Available at https://datatools.ahrq.gov/meps-hc/

[84] This number is from a 2003 Urban Institute study (https://www.urban.org/sites/default/files/alfresco/publication-pdfs/1000981-Caring-for-the-Uninsured-in-Massachusetts-What-Does-it-Cost-Who-Pays-and-What-Would-Full-Coverage-Add-to-Medical-Spending.pdf) and should be updated as soon as a better estimate is available.

to the values given by Pope et al. (2014)[85] for coverage at different metal levels; we estimate future (national) actuarial value by extrapolating from the past ratios of out-of-pocket to total expenditure from 2016 to 2023. We then calculate the expected factor of change in utilization by dividing the induced demand corresponding to expected AV under implementation of the Trust (0.96) by the induced demand corresponding to the AV for each projected year. The resulting value corresponds to the expected costs of fully covering the under-insured population, given nationwide statistics, and is 4.48%. The number used in the report is slightly higher, and comes from an alternative calculation that yields lower estimates for future AV. We multiplied the proportion of the MA population covered by employer, non-group, Medicaid, Medicare, or no insurance, by an AV value specific to each group,[86] giving a state-specific value for total AV, albeit one that does not rely on time-series estimates.

We calculated the cost of raising Medicaid prices to Medicare prices plus 10% using the KFF fee index.[87] We include the cost of raising Medicaid prices across all categories of spending as listed by CMS. We calculated the cost of including Medicare Part B using a monthly fee of 185 per person[88] and Medicare enrollment data from CMS.[89] The total costs therefore comprise the cost of expanding coverage to the under- and uninsured, the cost of raising Medicare and Medicaid prices to Medicare levels plus 10%, and the cost of paying for Medicare part B.

Calculating savings

Savings come from price adjustments of PHI prices to Medicare levels plus 10%, reducing administrative costs and eliminating profits, and reducing fraud. We calculate hospital price adjustments using a price ratio of PHI to (current) Medicare prices of 243%,[90]and provider price adjustments using a price ratio of 143%.[91] We estimate the decrease in drug prices by assuming that PHI pays Medicare part D prices, and then assuming that prices can be lowered to Medicaid levels (the ratio of Medicare part D to Medicaid prices is 291%[92]). We assume that the

[85] Available at https://www.cms.gov/mmrr/Downloads/MMRR2014_004_03_a04.pdf
[86] AV for employer insurance (82.4%) obtained from https://www.dol.gov/sites/dolgov/files/ebsa/researchers/analysis/health-and-welfare/employer-sponsored-insurance-actuarial-values-and-sensitivity-analysis.pdf; AV for non-group insurance (70%) obtained from https://www.urban.org/sites/default/files/publication/84256/2000931-Are-Nongroup-Marketplace-Premiums-Really-High-Not-in-Comparison-with-Employer-Insurance.pdf; AV for Medicaid is set to 100%; AV for Medicare (83.7%) obtained from https://www.milliman.com/en/insight/Average-annual-beneficiary-health-care-costs-for-various-Medicare-coverage-options-2021; Military AV estimated at 90%.
[87] Available at https://www.kff.org/medicaid/state-indicator/medicaid-to-medicare-fee-index/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D
[88] https://www.medicare.gov/basics/get-started-with-medicare/medicare-basics/what-does-medicare-cost
[89] Available at https://data.cms.gov/summary-statistics-on-beneficiary-enrollment/medicare-and-medicaid-reports/medicare-monthly-enrollment
[90] Statistic obtained from https://www.rand.org/pubs/research_reports/RRA1144-2-v2.html
[91] Statistic obtained from https://www.kff.org/medicare/how-much-more-than-medicare-do-private-insurers-pay-a-review-of-the-literature/
[92] Statistic obtained from https://www.cbo.gov/publication/57007

same relative decrease can be obtained for durable medical products. The prices paid for drugs by Medicare parts A and B will not change, as these are set by federal law. Due to an absence of estimates for PHI to Medicare price ratios, we do not account for price adjustments from other categories of spending (e.g. home health care), though we do account for raising Medicaid prices in these categories, and our estimate is thus conservative.

Provider administrative costs are estimated as explained in the main text report, from two alternative sources. For the expenditure types for which Himmelstein and Woolhandler do not provide estimates of provider administrative costs, we use the 32% figure given by McKinsey 2021 for their "Other sites of care" category. We estimate savings relative to Canadian prices, which we obtain for some expenditure types from Himmelstein and Woolhandler 2020; for the expenditure types without direct Canadian estimates, we extrapolate Canadian prices given U.S. prices per expenditure type as given by Himmelstein and Woolhandler 2020 using a simple linear regression model.

We project future insurance administrative cost rates using Table 4 from the CMS NHE dataset,[93] by projecting the total expenditure and net expenditure (non-benefit spending) for each source of funds, and dividing the net expenditure by the total expenditure. The resulting percentage is the percentage of spending not disbursed as benefits – i.e., the amount that went to administration, advertising, or profits. We assume that insurance administration rates in all categories can be reduced to 2% (corresponding to the MLR of traditional Medicare, see text of main report), and calculate savings accordingly.

Revenue

We estimate existing revenue by summing

- projected total state spending on Medicare, plus 10% of projected Medicare spending;
- projected total state spending on Medicaid, plus 50% the expected increase in revenue from raising Medicaid prices to Medicare levels plus 10% of Medicare levels (since 50% of Medicaid funding comes from the federal government, and the rest of the increase needs to be covered by new revenue);
- spending by the VA[94] projected from data from 2016-2023 using the TREND function in Excel;
- other state public health spending as estimated by extrapolating the "Other Third Party Payers and Programs and Public Health Activity" statistic from Table 3 from the CMS NHE dataset using the TREND function in Excel and adjusting for the population of MA;
- and ACA subsidies as projected from KFF data from 2016-2024[95] using the TREND function in Excel.

[93] https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data
[94] From the National Center for Veterans Analysis and Statistics, https://www.va.gov/vetdata/expenditures.asp
[95] https://www.kff.org/affordable-care-act/state-indicator/average-monthly-advance-premium-tax-credit-aptc/?currentTimeframe=8&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

To this, we add new revenue from the taxes added under the Act. To calculate revenue from the tax on small employers, we project the total payroll for employers with under 100 employees from the Census County Business Patterns dataset[96] from 2016-2023 using the TREND function in Excel; we then subtract $20,000 times the total number of small employers from this total payroll figure, and multiply the resulting difference by the tax rate. We calculate the revenue from large employers in the same way, but considering employers of 100 or more employees. We calculated revenue from the tax on employees by extrapolating the total amount of payroll (wage and salary) income in MA from 2010-2019 as given by the Bureau of Economic Analysis[97] using the TREND function in analysis subtracting $20,000 for each employee, and multiplying the difference by the tax rate. We calculated revenue from the tax on self-employed individuals by similarly extrapolating "proprietor's income" from the BEA data from 2010-2019 and subtracting $20,000 for each proprietor, and multiplying the difference by the corresponding tax rate. Lastly, we calculated revenue from the tax on non-payroll income by summing the total income due to interest, ordinary dividends, qualified dividends, capital gains, and S-Corp and partnership income in the years 2015 to 2022 for individuals with adjusted gross income (AGI) of at least $200,000, using data from the IRS.[98] We then extrapolated this value (total non-payroll income) to future years using the TREND function in Excel. We then extrapolated the total number of individuals with AGI of at least $200,000 that had income from interest (in this way approximating the number of individuals with any non-payroll income) using the TREND function, and subtracted $20,000 for each individual such individual from the total non-payroll income in each year. We then multiplied this difference by the corresponding tax rate.

We note that our methodology for calculating new revenue underestimates the true yield from the new taxes, since 1) we subtracted $20,000 from income of each type for all individuals, even if they earned less than $20,000; and 2) we only calculated revenue from taxing non-payroll income for individuals with AGI of at least $200,000. These sources of error were introduced due to constraints on data availability, and can only result in an underestimate of new revenue.

Other alternative modeling assumptions

In addition to using multiple models to project total expenditure (Figures 9 and 10), we test the impact of varying several other of our modeling assumptions. We use the "CMS" model for projecting expenditure increases in all analyses in this section.

First, we tested two different estimates of the demand induced when better coverage is offered to the under-insured population (discussed above). Under the model using national data, which

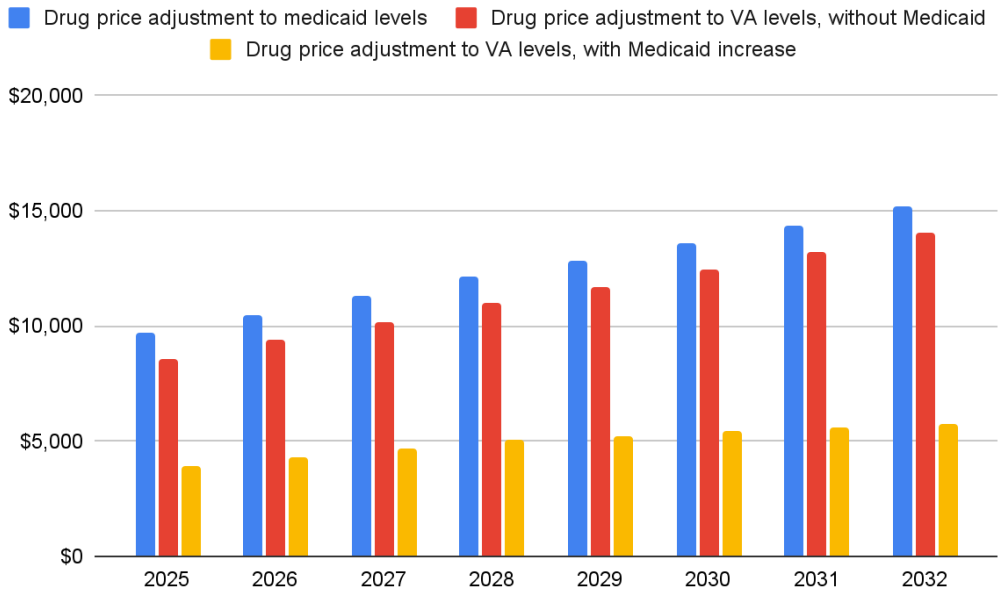
[96] https://www.census.gov/programs-surveys/cbp.html

[97] https://apps.bea.gov/iTable/?reqid=70&step=30&isuri=1&major_area=0&area=25000&year=2021,2020,2019,2018,2017,2016,2015,2014,2013,2012,2011,2010,2009,2008,2007,2006,2005,2004,2003,2002,2001,2000,1999,1998,1997,1996,1995,1994,1993,1992,1991,1990,1989,1988,1987,1986,1985&tableid=48&year_end=-1&classification=non-industry&state=0&statistic=-1&yearbegin=-1&unit_of_measure=levels

[98] Available at https://www.irs.gov/statistics/soi-tax-stats-individual-statistical-tables-by-size-of-adjusted-gross-income

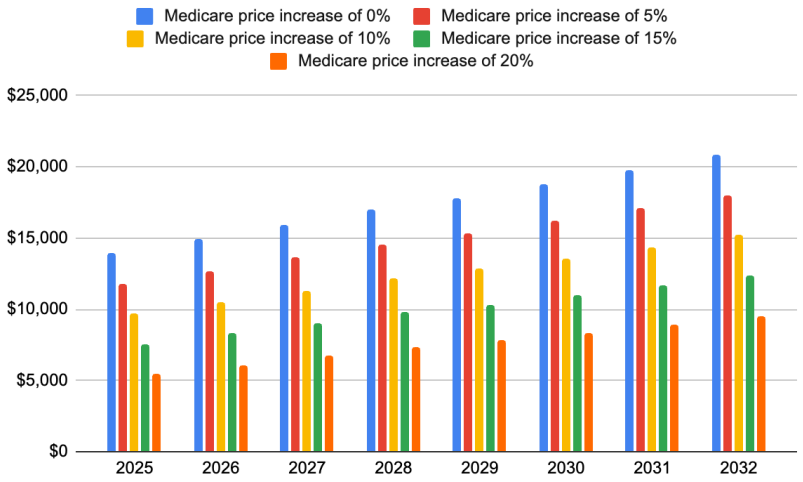
estimates increased utilization of 4.5%, we see an added surplus of $2.78 billion in 2026 and of $4.15 billion in 2032 relative to the model using MA-specific data which estimates an increased utilization of 7.6% (all else held constant). Similarly, in the data presented above we assume the proportion of the population without insurance remains constant at the average level between 2012 and 2019, over which time it was relatively constant; if we model the uninsured rate using earlier data, we project a decrease in future years; assuming that this decrease continues, Medicare-for-All would save an additional $480 million in 2026 and $1.19 billion in 2032.

Second, we estimated the projected surplus under different methods of drug price reduction (Appendix Figure 1). The estimates given in the main report assume that drug prices will be reduced to Medicaid levels (34% of Medicare levels); we also give estimates for reducing (all but Medicaid) drug prices to VA levels (46% of Medicare levels), reducing drug prices to VA levels while raising Medicaid prices to VA levels. In all cases, we have a positive surplus, though it is substantially lower in the third case.



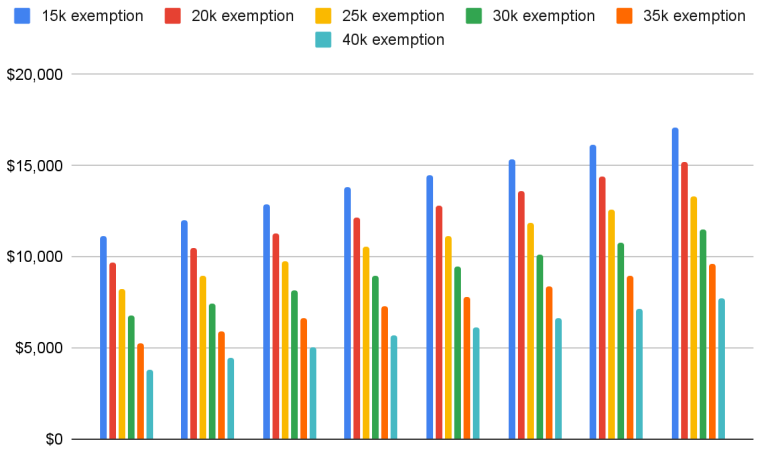
Appendix Figure 1. Projected surplus under different models of drug price reduction.

Third, we estimate projected surplus under different regimes of hospital and provider price reduction. In the main report, we present estimates given hospital and provider price reduction to Medicare levels plus 10%, as an estimate for what could be obtained in bargaining with organizations representing hospitals and clinicians. Since such price reductions represent about 35% of total savings, we tested alternative price reduction schemes (to Medicare levels plus a varying percentage up to 20%) to ensure that a surplus still remained even under price reductions (all else held constant). The results are presented in Appendix Figure 2. In all cases, a positive surplus results, though when combined with the most conservative of alternative drug pricing schemes presented in Appendix Figure 1, there is a possibility of a deficit resulting, at least in early years of implementation, especially if the phased price reduction model is adopted.



Appendix Figure 2. Surplus resulting from alternative price reduction schemes.

Fourth, we examined the resulting surplus under varying tax exemption levels (Appendix figure 3). While the main report and Table 1 use a $20,000 exemption for all taxes, the Trust would likely be viable with a smaller surplus, as obtained with (for example) a $30,000 exemption.



Appendix figure 3. Surplus resulting from alternative tax exemptions.

Fifth, we tested alternative estimates for provider administration costs, as the literature presents estimates that vary widely by category. In comparison to the savings presented in the main report (calculated using estimates from Himmelstein and Woolhandler 2020), we obtain similar estimates ($12.9 billion dollars in savings) using data from a separate 2021 McKinsey report on provider costs.[99]

[99] Sahni et al. 2021

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