EXECUTIVE SUMMARY

This report analyzes the economic consequences of implementing a comprehensive, universal, single payer health insurance program for all Rhode Island residents administered by the state. This single payer program would replace the current multi-payer system consisting of employer-based insurance, individually-acquired insurance and federally sponsored programs (e.g., Medicare and Medicaid).

Rhode Island:

- Rhode Islanders already pay enough money to have comprehensive and universal health insurance but are not getting these due to the current multi-payer system.
- Between 1991 and 2014, health care spending per person rose by over 250% rising much faster than income and greatly reducing the disposable income of Rhode Islanders.
- Medical related bankruptcies are 62% of personal bankruptcies and of these, 69% had insurance at the time of their bankruptcy.
- Even after the Affordable Care Act is fully implemented, 4% of Rhode Islanders will not have insurance resulting in as many as 116 Rhode Islanders dying unnecessarily from lack of insurance each year.

What the Rhode Island single payer program would do:

- Provide comprehensive health care coverage to all Rhode Island residents with most Rhode Islanders paying less for health care than they are currently paying;
- Improve access to health care;
- Save approximately \$4000 per resident per year by 2024 and put more money into the Rhode Island economy.
- Significantly reduce health care dollars spent on administrative costs and shift these dollars to actual provision of health care (providers would save almost \$1 billion in administrative costs in the first year);
- Decrease administrative burdens on health care providers and allow them to spend more time providing health care;
- Eliminate the burden of health insurance costs and administrative obligations on Rhode Island businesses and thereby make them more competitive and profitable. In the first year, payroll contributions to the single payer plan would be over \$1.2 billion less than current private health insurance premiums.
- Contain health care costs (reduced administration and control over monopolistic pricing) would save 23% of current expenditures in the first year with larger savings in subsequent years.
- Create a significant economic stimulus for the state by attracting businesses to and keeping businesses in Rhode Island because of reduced health insurance costs, a particular boon to small businesses and their employees.

How Single Payer Can Work:

- The new system would cover 93 percent of total health care spending; a higher share than a platinum plan on the ACA Exchange;
- Half of current health care expenditures are already coming from public programs;
- State government would reduce health care administrative costs by \$258 million;
- Although the new system would require over \$3.7 billion in additional state revenues, new taxes would be more than offset for the vast majority of Rhode Islanders by overall decreased spending by businesses and elimination of premiums and out-of-pocket costs for individuals;
- While a few high earning households will pay more in taxes than they now pay for health care, these households are ready to bear this burden because they have had the highest income growth and enjoyed the largest tax cuts over the last decades.

Single Payer Rhode Island: Impact and Implementation

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January 5, 2015

| Contents Single Payer Rhode Island: Impact and Implementation |
|---|
| Figures |
| Tables |
| Introduction |
| |
| Health Care spending in Rhode Island |
| Anticipated savings from single payer in Rhode Island, 20155 |
| Savings in the administration of private health insurance: |
| Savings in employer's administration of private health insurance plans |
| Savings in billing and insurance related expenses in provider offices and hospital administration 8 |
| Savings from reducing market power and price distortions: pharmaceuticals8 |
| Savings from reducing market power and price distortions: Hospitals and Physicians:9 |
| Savings from reduced administrative expense in government programs9 |
| Savings from reduced fraud9 |
| System improvements under single payer, Rhode Island 2015 |
| Universal coverage11 |
| Increased utilization12 |
| Medicaid rates12 |
| Net Costs of Rhode Island single payer13 |
| Financing Rhode Island single payer15 |
| Redistributing the reduced burden16 |
| Single-payer and the quality of care19 |
| Effect of single payer health care on the Rhode Island Economy21 |
| Declining payroll costs |
| The future of Rhode Island health care22 |
| Conclusion: found money24 |
| Bibliography |
| Appendix 1: Estimating Rhode Island health care expenditures |
| Appendix 2: Estimating the sources of Rhode Island health care expenditures |
| Appendix 3: Estimating savings from Rhode Island single payer31 |

| Appendix 4: Estimating the cost of program improvements | 33 |
|---|----|
| Universal coverage | 33 |
| Change in utilization | 33 |
| Medicaid reimbursements | 34 |
| Appendix 5: Revenue sources for Rhode Island Health Care Plan | 35 |
| Appendix 6: Estimating the net burden of the Rhode Island Health Care Plan | 36 |
| Appendix 7: Alternative coverage options | 37 |
| A lower actuarial rate | 37 |
| The cost of long-term care coverage | 37 |
| Figures Figure 1. Health care expenditures and income, Rhode Island, 1991-2025, actual and projected | 2 |
| Figure 2. Personal health care expenditures, Rhode Island, 1991-2025 as share of gross state product. | |
| Figure 3. Savings from Rhode Island single payer, 2015, in \$millions | |
| Figure 4. Age Adjusted Mortality and proportion unable to see doctor because of cost, Rhode Island | |
| Counties. | |
| Figure 5. Shift in spending towards providers, single payer compared with ACA | 15 |
| Figure 6. Savings from Rhode Island single payer as share of income after taxes and health care | |
| spending. Households with 2 adults and 2 children. | |
| Figure 7. Sources of funding, Rhode Island Health Care, ACA and Single-payer | |
| Figure 8. Experienced access barrier because of cost in past year | |
| Figure 9. Health care costs, current system and Rhode Island single payer | 24 |
| Tables | |
| Table 1. Sources of health-care spending, Rhode Island, projected 2015 | 4 |
| Table 2. Savings (in \$millions) from enactment of single payer in Rhode Island, 2015 | 10 |
| Table 3. Net spending under Rhode Island single payer, 2015(\$ millions) | |
| Table 4. Funding single-payer Rhode Island, 2015 | |
| Table 5. Financing of Rhode Island Health Care Plan, in \$ millions, 2015 | |
| Table 6. Estimation of personal health expenditures, Rhode Island, 2015 | |
| Table 7. Estimation of savings: administration, pricing, fraud reduction | 31 |

Introduction

This policy report explores the economic implications of establishing a single payer health care financing system in Rhode Island. The proposed plan would replace Rhode Island's current multi-payer system in which individuals, private businesses and government entities pay public and private insurers for health care coverage. Primarily by reducing administrative and other waste, the single payer system would finance virtually all medically necessary care including hospitalization, doctor visits, mental health, prescribed occupational and physical therapy, prescription drugs, dental and eye care, medical devices, and nursing home and home health care. The proposed plan would offer this comprehensive coverage to all Rhode Island residents.

Single payer in Rhode Island will finance medical care with substantial savings compared with the existing multi-payer system of public and private insurers and would improve access to health care by extending coverage to the 4% of Rhode Island residents still without insurance under the Affordable Care Act and expanding coverage for the growing number with inadequate health care coverage. Single payer would improve the economic health of Rhode Island by: increasing real disposable income for most residents; reducing the burden of health care on businesses and promoting increased employment; and shifting the costs of health care away from working and middle-class residents.

Health Care spending in Rhode Island

Personal health care spending has been rising at an unsustainable pace in Rhode Island.

- Between 1991 and 2001, spending per person rose by 76%, and spending doubled between 2001 and 2014.
- Health care costs have risen much faster than income (see Figure 1).
- Health care costs increased from 14% of state income² in 1991 to 21% in 2014;
- Under the current multi-payer health insurance system, health care costs will rise to over 25% of state income in the next decade (see Figure 2).

Health care cost inflation is squeezing disposable income for Rhode Islanders. If health care spending per person had risen only as fast as income, then spending would be 32% less, saving the average person over \$3200 per year in 2014, and the average family of four over \$12,000.

¹ The plan will cover rehabilitation services and other long-term medical care at home and in nursing care facilities.

² Gross state income is defined comparably to the national gross domestic product. It is the sum of all value added by industries within the state.

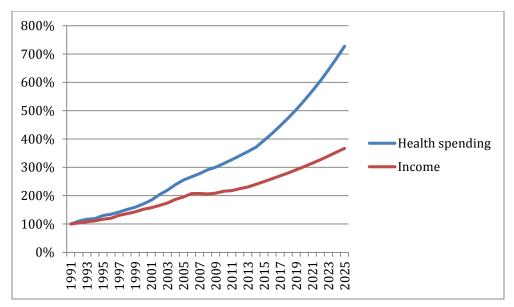


Figure 1. Health care expenditures and income, Rhode Island, 1991-2025, actual and projected.

Note: This gives health expenditures and Gross State Product in Rhode Island. GSP is from United States Bureau of Economic Analysis; health spending is from United States, Center for Medicare and Medicaid Statistics, National Health Expenditures data, http://www.cms.gov/NationalHealthExpendData/Downloads/res-tables.pdf

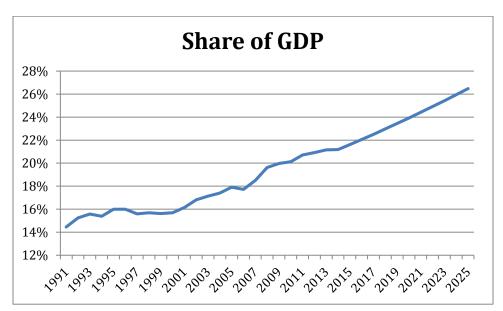


Figure 2. Personal health care expenditures, Rhode Island, 1991-2025 as share of gross state product. *Note:* This gives health expenditures in Rhode Island divided by total income (GSP) in the state.

Although rising health expenditures can reflect an income effect when an affluent and aging population chooses to buy more health care of a higher quality,³ in Rhode Island, spending has

³ David M Cutler, *Your Money or Your Life: Strong Medicine for America's Health Care System* (Oxford: Oxford University Press, 2004); Gerald Friedman, "Universal Health Care: Can We Afford Anything Less?," *Dollars and Sense*, June 29, 2011, http://dollarsandsense.org/archives/2011/0711friedman.html; Allan Garber and Jonathan

increased without improving health care for many residents. Employees, for example, have had to pay increasing annual premiums because many employers have dropped or restricted health insurance benefits due to rising costs. In 2012, average annual premiums in Rhode Island passed \$11,000 with the average employer paying over \$8,000. This figure would have been even higher except that individuals are also paying higher deductibles. This "cost shifting onto the sick," or the reduction in the share of health costs covered by insurance, is quite significant. The average deductible is now over \$1,700.

The current fragmented payment system includes dozens of insurance firms, hundreds of different employer sponsored plans, large government programs, including Medicare and Medicaid, and deductibles and co-pays paid by individuals. While a small majority of residents receive health insurance through employment, public programs already account for half of all health-care expenditures in Rhode Island. Private insurance (including employment-based insurance for public sector workers) accounts for less than half of expenditures, a lower proportion of expenditures than of residents because they tend to enroll younger and healthier people.⁴ The rest of spending, over 20 percent, is out-of-pocket or from other sources (such as philanthropy).

Table 1. Sources of health-care spending, Rhode Island, annual spending projected 2015.

| | Sourc | ces of Health | Adı | ninistrative | Share of | Share of |
|----------------------|-------|---------------|-----|--------------|----------|-------------|
| | Car | e Spending, | | expense | Spending | Health care |
| | | 2015 | | | | |
| Employer | | | | | | |
| administration | \$ | 79 | \$ | 79 | 0.6% | 0% |
| Private employer- | | | | | | |
| sponsored health | | | | | | |
| insurance | \$ | 2,479 | \$ | 372 | 18.6% | 17% |
| Government employees | \$ | 629 | \$ | 94 | 4.7% | 4% |
| Individual health | | | | | | |
| insurance | \$ | 404 | \$ | 81 | 3.0% | 3% |
| Medicare | \$ | 2,757 | \$ | 50 | 20.7% | 22% |
| Medicaid | \$ | 3,421 | \$ | 195 | 25.6% | 26% |
| SCHIP | \$ | 55 | \$ | 3 | 0.4% | 0% |
| VA | \$ | 257 | \$ | 15 | 1.9% | 2% |
| Government retirees | \$ | 54 | \$ | 8 | 0.4% | 0% |
| Workers' Comp | \$ | 60 | \$ | 17 | 0.4% | 0% |
| Other government | \$ | 243 | \$ | 36 | 1.8% | 2% |
| Other and out-of- | | | | | | |
| pocket | \$ | 2,907 | | | 21.8% | 24% |

Skinner, "Is American Health Care Uniquely Inefficient?," *Journal of Economic Perspectives* 22, no. 4 (Fall 2008): 27–50.

⁴ Insurance expenditures have been calculated from Medical Expenditure Panel Survey at the Department of Health and Human Services, Agency for Healthcare Research and Quality, *Medical Expenditure Panel Survey*, 2009, http://www.meps.ahrq.gov/mepsweb/data_stats/state_tables.jsp?regionid=18&year=-1.

Public health care expenditures other than spending for public employee health insurance account for nearly half of total Rhode Island expenditures. Federal programs include the Veteran's Administration, Medicare for the elderly and some disabled, Medicaid for the poor (including some elderly and disabled), and Children's Health Insurance (SCHIP).⁵ The state of Rhode Island contributes to SCHIP and Medicaid, and, with local governments, provides public health services.

After taking account of private insurance and government programs, "other and out-of-pocket" expenditures have been calculated as a residual.⁶ Out-of-pocket spending, including copayments, insurance deductibles, spending by the uninsured, and charges not covered by insurance or disallowed for other reasons account for a fifth of total expenditures.

While nearly half of health-care spending comes from the private sector, employers, individuals, businesses, or government employers, this spending accounts for less than half of health care services. The shortfall between spending and services reflects the higher administrative burden on private sector spending. Private spending is a relatively inefficient source of health care because more of it goes to administering the health care system, including marketing, billing, and the inflated salaries paid private insurance executives.⁷

Anticipated savings from single payer in Rhode Island, 2015

A single payer plan would have a single public entity provide eligibility, payment and auditing services currently performed by private and public health insurance, as well as paying for medically necessary services currently purchased out-of-pocket.⁸ It would fund most health care in the state *except* for 20 percent of out-of-pocket expenditures that are assumed not to be medically necessary or are for long-term care which is not to be covered initially.⁹ The proposed

⁵ Some of these appear on the state budget as state expenditures but are at least partly reimbursed by the Federal government. The usual match for Medicaid is 52 percent with the state paying 48% and the Federal government 52%. Under the Affordable Care Act (ACA), the Federal government will reimburse states for 90-100 percent of the cost of Medicaid expansion from 2014-24.

⁶ Note that this procedure puts any error in the estimate of total health expenditure into the "Out-of-pocket" category.

⁷ The CEOs of nine large health insurers averaged nearly \$14 million in compensation, over double the average for CEOs of Russell 3000 companies, and nearly 100 times that of the head of the United States Centers for Medicare and Medicaid Services; see "CEO Pay by Industry," *AFL-CIO*, accessed December 5, 2014, http://www.aflcio.org/Corporate-Watch/Paywatch-2014/CEO-Pay-by-Industry; "Healthcare-NOW! - Health Insurance CEO Pay Skyrockets in 2013," accessed May 5, 2014, http://www.healthcare-now.org/health-insurance-ceo-pay-skyrockets-in-2013.

⁸ Under this proposal, the Rhode Island single payer would cover dental and vision. It is assumed here that utilization for these services will increase at the same rate as for other services.

⁹ This includes optional cosmetic surgery, procedures such as dental implants and contact lenses, special services in hospitals, such as private rooms and cable television. Initially, it also includes long-term care because this benefit will be only phased in over time. Edith Rasell, "An Equitable Way to Pay for Universal Coverage," *International*

plan would cover about 93 percent of total spending leaving individuals responsible for expenditures not deemed medically necessary (e.g., purely cosmetic procedures). ¹⁰

Through economies in administration and by reducing inflated prices within health care, a single payer plan would produce substantial savings over our current health care system. These economies would allow the plan to save 23 percent of current annual expenditures while providing the same health services as the current system. Some of these savings would be used to correct problems within the health care system by extending coverage to the uninsured, raising some provider reimbursements, and removing barriers to access. After these adjustments, health care spending in Rhode Island would be nearly 12 percent lower, with annual savings of over \$1.5 billion, or over \$1,500 per resident in 2015.

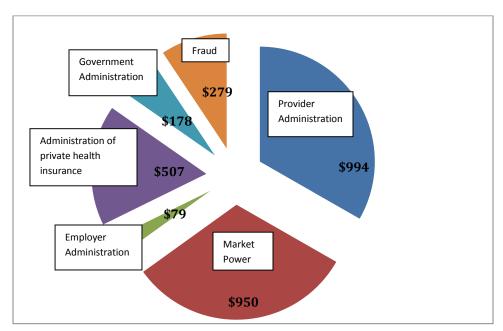


Figure 3. Savings from Rhode Island single payer, 2015, in \$millions.

Note: This shows the projected savings in \$millions from a single-payer system in Rhode Island. The largest area of savings would be in reduced market power for drug and hospital prices. There are also large savings in provider officers' billing and insurance related operations and in insurance company administration.

Journal of Health Services 29, no. 1 (1999): 179–88; Physicians for a National Health Program, "Liberal Benefits, Conservative Spending," Journal of the American Medical Association 265 (1991), http://www.pnhp.org/publications/liberal-benefits-conservative-spending.

¹⁰ We assume that all necessary federal waivers are granted and legislation is enacted to allow the incorporation of existing federal programs into the Rhode Island plan, including Medicare, Medicaid, and the Veteran's Administration. John E. McDonough, "Wyden's Waiver: State Innovation on Steroids," *Journal of Health Politics, Policy and Law,* May 19, 2014, 2744824, doi:10.1215/03616878-2744824; Ron Wyden, *State Waivers: How a State Could Do Health Reform Its Own Way* (Washington, D. C.: Office of Senator Ron Wyden, United States Senate, n.d.), http://www.wyden.senate.gov/download/?id=6073398f-c82c-42f4-8da5-e004a867e01a&download=1.; Jesse Cross-Call, "Understanding Health Reform's Waivers for State Innovation," *Center on Budget and Policy Priorities*, April 18, 2011, http://www.cbpp.org/cms/?fa=view&id=3475.

Savings would come from administrative economies and by reducing the anti-competitive practices of a few providers.¹¹ They are summarized as follows:

Savings in the administration of private health insurance:

Private health insurers operate with a Medical Loss Ratio of around 88 percent, spending about 12 percent of premiums on administrative activities, including advertising, bill processing, and other overhead. Lowering the administrative costs of private insurance to the level of Medicare (about 1.8 percent) would reduce costs by over \$500 million in 2015.¹²

Savings in employer's administration of private health insurance plans.

Employers incur significant costs in administering health insurance plans, including hiring health insurance benefit consultants. In 1999, these costs came to 4.2% of the total cost of employer-provided health insurance; applying the same ratio to Rhode Island in 2015 gives costs of \$79 million ¹³

¹¹ Estimates of the sources of waste in the United States include Donald Berwick and Andrew Hackbarth, "Eliminating Waste in US Health Care," *JAMA: The Journal of the American Medical Association* 307, no. 14 (2012): 1513–16; Martha Coakley, *Examination of Health Care Cost Trends and Cost Drivers Pursuant to G.L. C.* 118G, § 6½(b) Report, 2011 (Boston, Mass.: Attorney General of Massachusetts, 2011); Massachusetts Health Policy Commission, 2013 Cost Trends Report, Annual Report (Boston, Mass., 2013).

¹² Nationally, health insurers refunded over \$332 million in excessive administrative charges under the ACA in 2013 to nearly 7 million subscribers; Rhode insurers paid back \$48,696 to 710 subscribers. See http://kff.org/health-reform/state-indicator/mlr-rebates-total/

Even under the ACA, government measures of insurance company medical loss ratios leave extensive scope for insurance companies to pass administrative costs as medical costs. One observer has noted that the definition of medical management expenses used by the state includes such administrative expenses as "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 Medical Loss Ratio. Vince Phillips, *TESTIMONY ON MEDICAL LOSS RATIO House Bill 746* (Harrisburg, PA: Pennsylvania Legislature, House Insurance Committee, March 12, 2009), http://www.legis.state.pa.us/cfdocs/legis/TR/transcripts/2009_0041_0010_TSTMNY.pdf; For a discussion of the manipulation of the medical loss ratio, see Maryland Insurance Administration, "Report on the Use of the Medical Loss Ratio" (Maryland, December 2009); Maryland Health Care Commission, "State Health Care Expenditures: Experience from 2007," March 2009,

http://mhcc.maryland.gov/health_care_expenditures/shea07/report.pdf; Maryland Health Care Commission, "Health Insurance Premiums, "the Underwriting Cycle and Carrier Surpluses," January 27, 2005; Eric Naumburg, "Medical Loss Ratios in Maryland," July 12, 2010.

¹³ Steffie Woolhandler, Terry Campbell, and David Himmelstein, "Cost of Health Care Administration in the United States and Canada," *New England Journal of Medicine*, no. 349 (2003): 768–75.

Savings in billing and insurance related expenses in provider offices and hospital administration.

It now costs nearly eight-times as much to collect bills in health-care than in other industries.¹⁴ Simplifying the reimbursement process would allow providers to save almost \$1 billion in administrative costs in 2015.¹⁵

Savings from reducing market power and price distortions: pharmaceuticals.

Drug prices are about 60 percent higher in the United States than in Europe or Canada. ¹⁶ This reflects the market power of companies whose brand reputation is reinforced by legal protection. Inflated prices coming from market power are "economic rents" received by producers who would provide the same product even at a much lower price. When market power is reduced with the removal of patent protection, for example, patients can buy the same drug for much lower prices; the entry of two new producers typically lowers prices by 50% and prices fall by 80% or more when there are eight or more producers. ¹⁷ The large premiums for drugs still under patent protection suggests that even the 60% figure understates the role of market power in inflating drug prices. A single agency negotiating prices for Rhode Island should be able to lower prices

¹⁴ Bonnie B. Blanchfield et al., "Saving Billions Of Dollars—And Physicians' Time—By Streamlining Billing Practices," *Health Affairs*, April 29, 2010, 10.1377/hlthaff.2009.0075, doi:10.1377/hlthaff.2009.0075.

¹⁵ Woolhandler et al. have found that provider's administrative costs are much lower in Canada with a plan like that envisioned here than in the United State and they estimate that a third of medical costs in provider offices in the United States are due to administrative costs, triple the rate in Canada. See Woolhandler, Campbell, and Himmelstein, "Cost of Health Care Administration in the United States and Canada"; Dante Morra et al., "US Physician Practices Versus Canadians: Spending Nearly Four Times As Much Money Interacting With Payers," *Health Affairs* 30, no. 8 (2011): 1443 –1450, doi:10.1377/hlthaff.2010.0893; health-care providers spend nearly eight times as much collecting bills as do other businesses; see Blanchfield et al., "Saving Billions Of Dollars—And Physicians' Time—By Streamlining Billing Practices."

¹⁶ McKinsey Global Institute, "Accounting for the Cost of Health Care in the United States," January 2007, 56, http://www.mckinsey.com/mgi/rp/healthcare/accounting_cost_healthcare.asp; A survey found that drug prices negotiated by the Veterans Administration in 2005 were 48% lower than those offered by Medicare drug plans. themselves somewhat lower than standard drug store prices. McKinsey Global Institute, "Accounting for the Cost of Health Care in the United States"; Austin Frakt, Steven D. Pizer, and Roger Feldman, Should Medicare Adopt the Veterans Health Administration Formulary?, SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, April 14, 2011), http://papers.ssrn.com/abstract=1809665; Austin Frakt, Steven D. Pizer, and Roger Feldman, Should Medicare Adopt the Veterans Health Administration Formulary?, SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, April 14, 2011), http://papers.ssrn.com/abstract=1809665.

¹⁷ Center for Devices and Radiological Health, "About the Center for Drug Evaluation and Research - Generic Competition and Drug Prices," WebContent, accessed August 1, 2014, http://www.fda.gov/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/CDER/ucm129385.htm.

dramatically.¹⁸ If the single-payer agency can lower prices by 37%, less of a savings than that achieved by the VA, it would save in 2015 over \$700 million.¹⁹

Savings from reducing market power and price distortions: Hospitals and Physicians:

The office of the Massachusetts Attorney General has documented well how some medical practices and hospitals charge prices significantly higher for the same service with a range in hospital prices as high as 415 percent, while the range in prices for physician services is over 260%.²⁰ While private insurers have been unable to negotiate equitable prices against entrenched providers with market power, the proposed single payer agency would be able to act as Medicare already does, balancing their monopoly with monopsonistic power. Reducing above average prices to the median level for hospitals and physician practices for payments currently under private insurance would lower hospital spending by nearly 5% and physician services by over 1%, saving over \$180 million.²¹

Savings from reduced administrative expense in government programs.

Administrative costs in Medicaid are three times as high as in Medicare, almost 6 percent of benefits. Integrating Medicaid into the single payer agency would save almost over \$130 million in administrative costs.

Savings from reduced fraud.

Fraudulent billing, including duplicate billing and billing for services not rendered, accounts for between 3 percent and 10 percent of health care spending in the United States, including an error rate in Federal programs of over 9 percent.²² This includes the "accidental fraud" caused by

¹⁸ The Rhode Island agency would buy drugs in bulk at negotiated prices and then resell them to local pharmacies and health care providers. Drug prices negotiated by the Veterans Administration and other federal agencies, other than Medicaid,in 2005 were 48% lower than those offered by Medicare drug plans. themselves somewhat lower than standard drug store prices. McKinsey Global Institute, "Accounting for the Cost of Health Care in the United States"; Frakt, Pizer, and Feldman, *Should Medicare Adopt the Veterans Health Administration Formulary?*, April 14, 2011.

¹⁹ McKinsey Global Institute, "Accounting for the Cost of Health Care in the United States," 56 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.

²⁰ There is no evidence of a quality difference for the higher priced services and little of the price differential is reflected in the payment to physicians. Instead, most of the price differential is in networked hospitals with large market share. (Ironically, the share of patients going to high priced hospitals has been rising with the consolidation of hospital networks.) See Coakley, *Examination of Health Care Cost Trends and Cost Drivers Pursuant to G.L. C.* 118G, § 6½(b) Report, 2011; Blue Cross/Blue Shield Foundation, *Health Care Costs and Spending in Massachusetts* (Boston, MA, March 2012).

²¹ Private insurers have been unable to bargain hospital prices down for the same reason that they have been unable to bargain down drug prices: they are unwilling to "walk away" for fear of losing their own customers, and it has been relatively easy for them to pass higher costs along in higher premiums.

²² Kathleen King and General Accounting Office, "Medicare and Medicaid Fraud, Waste, and Abuse" (United States Senate, Subcommittee on Federal Financial Management, March 9, 2011),

http://www.gao.gov/new.items/d11409t.pdf; National Health Care Anti-Fraud Association, *Testimony of the National Health Care Anti-Fraud Association to the House Insurance Committee* (Harrisburg, PA: House of

duplicate billing due to the confusing nature of the insurance process.²³ Single payer would lead to reduced fraud in three ways. Eliminating multiple payers would immediately eliminate the possibility of duplicate billing. It would also enormously 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, the single payer agency could, conservatively, save 2.5% of total costs or nearly \$300 million.²⁴

Altogether, these savings come to over \$3 billion, 23 percent of current spending. They are itemized in Figure 3 and in Table 2:

Table 2. Savings (in \$millions) from enactment of single payer in Rhode Island, 2015.

| Provider Administration | \$ 994 |
|--|-------------|
| Market power reduction: drugs, hospitals, medical devices, physician practices | \$ 950 |
| Employer administration of private health insurance | \$ 79 |
| Administration of private health insurance | \$ 507 |
| Government administration | \$ 178 |
| Reduced fraud | \$ 279 |
| Total savings | \$ 2,989 |

Note: This table reports the projected savings (in \$ millions) according to the site where the savings are to be achieved. The savings are calculated by applying a savings percentage estimate to each category of spending as described in the text and Appendix.3.

System improvements under single payer, Rhode Island 2015

Savings would come to nearly \$3,000 per resident, savings achieved largely by eliminating excessive prices as well as unpleasant and wasteful administrative forms and bureaucratic barriers to care.²⁵ These savings would allow Rhode Island to expand access to care for those still without insurance, reduce barriers to access for those with insurance, and reduce inequities in the payment for medical services.

The Affordable Care Act is significantly expanding health insurance coverage in Rhode Island. Medicaid expansion and new enrollments through the state exchange have extended health insurance coverage to over 88,000 Rhode Islanders, reducing the share without insurance from

Representatives, Commonwealth of Pennsylvania, January 28, 2010),

http://www.docucu.com/view/7d4b3344492e717c21f4767dcad3ae16/National-Health-Care-Anti-Fraud-Association.pdf.

²³ Anyone who has tried to interpret a hospital bill can appreciate how easy it would be to make mistakes.

²⁴ My estimate of savings from fraud reduction is conservative compared with, for example, the Lewin Group which regularly assumes that 5% of claims are fraudulent and 20% of these would be detected with enhanced subpoena powers without taking account of the reduction in duplicate claims under system like that proposed here for Rhode Island. Also see William Hsiao, Steven Kappel, and Jonathan Gruber, "Act 128: Health System Reform Design. Achieving Affordable Universal Health Care in Vermont," January 21, 2011, http://www.leg.state.vt.us/ifo/healthcare/FINAL%20VT%20Draft%20Hsiao%20Report.pdf.

²⁵ Note that total health care spending would fall by only \$1,500 per resident because of program improvements.

12% down to 4%.²⁶ This still leaves over 38,000 without insurance, and over 100 extra deaths each year.²⁷ Beyond the excess mortality due to *uninsurance*, many die because of the growing problem of *underinsurance* where high deductibles and copays leave many insured Rhode Islanders unable to afford needed care. The importance of access is highlighted in Figure 4 which shows the relationship between the age-adjusted mortality rate in Rhode Island counties and the proportion of the population reporting that they "Could not see doctor due to cost." Even among those with health insurance, a significant number have cost-related-access problems, and these problems can be associated with a significant share of mortality within the state.²⁸

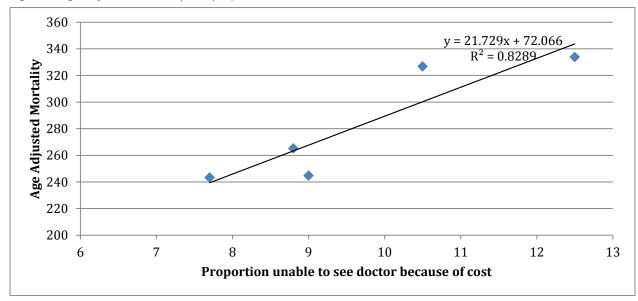


Figure 4. Age Adjusted Mortality and proportion unable to see doctor because of cost, Rhode Island Counties.

Universal coverage

Expanding coverage to the nearly 40,000 Rhode Islanders uninsured under the ACA will cost over \$100 million.²⁹

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²⁶ "ACASignups.net," Text, *ACASignups.net*, accessed April 1, 2014, http://acasignups.net/; Kaiser Family Foundation, "State Health Facts.org," n.d.

²⁷ This is estimated by applying a 40% higher mortality rate to the estimated mortality rate for the insured population; see Andrew Wilper et al., "Health Insurance and Mortality in US Adults," *American Journal of Public Health* 99, no. 12 (n.d.): 1–8; Note that this 40% figure is higher than the 25% estimated by an earlier study, Institute of Medicine (US) Committee on the Consequences of Uninsurance, "Estimates of Excess Mortality Among Uninsured Adults," 2002, http://www.ncbi.nlm.nih.gov/books/NBK220638/.

²⁸ This is from the data at http://www.countyhealthrankings.org/ Using the regression of mortality on access, there would have been 46% fewer deaths in the state had the share with cost related access problems been only 4%. ²⁹ Jack Hadley and John Holahan, "The Cost of Care for the Uninsured: What Do We Spend, Who Pays, and What Would Full Coverage Add to Medical Spending" (Kaiser Commission on Medicaid and the Uninsured, May 10, 2004), http://www.kff.org/uninsured/upload/The-Cost-of-Care-for-the-Uninsured-What-Do-We-Spend-Who-Pays-and-What-Would-Full-Coverage-Add-to-Medical-Spending.pdf. Coverage expansion is relatively inexpensive because the population without insurance is relatively young, and would spend only about 85 percent as much on health care as the general population, and they currently spend 55% as much as the average.

Increased utilization

Expenditures may also increase if eliminating co-payments and restrictive insurance policies leads to more utilization among the already insured population. In Canada, the elimination of co-payments and deductibles with the establishment of a system of universal health care in 1971 led to an increase in utilization of three percent. Utilization may increase more in Rhode Island 2015 because some of the slowdown in health care spending over the last few years was due to increased cost-sharing; removing barriers to access, deductibles and copays, will, therefore, lead to more utilization. Assuming an increase in utilization of 4.8 percent means that eliminating copayments and deductibles would lead to an increase in health care utilization of over \$400 million.³⁰ While this raises the current cost of health care, like the extension of coverage to the entire population, it will lead to future savings through reduced morbidity and mortality.

Medicaid rates

Currently, Rhode Island discriminates against providers who serve Medicaid by paying rates 42 percent lower than those paid Medicare providers.³¹ By folding in Medicaid, a single payer plan would raise reimbursement rates by 72 percent at a cost of about \$900 million.³² This will benefit recipients as well as providers because current low reimbursement rates threaten Medicaid's viability by forcing a growing number of physicians to stop accepting patients with Medicaid insurance.³³

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³⁰ This overstates the effect on utilization because there would not be the same change for the 20% of health care that is already funded through Medicare and the Veteran's Administration. This also overestimates the long-term impact because greater utilization will, over time, lead to some savings from better health. There is a substantial literature on the effects of copayments on utilization. See William Manning et al., "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," American Economic Review 77, no. 3 (June 1987): 265; Robert Brook et al., "The Effect of Coinsurance on the Health of Adults: Results from the RAND Health Insurance Experiment" (Rand, 1984), http://www.rand.org/pubs/reports/R3055/; B. Harris, A. Stergachis, and L. Ried, "The Effect of Drug Co-Payments on Utilization and Cost of Pharmaceuticals in a Health Maintenance Organization," Medical Care 28, no. 10 (1990): 907-17; D. Cherkin, L. Grothaus, and E. Wagner, "The Effect of Ofice Visit Copayments on Utilization in a Health Maintenance Organization," Medical Care 27, no. 7 (1989): 669–79; Leighton Ku, Elaine Deschamps, and Judi Hilman, "The Effects of Copayments on the Use of Medical Services and Prescription Drugs in Utah's Medicaid Program" (Center on Budget and Policy Priorities, November 2, 2004), http://www.cbpp.org/cms/index.cfm?fa=view&id=1398; Jonathan Gruber, "The Role of Consumer Copayments for Health Care: Lessons from the RAND Health Insurance Experiment and Beyond" (Kaiser Family Foundation, October 2006), 6, http://www.kff.org/insurance/upload/7566.pdf; Hsiao, Kappel, and Gruber, "Act 128: Health System Reform Design. Achieving Affordable Universal Health Care in Vermont."

³¹ Medicaid to Medicare rates are from Kaiser Family Foundation; also see American Academy of Pediatrics, "Medicaid Reimbursement: Medicaid Rates and Provider Participation," July 2009, http://www.sdsma.org/documents/MedicaidSummerStudy.final.pdf Note that the ACA provides for equalizing rates for primary care.

³² Note that this is after taking account of the expansion of Medicaid in 2014 because of the Affordable Care Act. And it is after taking account of the savings through reduced Medicaid administrative costs.

³³ Peter Cunningham and Jessica May, "Medicaid Patients Increasingly Concentrated Among Physicians," August 2006, http://www.hschange.com/CONTENT/866/#ib10; American Academy of Pediatrics, "Medicaid Reimbursement: Medicaid Rates and Provider Participation"; Kaiser Family Foundation, "State Health Facts.org."

Net Costs of Rhode Island single payer

Beginning with projected spending under the ACA-regime and adjusting for savings and program improvements, the Rhode Island single payer plan will lower health care spending by nearly 12 percent, saving over \$1,500 million in the first year. This is itemized in Table 3:

Table 3. Net spending under Rhode Island single payer, 2015(\$ millions)

| Single payer health care spending total | \$ 11,651 |
|---|--------------|
| | |
| Increased utilization | \$ 444 |
| Medicaid rate equalization | \$ 905 |
| Universal coverage | \$ 102 |
| Program Improvements | |
| improvements | \$ 10,200 |
| Net spending without program | |
| Total savings | \$ 2,989 |
| Reduced fraud | \$ 279 |
| Sponsor Administration | \$ 764 |
| Monopoly pricing of drugs and devices | \$ 950 |
| Provider Administration | \$ 994 |
| Savings | |
| Total | \$ 13,189 |
| Government | \$ 474 |
| Private administration | \$ 477 |
| Personal Health Expenditures | \$ 12,238 |

Note: Extra costs associated with the establishment of a single payer plan in Rhode Island come from the expansion of coverage and expanded access to health care services and from the incorporation of Medicaid into a universal system.

The Plan would involve a dramatic shift in health expenditures in Rhode Island away from administrative activities towards the provision of health care. Overall, expenditures are less under single payer with an absolute reduction in administrative activities balanced by a smaller increase in health care provision. Instead of paying for bureaucrats, advertising, and other administrative expenses unrelated to health care, payments to providers increase. Under the current system, administrative costs account for over 25 percent of total health care spending and pharmaceuticals and medical device spending comes to 16 percent; under single payer in Rhode Island, administrative spending would be halved, pharmaceutical and device spending drops to 13 percent, and provider payments rises from 58 percent to 73 percent of the total (see Figure 5).

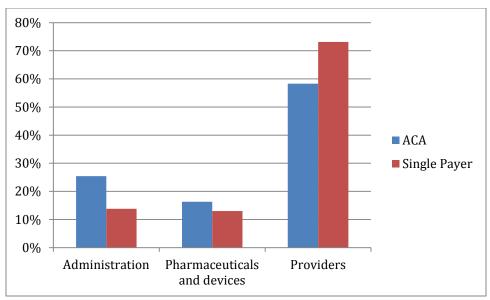


Figure 5. Shift in spending towards providers, single payer compared with ACA

Financing Rhode Island single payer

After taking account of the savings realized and additional costs, the state would fund nearly \$12 billion in health care services.³⁴ While less than the amount currently spent on health care in the state as a whole, this requires over \$4 billion in additional revenues over and above current state spending assuming continued Federal Medicare, Medicaid, and ACA program reimbursements.³⁵ Because there will be a reduction of about \$2 billion in contributions from businesses and households, these funds could be raised in a variety of ways while leaving more money for most Rhode Islanders. Two such funding plans are suggested in Table 4 which gives estimates of moneys collected from an 8 percent across-the-board income tax (applied to capital gains as well) and a 10% payroll tax combined with a 10% tax on capital gains, interest, profits, and rents.36

³⁴ This comes to 95 percent of health care expenditures.

³⁵ This does not include federal, state, or local government spending on employer-provided health insurance nor does it include employee premiums. All of these would disappear along with other private, employment-linked health insurance. We are assuming that the Federal Government will agree to continue funding Medicaid and other Federal health programs at current rates. This would involve substantial savings for the Federal Government because of the single payer system's administrative efficiency. Because the Medicaid program would be incorporated within the larger Plan, we assume that the Federal contribution would no longer be tied to individuals but would be provided through a block grant.

³⁶ After establishing a working reserve, surplus revenues would be returned to the public through a premium holiday at the end of the year.

Table 4. Funding single-payer Rhode Island, 2015

| Personal Income and sources, Rhode Island 2015 | | |
|---|----------------------|---------|
| State personal income | \$ | 53,569 |
| Wages and salaries | \$ | 25,388 |
| Dividends, interest, rents, profits | \$ | 13,775 |
| Capital gains | \$ | 2,100 |
| | | |
| Anticipated revenue from suggested state single payer premium net program costs | ms compared with est | timated |
| Flat income tax rate of 8% (including capital gains) | \$ | 4,454 |
| Surplus | \$ | 719 |
| | | |
| Payroll tax of 10% | \$ | 2,539 |
| Tax on dividends, etc. of 10% | \$ | 1,378 |
| Capital gains tax of 10% | \$ | 210 |
| Surplus | \$ | 391 |

Table 5. Financing of Rhode Island Health Care Plan, in \$ millions, 2015.

| Needed revenues | \$ 11,651 |
|--|--------------|
| | |
| Existing revenue sources | |
| Medicare | \$ 2,757 |
| Medicaid and SCHIP | \$ 2,716 |
| Medicaid expansion (ACA) and rate fix | \$ 1,257 |
| VA | \$ 257 |
| 20% of current out-of-pocket (spending on uncovered services and services not medically necessary) | \$ 833 |
| ACA subsidies | \$ 96 |
| Total existing revenue | \$ 7,916 |
| Remaining revenue needs | \$ 3,735 |

Note: This assumes maintenance of Federal spending under the ACA and the transfer of state health spending under Medicaid and public health programs to the Rhode Island Plan. It is assumed that 20% of current out-of-pocket spending will not be covered, including some optional procedures (e.g. some cosmetic surgery, eyeglass frames) and some not-medically-necessary. Long-term care will continue to be covered through Medicaid and, where medically necessary, through Medicare, but will not initially be covered by the single payer program.

Redistributing the reduced burden

Most Rhode Islanders will save thousands of dollars a year compared with what they and their employers currently spend on health insurance premiums and out-of-pocket spending. Because

many low-income households are already receiving subsidized health care through Medicaid and the Affordable Care Act, the largest savings will go to working families and to middle-income households, especially those with children. Income after health costs and taxes will increase by 32% for middle-income families; and even households with income of over \$100,000 will save. Only a small number of the richest, and best able to pay, will pay more (see Figure 6).

Employers will also benefit from the single payer plan. They will save nearly \$80 million on the administrative expense of operating employer-provided health insurance plans. Freed from the uncertainty and stress of having to negotiate health insurance, they will be able to concentrate on their businesses. (This is especially true for small employers who, because of the small size of their risk pool, pay the highest insurance rates and face the greatest rate-uncertainty in annual renegotiations.) Employers will also save money on insurance premiums. The payroll levy will be substantially less than most employers now pay for health insurance.³⁷ On average, employment-based health insurance costs employers nearly 13 percent of payroll, with the heaviest burden on small employers who pay the highest cost for health insurance.³⁸ Counting both public and private sectors, employment-based health insurance will cost over \$3.2 in 2015; a single payer system would save them \$700 million dollars. Reducing the burden of health insurance premiums will help Rhode Island businesses compete, attracting investment and jobs to the state.

In addition to reducing the burden of health care, the single payer program would shift the burden of health care spending from the sick and needy onto payments related to ability to pay. Under the current system, health care costs, including insurance premiums, are a fixed amount, invariant with income but increasing with sickness. The single payer system will flip this,

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³⁷ The savings will be even greater for covered employees; there will, of course, be greater expense for employers who currently do not provide health insurance.

³⁸ Of course, some do not provide health insurance to their workers. These free-riders are subsidized because their employers are covered through free care programs, by government programs, or through coverage provided by another business to a family member.

setting costs according to income but largely without regard for health status.³⁹

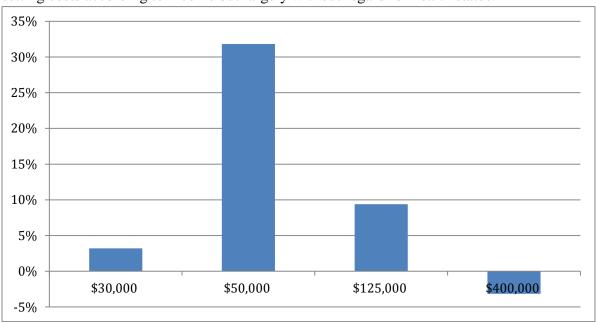


Figure 6. Savings from Rhode Island single payer as share of income after taxes and health care spending. Households with 2 adults and 2 children.

Together, the efficiency gains from single payer and shifting the basis of funding from lump-sum premiums and cost-sharing to a charge related to income combine to produce benefits for the great majority of Rhode Islanders (see Figures 6 and 7). Even after taking account of income and payroll taxes, households will save from the reduction in out-of-pocket costs and private premiums. Businesses will benefit on average with the greatest benefits going to those that have been paying the highest health insurance premiums. These include small and mid-sized private establishments that offer health insurance at relatively high cost. Larger establishments would gain less because they pay lower rates on their health insurance; small businesses that provide health insurance will save more because they now pay higher rates; and employees who are not covered will save still more because they will no longer have to buy insurance on the individual market. The state and local governments will also benefit in their role as employers because public employers pay relatively high premiums for relatively good insurance plans, and because their plans enroll a larger share of their employees and families.

1646, doi:10.1377/hlthaff.2010.0712.

18

³⁹ These estimates are made using data on income by source and its distribution in the following sources: Bureau of Economic Analysis, *State Annual Personal Income*, 2011, http://www.bea.gov/regional/spi/; United for a Fair Economy, *Flip It to Fix It: An Immediate, Fair Solution to State Budget Shortfalls*, May 25, 2011, http://faireconomy.org/flipitreport; Patricia Ketsche et al., "Lower-Income Families Pay A Higher Share Of Income Toward National Health Care Spending Than Higher-Income Families Do," *Health Affairs* 30, no. 9 (2011): 1637 –

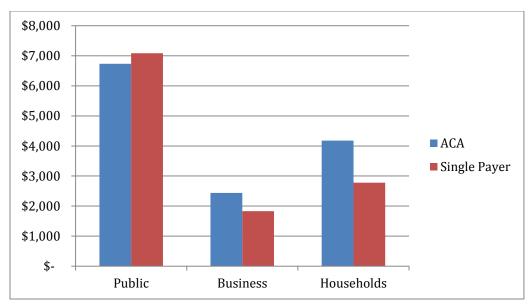


Figure 7. Sources of funding, Rhode Island Health Care, ACA and Single-payer

Single-payer and the quality of care

Not only will the single payer system save money but it will bring improved health care to Rhode Island. It will, of course, immediately bring better health care to residents of Rhode Island without insurance. It will also improve care for those with inadequate insurance. And by reducing turnover in coverage and by facilitating better coordination of care, it will improve health care for everyone.

While the expansion of insurance coverage and removal of barriers to access will increase demand for health care in Rhode Island, this will easily be accommodated by reducing waste in the health care system, including the time physicians now spend in dealing with the health-insurance; physicians and other providers will also save time and money because moving to a single-payer system will enormously simplify medical records systems. One measure of this waste is the relative inability of the American health care system to provide prompt access to doctors for sick people. A recent survey found that the proportion of sick people able to see a doctor that day or the next was lower in the United States than in 7 of 9 other countries, all of whom had national health systems. In addition, the United States had by far the highest rate of

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⁴⁰ Building electronic medical record systems to accomodate different insurers is not only a waste of physicians time and money but also a major source of frustration leading some to leave the profession; see Steffie Woolhandler and David Himmelstein, "Administrative Work Consumes One-Sixth of U.S. Physicians' Working Hours and Lowers Their Career Satisfaction," *International Journal of Health Services* 44, no. 4 (January 1, 2014): 635–42, doi:10.2190/HS.44.4.a; David Himmelstein, Adam Wright, and Steffie Woolhandler, "Hospital Computing and the Costs and Quality of Care: A National Study," *American Journal of Medicine* 20, no. 10 (November 2009): 1–7.

⁴¹ Sarah Thomson et al., *International Profiles of Health Care Systems, 2013 Australia, Canada, Denmark, England, France, Germany, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, and the United States (Commonwealth Fund, November 2013), http://www.commonwealthfund.org/~/media/files/publications/fund-report/2013/nov/1717 thomson intl profiles hlt care sys 2013 v2.pdf.*

people reporting cost-related access troubles; that is they could not see a doctor when sick because of cost (see Figure 8).⁴² The United States already has health-care rationing; as many as half of sick Americans either cannot see a doctor at all or cannot get an appointment that day or the next.

The fragmented financing system also lowers the quality of care for Americans when they do see a physician both by inhibiting the coordination of care and by preventing the development of useful data on treatment and outcomes. The spread of insurance-based provider networks is forcing a growing number of Americans to change doctors; this includes workers who change jobs and insurance, as well as those whose employer changes insurance plans, or those who see a doctor who is no longer in network. .⁴³ The spread of networks also inhibits the coordination of care by forcing primary-care physicians to work with different specialists depending on the patients insurance rather than the patient's medical condition.

Medical information is an increasingly valuable commodity carefully safeguarded by insurance companies who are able to mine their policy holders' data for marketing and other purposes. Only in the Medicare system and the Veteran's Administration do we have continuous records of individuals, their health conditions, their treatments, and the long-term outcomes. A similar body of information would automatically be created by the Rhode Island single payer organization, and it would become an invaluable data source to track disease incidence and effective treatment. It would also allow the single payer body to identify health care hot spots, areas of illness and areas of ineffective and excessive treatment.⁴⁴

42 Ibid.

⁴³ Failures of coordination between different providers account for a substantial economic waste in American health care as well as much unnecessary suffering and even death. By providing continuous insurance coverage and free choice of provider, the single payer system will naturally reduce this problem. Berwick and Hackbarth,

[&]quot;Eliminating Waste in US Health Care."

⁴⁴ Ibid.

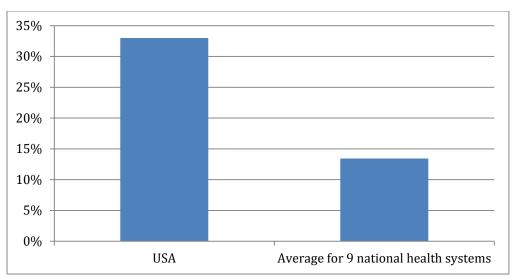


Figure 8. Experienced access barrier because of cost in past year.

Effect of single payer health care on the Rhode Island Economy

The analysis thus far understates the economic gains from single payer because it uses a static model that neglects likely changes in economic parameters coming from the adoption of a reform that would dramatically lower the burden of health care costs. In particular, single payer would increase employment and income in Rhode Island by putting money back into the economy and by making businesses more competitive.

By lowering the overall burden of health care spending and shifting some of the burden from payroll costs to income taxes, single payer will lower the relative cost of labor to employers potentially giving Rhode Island employers a competitive advantage against those based in other states with less efficient health care finance systems.

Many Rhode Island workers currently suffer from job-lock where they fear to change jobs or to open new businesses because they will lose their current health insurance.⁴⁵ A single payer system in Rhode Island would free these workers to seek more efficient employment, freeing employers of the burden of unhappy workers, and freeing Rhode Islanders to act on their entrepreneurial dreams.⁴⁶

Declining payroll costs

Replacing current health insurance premiums with the proposed contribution would immediately save businesses the over \$79 million now spent on administering employer provided health

⁴⁵ The Affordable Care Act helps by providing for improved access to individual health insurance through the exchange system.

⁴⁶ David Sterret, Ashley Bender, and David Palmer, "A Business Case for Universal Healthcare: Improving Economic Growth and Reducing Unemployment by Providing Access for All," *Health Law and Policy Brief* 8, no. 2 (Spring 2014): 41–56.

insurance while lowering business costs for hired labor by over \$600 million in 2014, almost 3 percent of payroll.⁴⁷ Most businesses will benefit because greater efficiency and the shift towards income-related financing will leave a 10% payroll contribution that is significantly less than the 13% currently spent on health insurance premiums. Efficiency savings that lower employment in Billing and Insurance Related activities (BIR) and other operations will be more than balanced by increased consumer spending in Rhode Island. Lower labor costs on business, however, will lead to increased sales by making Rhode Island more competitive with businesses in other states; and lower labor costs will also encourage businesses in Rhode Island to adopt somewhat more labor-intensive technologies, hiring more workers rather than machinery.⁴⁸ On balance, single payer would increase employment in Rhode Island by nearly 3 percent, or 14,000 new jobs.

The future of Rhode Island health care

Provisions of the Patient Protection and Affordable Care Act (ACA) of 2010 may eventually slow the increase in health care costs. Over the next decade, however, few expect the act to have much effect on costs except that the extension of insurance to millions previously uninsured will increase health care spending.⁴⁹ Estimates of spending over the next decade are presented in Figure 9. These are made assuming that the ACA will have no effect on costs except the costs coming from extending Medicaid coverage and private insurance.⁵⁰

While expenditure data on the state level are only available through 2009, expenditures for later years through 2023 have been projected on the assumption that past trends will continue into the

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⁴⁷ In 1999, employer costs of administering health insurance came to 4.2% of private health insurance premiums; I have applied the same ratio here. Woolhandler, Campbell, and Himmelstein, "Cost of Health Care Administration in the United States and Canada" Because employers bear about 75% of the cost of health care premiums, the savings is only 75% of the total.

⁴⁸ It is also likely that the shift from administrative occupations will increase employment in Rhode Island at the expense of jobs in other states by bringing spending back to Rhode Island from Connecticut and other insurance centers. Comparing Bureau of Labor Statistics estimates of insurance employment with the state's population, Connecticut has nearly five-times as high a share of insurance jobs as it does population while Minnesota, New Jersey, and Ohio have two- to three-times as many insurance jobs.

⁴⁹ Center for Healthcare Research and Transformation, *The Patient Protection and Affordable Care Act at the State and Local Level*, June 2010, http://www.chrt.org/public-policy/policy-briefs/policy-brief-2010-06-the-patient-protection-and-affordable-care-act-at-the-state-and-local-level/; Congressional Budget Office and Joint Committee on Taxation, "Fiscal Impact of Reconciliation Act of 2010," March 20, 2010,

http://www.cbo.gov/ftpdocs/113xx/doc11379/AmendReconProp.pdf; Lewin Group, *Patient Protection and Affordable Care Act (PPACA): Long Term Costs for Governments, Employers, Familities and Providers*, Staff Working Paper, (June 8, 2010), http://www.lewin.com/content/publications/LewinGroupAnalysis-

PatientProtectionandAffordableCareAct2010.pdf; Stephanie Cutter, "Health Care Costs," White House Blog, January 26, 2011, http://www.whitehouse.gov/blog/2011/01/26/health-care-costs.

⁵⁰ Estimates of the increase in coverage through participation in Insurance Exchanges are from the Congressional Budget Office; Congressional Budget Office and Joint Committee on Taxation, "Fiscal Impact of Reconciliation Act of 2010"; Kaiser Family Foundation, "State Health Facts.org."

future except as modified in specified ways.⁵¹ The slowdown in national health care spending since 2008 has been applied to estimated state spending; and it is expected that spending will resume the previous annual rate of increase in 2016. Two adjustments are made to project annual expenditures under single payer. First, expenditures for 2015 are adjusted downward to reflect the savings that would be realized under the act. Expenditures in later years are projected from this base on the assumption that per-capita expenditures increased at a rate 1.1 percent *less* than would have been the case under the existing health care finance system.⁵² This lower rate reflects the difference between Canadian experience with a health care system like that envisioned here for Rhode Island and the experience of the United States from 1970-2008; it also approximates the difference between the experience of private health insurance in the United States and the Medicare system since the early 1970s.⁵³ The dynamic savings would reflect the continuing savings from ending the inflation in administration and drug pricing, and the efficiency gains to be realized through better coordination of care and the use of global budgeting.

Single payer produces significant savings in its first year of operation. Because of its superior dynamic efficiency, single payer will produce growing savings over time, savings of over \$2000 per person in 2020 and \$4000 by 2024 (see Figure 9). While providing health insurance coverage to all residents and allowing greater utilization of health care services, single payer will save almost 10% of health care spending in 2015 and nearly 20% in 2024.

⁵¹ Andrea M. Sisko et al., "National Health Spending Projections: The Estimated Impact Of Reform Through 2019," *Health Affairs* 29, no. 10 (October 1, 2010): 1933–41, doi:10.1377/hlthaff.2010.0788.

⁵² The lower share of administrative costs under single payer will by itself account for a fall in the health-care inflation rate of 0.3% per annum. It is assumed here that the other savings will come from better coordination of care leading to continued reductions in duplicate care, continued anti-fraud efforts, and improved quality of care including preventive care and reduced readmissions.

From 1969 to 2009, the cost per enrollee of Medicare services rose by 7.9 percent per annum, 1.2 percentage points less than the 9.1 percent per annum for private health insurance offering "common benefits"; Table 16 in Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, at https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/tables.pdf.

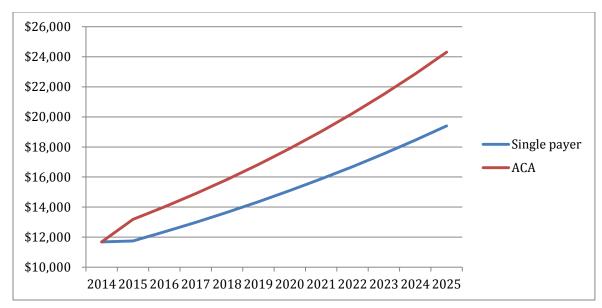


Figure 9. Health care costs, current system and Rhode Island single payer.

Note: This gives total health spending (including administrative costs) under alternative plans. Expenditures under single payer in Rhode Island start from a lower base in 2015 because of the savings discussed in the text and then grow at a rate 1.1 percent slower per year, as has been the case for Canada compared with the US since 1971. The ACA line assumes no reduction in health care costs per covered person.

Conclusion: found money

The Rhode Island legislature now has the opportunity to enact legislation that would not only produce substantial economic gains but would improve the health of residents and save lives. The new system would create such large economies in the administration of health care that all of those currently uninsured could be given access to health care with money left over. Furthermore, by financing health care with taxes linked to income, single payer would produce large savings for the great majority of Rhode Island residents. Finally, by reducing business costs, it would also lead to expansion in employment.

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Appendix 1: Estimating Rhode Island health care expenditures

Annual personal health care expenditures from 1997-2009 are from the Center for Medicare and Medicaid Services at http://www.cms.gov/NationalHealthExpendData/Downloads/restables.pdf

Expenditures beyond 2009 have been projected assuming the same rate of increase in per capita expenditures as for 1997-2009. Total expenditures have then been estimated as the state population times projected 2010 and 2011 per capita expenditures. Population data are from the United State, Bureau of the Census:

http://www.census.gov/popest/estimates.php

Appendix 2: Estimating the sources of Rhode Island health care expenditures.

Spending for private insurance and for Medicare and Medicaid is from the Center for Medicare and Medicaid Services. State and local spending are from sources in Rhode Island.

Out-of-pocket spending is calculated as a residual: total expenditures minus private health insurance and public spending.

Appendix 3: Estimating savings from Rhode Island single payer

Savings have been calculated for 2014 in three steps.

First, expenditures for nine types of services have been calculated for 2014 from CMS data for 1991 through 2009 on the assumption that expenditures for that service will continue to increase from 2009-14 at the same annual rate of increase as 1991-2009 (see Table 6). Two adjustments were made. The rate of increase was adjusted for the slowdown in spending since 2008. And expenditures were increased by the expected rate of increase in health care spending under the coverage expansion of the ACA. (It is assumed that the ACA will have no effect on nursing home care because it will not increase coverage among the elderly or the indigent disabled already covered by Medicare or Medicaid.)

| | 1991 | | 2009 | | Annual Growth rate | Adjusted rate for spending slowdown | 2015 | iadj | 2015 adjusted for ACA | | |
|-----------------------|------|-------|------|-------|--------------------------|-------------------------------------|------|-------|--------------------------|--|--|
| Hospital | \$ | 1,171 | \$ | 3,236 | 5.65% | 3.89% | \$ | 4,086 | \$ 4,383 | | |
| Physician | \$ | 643 | \$ | 1,701 | 5.40% | 3.72% | \$ | 2,126 | \$ 2,281 | | |
| Other Professional | \$ | 74 | \$ | 277 | 7.33% | 5.05% | \$ | 375 | \$ 402 | | |
| Dental | \$ | 152 | \$ | 344 | 4.54% | 3.12% | \$ | 415 | \$ 445 | | |
| Home Health | \$ | 64 | \$ | 230 | 7.11% | 4.89% | \$ | 308 | \$ 331 | | |
| Drugs | \$ | 261 | \$ | 1,300 | 8.92% | 6.14% | \$ | 1,879 | \$ 2,015 | | |
| Durable Medical | \$ | 38 | \$ | 99 | 5.32% | 3.66% | \$ | 123 | \$ 132 | | |
| Nursing Home | \$ | 309 | \$ | 727 | 4.75% | 3.27% | \$ | 885 | \$ 885 | | |
| Other | \$ | 209 | \$ | 873 | 7.94% | 5.47% | \$ | 1,212 | \$ 1,300 | | |

Table 6. Estimation of personal health expenditures, Rhode Island, 2015

Second, provider savings for each category have been estimated by applying a savings rate to each activity.

| | | adjusted ACA | | Savings | | | | | | | | | maining |
|--------------------|-----|-----------------|-----------------|---------|----|-----|---------|----|-----|-------|----|---------|---------|
| | 101 | ACA | Administ rative | | | P | Pricing | | | Fraud | | pending | |
| Hospital | \$ | 4,383 | 9.4% | 3.7% | \$ | 410 | 9 | \$ | 162 | \$ | 99 | \$ | 3,711 |
| Physician | \$ | 2,281 | 10.7% | 0.9% | \$ | 244 | 9 | \$ | 19 | \$ | 51 | \$ | 1,967 |
| Other Professional | \$ | 402 | 9.0% | | \$ | 36 | | | | \$ | 9 | \$ | 357 |
| Dental | \$ | 445 | 9.0% | | \$ | 40 | | | | \$ | 10 | \$ | 395 |
| Home Health | \$ | 331 | 19.2% | | \$ | 64 | | | | \$ | 7 | \$ | 261 |
| Drugs | \$ | 2,015 | | 37.5% | | | 9 | \$ | 756 | \$ | 50 | \$ | 1,209 |
| Durable Medical | \$ | 132 | | 10.0% | | | 9 | \$ | 13 | \$ | 3 | \$ | 116 |
| Nursing Home | \$ | 885 | 7.0% | | \$ | 62 | | | | \$ | 21 | \$ | 802 |
| Other | \$ | 1,300 | 10.7% | | \$ | 139 | | | | \$ | 29 | \$ | 1,132 |

Table 7. Estimation of savings: administration, pricing, fraud reduction.

The administrative savings rate is the difference between administrative cost in Canada and the United States.⁵⁴

It is assumed that the single payer agency will use its bargaining power to lower prices. A savings of 37.5 percent is assumed for pharmaceuticals and medical devices.⁵⁵ It is assumed that prices will be lowered for hospitals and physicians at the rate that would have prevailed in Massachusetts if prices were lowered to the median rate.⁵⁶

Savings for each activity are calculated as the savings rate times the 2015 expenditures.

Administrative savings in the financing process are estimated for two activities: private insurance and Medicaid and SCHIP. For each, spending in 2015 is estimated from the CMS estimates of 2009 spending assuming that expenditures increase from 2009-15 at the same annual rate of increase as 1991-2009. Savings are then estimated assuming that the Plan would have administrative expenses of the same rate as Medicare, or 1.8 percent. It is assumed that Medicaid/SCHIP administration is 5.7 percent; and private health insurance has administrative expense of 15 percent, leaving 13.2 percent for savings.

Total savings are the sum of the provider savings and administrative savings.

⁵⁴ Woolhandler, Campbell, and Himmelstein, "Cost of Health Care Administration in the United States and Canada."

⁵⁵ McKinsey Global Institute, "Accounting for the Cost of Health Care in the United States."

⁵⁶ Coakley, Examination of Health Care Cost Trends and Cost Drivers Pursuant to G.L. C. 118G, § 6½(b) Report, 2011.

Appendix 4: Estimating the cost of program improvements

Three program improvements are necessarily associated with a single payer system.

Universal coverage

One source of the efficiency of a single payer system is the elimination of the expense in checking insurance status. Currently, the uninsured spend about 55% of the average per capita health care spending. Because they are younger and healthier than the general population, it is assumed that their spending will rise to 85% when covered by the single payer plan.⁵⁷ The increase in spending with universal coverage is estimated by multiplying the increase in spending (30%) by the uninsured by their share of the Rhode Island population (3.7%). This proportion (1.111%) was applied to every category of personal spending *except* nursing home and long-term care.⁵⁸

Change in utilization

As described in the text, eliminating deductibles and copayments will allow the sick to utilize the health care system more. The increase in utilization is estimated as the 3% that happened in Canada with the establishment of a single payer system in 1971 plus 1.8% as an estimate of the shortfall in health care utilization over the last 3 years that is not explained by macroeconomic circumstances. This ratio is applied to every category of personal spending except nursing home and long-term care.

Another approach to estimating the change in utilization is to apply the elasticity of demand for health care to the change in the out-of-pocket cost of health care due to the single payer plan. By raising the actuarial rate from 78% to 93%, the plan lowers costs to patients by 68%. With an elasticity of demand of -0.17, this would raise utilization by 11%, double my historical estimate.⁵⁹

The higher estimate derived from elasticity of demand probably overstates the change in utilization with single payer. As Ringel et al. note, the elasticity of demand estimates are very

⁵⁷ Hadley and Holahan, "The Cost of Care for the Uninsured: What Do We Spend, Who Pays, and What Would Full Coverage Add to Medical Spending"; Rachel Garfield, Rachel Licata, and Katherine Young, *The Uninsured at the Starting Line: Findings from the 2013 Kaiser Survey of Low Income Americans and the ACA*, 47 Million (Kaiser Family Foundation, February 2014), http://kaiserfamilyfoundation.files.wordpress.com/2014/02/8552-the-uninsured-at-the-starting-line6.pdf; Kaiser Family Foundation, *The Uninsured: A Primer: Supplemental Data Tables*, October 2011, http://www.kff.org/uninsured/upload/7451-07-Data-Tables.pdf.

⁵⁸ Note that the same procedure was used to estimate the increase in spending due to the ACA increase in coverage.

⁵⁹ Jeanne Ringel et al., *The Elasticity of Demand for Health Care: A Review of the Literature and Its Application to the Military Health System* (National Defense Research Institute and Rand Health, 2005), http://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR1355.pdf; Jason Shafrin, "Is Health Care Demand Elastic? « Healthcare Economist," accessed December 5, 2014, http://healthcare-economist.com/2009/07/22/is-health-care-demand-elastic/.

different for preventive and primary services versus hospitalization and other services. Studies, like those reviewed by Ringel et al., that focus on physician *visits* may severely overstate the elasticity of demand for health *expenditures* because a very large share of expenditures are for hospitalization and acute care where the price-elasticity is very low.⁶⁰

Medicaid reimbursements

A single payer system would pay the same rate to all Rhode Island providers. The Affordable Care Act already provides for reimbursement of Medicaid primary care providers at the Medicare rate. The share of Medicaid expenditures for other providers is estimated by removing the share of primary care providers from the national share of Medicaid expenditures going to physicians. The cost of the reimbursement is then estimated as the increase in reimbursement rate times the share of non-primary care providers in the Medicaid expenditures times Medicaid expenditures.

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⁶⁰ Su Liu and Deborah Chollet, *Price and Income Elasticity of the Demand for Health Insurance and Health Care Services: A Critical Review of the Literature* (Mathematica Policy Research, March 24, 2006), 53, http://www.mathematica-mpr.com/~/media/publications/PDFs/priceincome.pdf.

Appendix 5: Revenue sources for Rhode Island Health Care Plan

Personal income and its sources are from the Bureau of Economic Analysis, http://www.bea.gov/regional/spi/

Personal income for 2015 has been estimated as the 2013 rate times the 1991-2013 rate of increase.

Appendix 6: Estimating the net burden of the Rhode Island Health Care Plan

The cost of current insurance for a family of 4 has been calculated at 4 levels of income and health insurance. For this purpose, the premiums for the Rhode Island health plan have been set at 10% of wage income and 10% of income from capital gains, dividends, interest, profits, and rents. In estimating current health care expenditures, the following assumptions have been made:

- 1. A family with a wage income \$30,000 and nonwage income of \$200 has an ACA subsidized silver plan, with the premium and subsidy from the calculator at the Kaiser Family Foundation.⁶¹ It is assumed that the plan has a medical loss ratio of 85%, and an actuarial value of 70%. Total coverage spending, therefore, is .85*premiums; and out of pocket spending is TCS/.7 TCS.
- 2. A family with a wage income of \$50,000 and a nonwage income of \$1000 is assumed to have the average employer-provided health plan in the state with total premiums of \$15,863. The medical loss ratio is assumed to be 85% and the actuarial value, 70%.
- 3. A family with a wage income of \$120,000 and nonwage income of \$5,000 is assumed to have a gold-level plan costing \$20,000 with a medical loss ratio of 85% and actuarial value of 80%.
- 4. A family with wage income of \$300,000 and nonwage income of \$100,000 is assumed to have a platinum-level plan costing \$25,000, with a medical loss ratio of 85% and actuarial value of 90%.

⁶¹ http://kff.org/interactive/subsidy-calculator/#state=&zip=&income-type=dollars&income=35200&employer-coverage=0&people=4&alternate-plan-family=individual&adult-count=2&adults%5B0%5D%5Bage%5D=21&adults%5B0%5D%5Btobacco%5D=0&adults%5B1%5D%5Bage%5D=21&adults%5B1%5D%5Btobacco%5D=0&child-count=2&child-tobacco=0

Appendix 7: Alternative coverage options

A lower actuarial rate

Single-payer payments could be reduced by maintaining copayments or deductibles. Maintaining such fees undermines the insurance function of the single-payer plan by shifting cost from the general public to sick individuals, and does so without regard for ability to pay. Such charges also risk reducing access, especially among low-income individuals. As happens with the current Medicare system, lowering the actuarial rate risks encouraging the purchase of wrap-around private insurance, which would raise administrative costs in the private insurers while also creating extra billing expenses.

Each percentage point reduction in the actuarial rate would lower the needed revenue by \$117 million, or 0.5% of payroll. Lowering the rate to 87%, the rate of the Federal Employee Benefits Program, would save \$935, potentially allowing a reduction in the needed tax on payroll and tax on unearned income by 23%, or from 10% down to 7.7%. The lower actuarial rate, and lower tax rate, would reduce the redistributive nature of the program. It would also entail additional costs.

- If households buy private insurance to cover the higher deductibles and copays, it might entail insurance administrative costs of an additional \$200 million.
- If the state single-payer agency tried to mitigate the burden of higher copayments and deductibles on the poorest 25% of households, those with incomes of under \$25,000, it would entail additional administration cost of as much as \$456 million while reducing the savings by over \$233 million. Together, these lower the savings to the state from the lower actuarial rate by \$689 million, down to \$246 million.

The cost of long-term care coverage

This report is drafted assuming that the single payer plan would *not* cover long-term care beyond what is already covered under Medicare (medically-necessary care) and Medicaid. Currently the elderly and others in nursing homes and other long-term care facilities pay 36% of the cost and they would continue to bear these costs. To cover existing long term care would add over \$300 billion to the cost of the program, with larger increases if utilization rose with coverage and over time because of the aging of the population.⁶⁴

⁶² Low-income households could be exempted from these fees but that would require a bureaucracy to check incomes, raising the administrative burden from Medicare's 1.8% toward Medicaid's 5.7%, at a cost of \$456 million 63 Again, this effect would be mitigated by exempting the low-income, but at an administrative cost.

⁶⁴ Most of the remaining costs are covered by Medicare and Medicaid with some 10%, or almost \$100 million, paid by other payers, generally philanthropies. Note that the cost to the state would be less if the single payer agency did not cover certain services, such as cable television or private rooms.

Long-term care is expected to become more expensive over time with population aging and increasing life expectancy. Assuming that the rate of the population needing care at any age will remain constant, the Congressional Budget Office projects that the cost of long-term care for the elderly will double as a share of the Gross Domestic Product, rising from 1.3% of GDP in 2010 to 3.0% in 2050, an annual rate of increase of over 4% a year in real terms; including inflation, the CBO projects long-term care costs will rise over 6% a year, increasing by 81% in a decade.

The existing literature on the price-sensitivity of long-term care has been exclusively for individual facilities rather than for the service as a whole.⁶⁶ An upper-bound estimate of the demand for long-term and nursing home care might be a where *all* the care currently provided, including by families, was provided through institutions. The Congressional Budget Office estimates that in 2011 family members provided \$234 billion worth of informal care in the home, almost double the \$134 billion in institutional care provided by nursing homes and others.⁶⁷ If this ratio applied to Rhode Island, then families provide informal elder care valued at \$1.5 billion in 2015, and this would rise to about \$2.3 billion in 2015. Including current spending on institutional care, nearly \$900 billion, the total cost of long-term care in 2024 would be expected to rise from \$2.4 b. in 2015 to \$3.6 billion in 2024. Subtracting the share paid by Medicaid and Medicare, an upper-bound of the cost of providing long-term care in the single-payer program might rise from \$1.9 billion in 2014 to \$2.8 billion.⁶⁸

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⁶⁵ "Rising Demand for Long-Term Services and Supports for Elderly People," *Congressional Budget Office*, accessed November 2, 2014, http://www.cbo.gov/publication/44363; Richard Johnson, Desmond Toohey, and Joshua Wiener, *Meeting the Long-Term Care Needs of the Baby Boomers: How Changing Families Will Affect Paid Helpers and Institutions, Retirement Project*, Discussion Paper (Washington, D. C.: Retirement Project, Urban Institute, May 2007), http://www.urban.org/uploadedpdf/311451_meeting_care.pdf.

⁶⁶ Reviewed in Liu and Chollet, *Price and Income Elasticity of the Demand for Health Insurance and Health Care Services: A Critical Review of the Literature*.

⁶⁷ "Rising Demand for Long-Term Services and Supports for Elderly People," 13.

⁶⁸ This might require an increase in the premium rate from 10% of payroll and other income to 14.5%.