

The Pennsylvania Health Care Plan
Impact and Implementation

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Introduction

This policy memo explores the economic implications of establishing the Pennsylvania Health Care Plan (PHCP) to provide universal health care in Pennsylvania through a one-payer system. The proposed plan would finance virtually all necessary medical care including hospital care, doctor visits, mental health, prescribed occupational and physical therapy, prescription drugs, eye care, medical devices as well as medically necessary nursing home care and home health care and dental care. Medical care would be financed through the PHCP without deductibles or co-payments for designated primary care or for preventive services.

The PHCP will finance medical care with substantial savings compared with the existing multi-payer system of public and private insurers. Some of these savings would be used to extend coverage to the 11 percent of Pennsylvania residents without insurance and to improve coverage for the growing number with inadequate coverage.¹ In addition to improving access to health care, the PHCP would reduce economic inequality by replacing the current regressive system of health insurance finance with contributions proportional to payrolls and to income from capital. By reducing administrative and other waste, the PHCP would increase real disposable income for most Pennsylvania residents, promote increased employment while reducing the burden of health care on business.

Health Care Spending in Pennsylvania

Personal health care spending has been rising at an unsustainable pace in Pennsylvania, more than doubling between 1997 and 2012 (see Figure 1). Health care costs have risen faster than income, raising the share of health care in the Pennsylvania economy from 14 percent of state income in 1997 to over 19 percent in 2012 (see Figure 2). Health care cost inflation is squeezing disposable income for Pennsylvanians. Had health care spending per person risen only as fast as the consumer price index, then spending would be 37% less, saving the average Pennsylvanian over \$3000 (see Figure 1). Had health care spending remained at the 1997 share of income, the average resident of Pennsylvania would have spent over \$2300 less on health care, or over \$9000 less for a family of four in 2012.

¹ Note that this includes 551,000 who will remain without insurance under the Affordable Care Act.

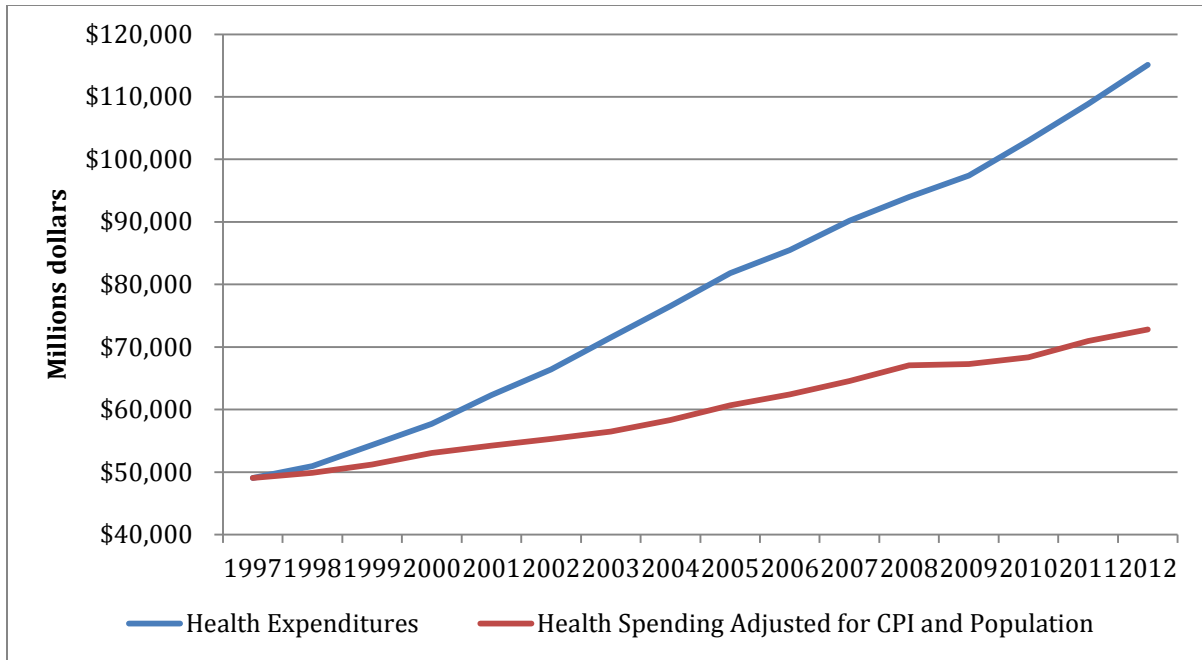


Figure 1. Personal health care expenditures, Pennsylvania, 1997-2012, actual; and level if health care costs had risen with inflation and population growth.

Note: This gives health expenditures in Pennsylvania compared with the expenditure level if expenditures had grown only as fast as the consumer price index; United States Center for Medicare and Medicaid Statistics, National Health Expenditures data, <http://www.cms.gov/NationalHealthExpendData/Downloads/res-tables.pdf>

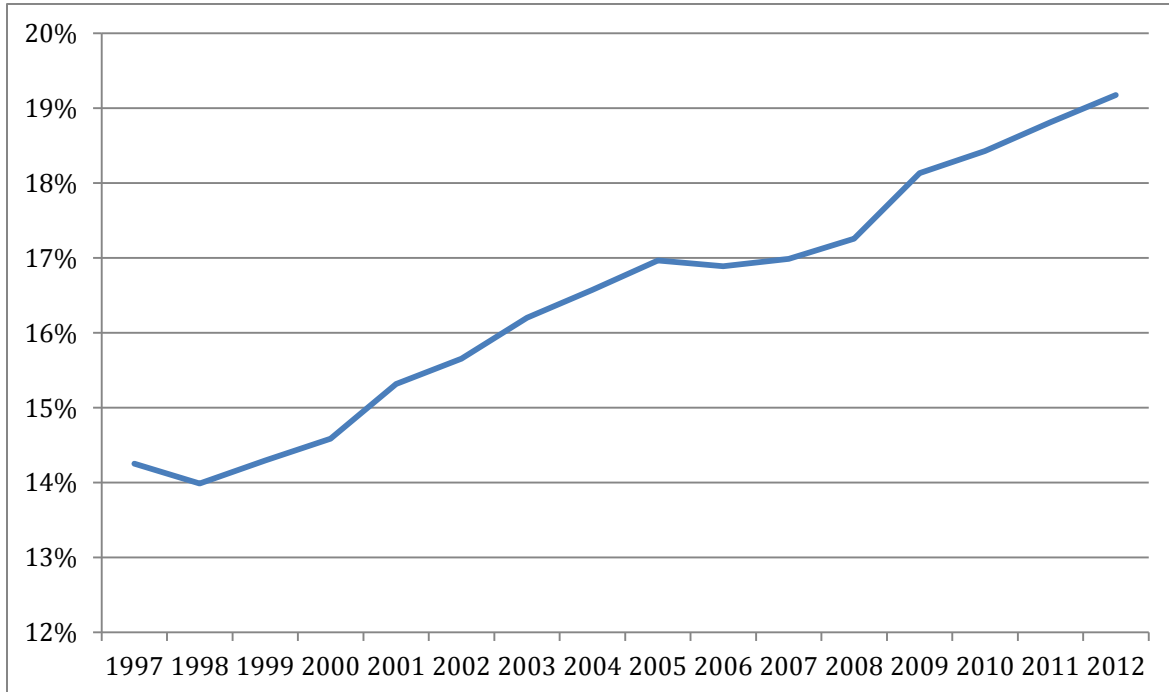


Figure 2. Personal health care expenditures, Pennsylvania, 1997-2012 as share of gross state product.

Note: This gives health expenditures in Pennsylvania divided by total income in the state.

Rising health expenditures can reflect an income effect when an affluent and aging population chooses to buy more health care of a higher quality.² In Pennsylvania, however, spending has increased without improving health care for many residents who continue to receive inadequate health care, especially those without health insurance. Despite increased spending, the proportion of the population without health insurance has risen, from 7.5 percent in 2004 to 8.2 percent in 2008 and 11.0 percent in 2010.³ Rising costs have led a growing number of employers to drop or to restrict health insurance for their employees; annual premiums, over \$13,500 for family coverage in 2009, have been rising steadily for over a decade.⁴ Medicaid and other safety-net programs have mitigated the fall in the proportion of the non-elderly population with health insurance, at rising taxpayer cost.⁵

Funding Pennsylvania Health Care Plan

The PHCP would replace most private and public health care expenditures with a single billing system that would simplify billing for providers. It would replace a fragmented payment system with a more stable one with a single risk pool. The current system includes dozens of separate insurance providers, including large government programs, Medicare and Medicaid, while a small majority of residents receive health insurance through employment. Private insurance (including employment-based insurance for public-sector workers) accounts for 40 percent of expenditures, a lower proportion of expenditures than of residents because they tend to enroll younger and healthier people (see Figure 2).⁶

² 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 Skinner, "Is American Health Care Uniquely Inefficient?," *Journal of Economic Perspectives* 22, no. 4 (Fall 2008): 27–50.

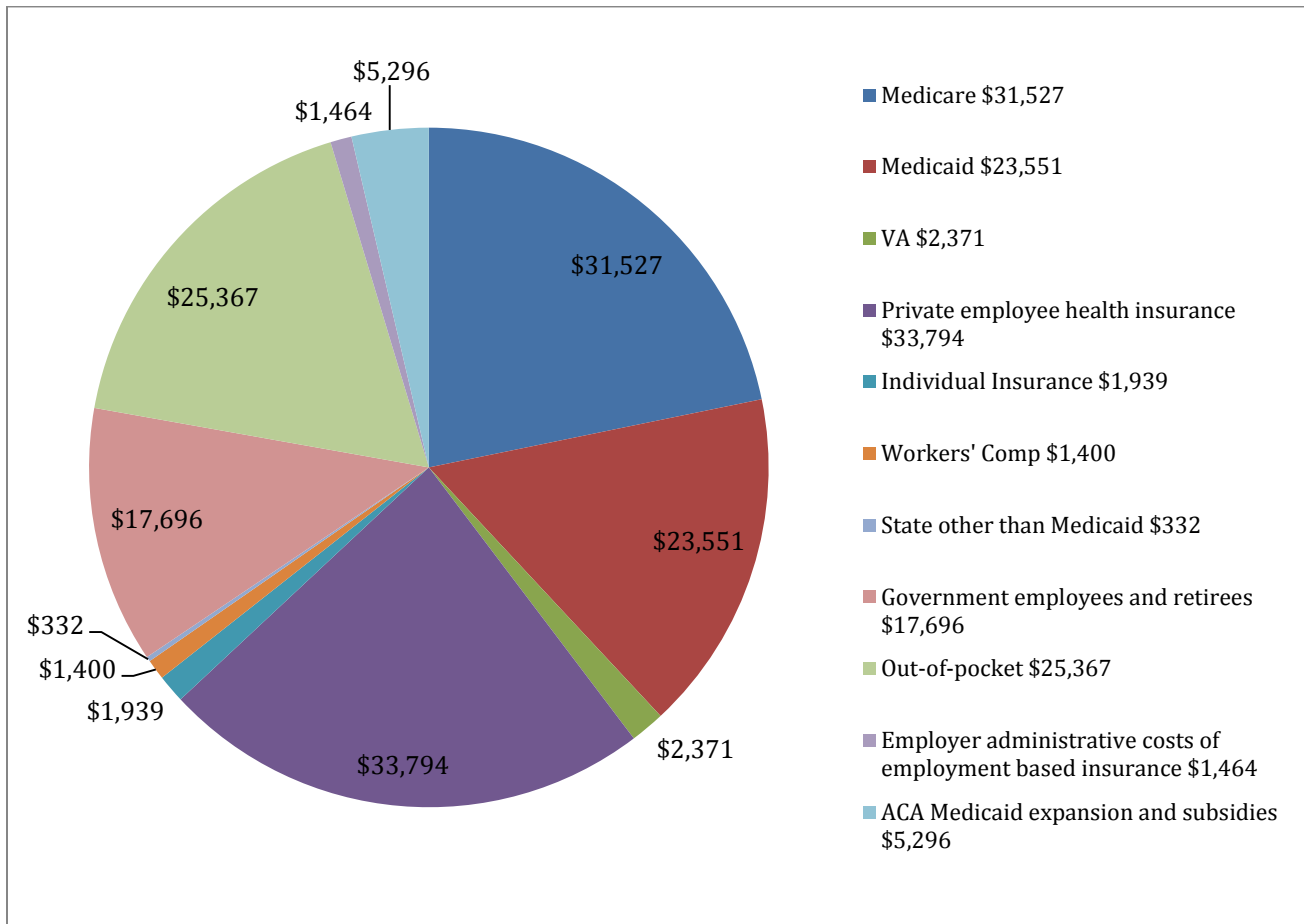
³ Pennsylvania Health Access Project, "A Snapshot of Pennsylvania's Uninsured," n.d., <http://pahealthaccess.org/sites/pahealthaccess.org/files/Snapshot-PA-uninsured.pdf>; Kaiser Family Foundation, "State Health Facts.org," n.d.

⁴ Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits Survey, 2011*, September 27, 2011, <http://ehbs.kff.org/pdf/2011/EHBS%202011%20Chartpack.pdf>; Private sector insurance coverage data are from 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.

⁵ Pennsylvania Health Access Project, "A Snapshot of Pennsylvania's Uninsured"; Kaiser Family Foundation, "State Health Facts.org."

⁶ 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*.

Figure 3. Projected sources of health care spending (\$millions), Pennsylvania, 2014.



Note: Total expenditures in 2014 are estimated from data from the United States Centers for Medicare and Medicaid Services, "Health Expenditures by State of Residence." Private includes employer-based insurance for public employees. Amounts are shown in \$millions next to labels.

Public sources other than spending for public employee health insurance account for almost half of total 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 (CHIP).⁷ The state of Pennsylvania 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.⁸ 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 sixth of total expenditures.

⁷ The usual match is 50 percent. It was increased to 61.59 percent as part of the American Recovery and Reinvestment Act (ARRA) of 2009 and returns to 50 percent in 2011. Under the PPACA, the Federal government will reimburse states for 90-100 percent of the cost of Medicaid expansion from 2014-19.

⁸ Note that this procedure puts any error in the estimate of total health expenditure into the "Out-of-pocket" category.

Anticipated Savings From Pennsylvania Health Plan, 2014

The Pennsylvania Health Care Plan would provide services currently provided by private and public health insurance, as well as paying for medically necessary services currently purchased out-of-pocket. 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.⁹ The proposed plan would cover about 96% of total spending leaving individuals responsible for expenditures not deemed medically necessary (e.g. some vitamins and some alternative therapies).¹⁰

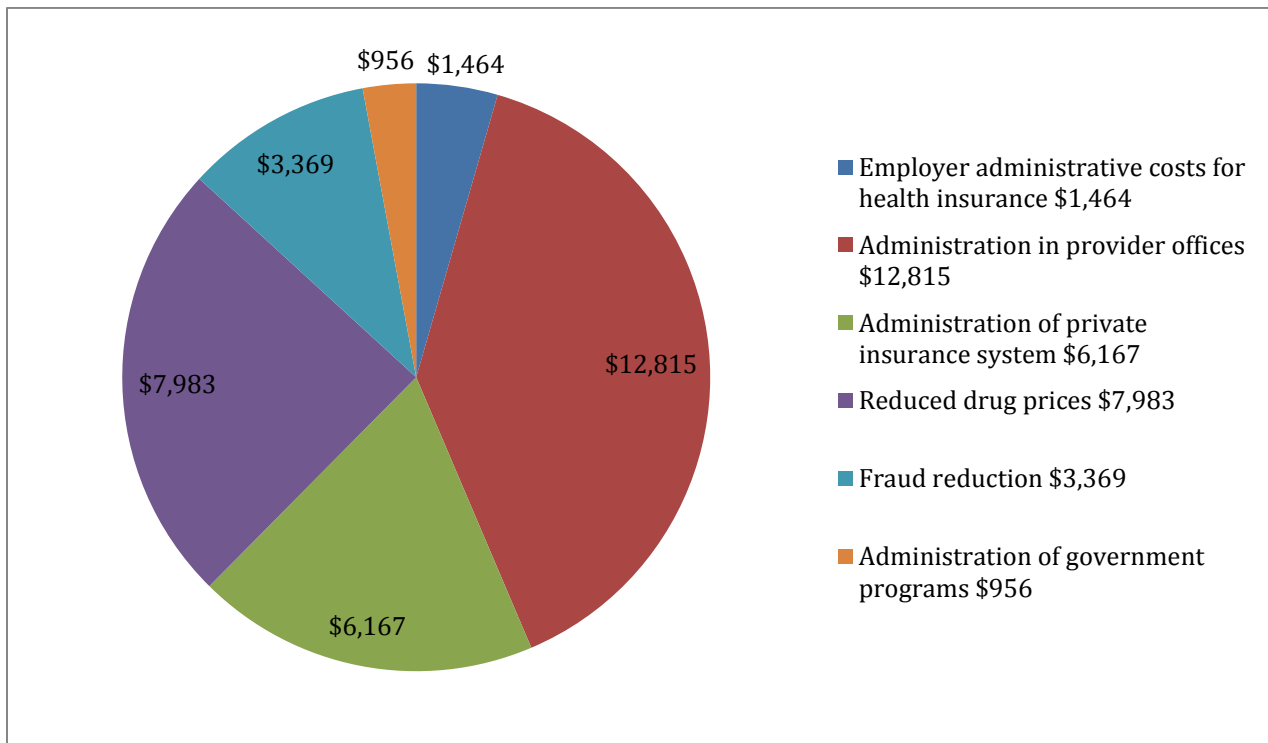
Through economies in administration and by reducing inflated prices within health care, the PHCP would produce substantial savings over the current health care system. These economies would allow the PHCP to save over 22 percent of current expenditures while providing the same health services as the current system.¹¹ 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 Pennsylvania would be over 11 percent lower under the PHCP, with savings of over \$17 billion or over \$1,000 per resident.

⁹ This is the share covered in the national plan proposed by Edith Rasell, "An Equitable Way to Pay for Universal Coverage," *International 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 PHCP, including Medicare, Medicaid, and the Veteran's Administration. Some out-of-pocket expenditures are also not covered in the Physicians for National Health Plan. See Physicians for a National Health Program, "Liberal Benefits, Conservative Spending," 183; Rasell, "An Equitable Way to Pay for Universal Coverage," 183.

¹¹ This report is prepared under the assumption that Pennsylvania will adopt the Medicaid expansion in the Affordable Care Act and will implement an Exchange system with subsidies for the purchase of private health insurance. The impact of the Pennsylvania Health Plan is compared to this ACA baseline.

Figure 4. Savings from Pennsylvania Health Care Plan, 2014, in \$millions.



Note: This shows the projected savings in \$millions from a one-payer system in Pennsylvania. The largest area of savings would be in provider offices' billing and insurance related operations with large savings also realized in other administrative costs and by reducing the market power of drug companies, equipment makers, and some hospitals.

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

- Savings in the administration of private health insurance:* A lobbyist for the Pennsylvania Health Insurance industry estimates that private health insurance plans have administrative costs of 14 percent. Lowering the administrative costs of private insurance to the level of Medicare (about 2 percent) would reduce costs by over \$6.2 billion.¹²

¹² Pennsylvania insurers paid back \$52 million in excessive administrative charges under the ACA in 2011. These estimates understate the savings to be achieved from reducing insurance company administrative costs because the state estimates 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” (Pennsylvania Association of Health Underwriters, 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

- *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 Pennsylvania in 2014 gives costs of \$1.5 billion.¹³
- *Savings in billing and insurance related expenses in provider offices and hospital administration.* Simplifying the reimbursement process would allow providers to save \$12.8 billion in administrative costs.¹⁴
- *Savings from reduced pharmaceutical pricing.* Drug prices are about 60 percent higher in the United States than in Europe or Canada.¹⁵ 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% with prices falling by 80% or more when there are eight or more producers.¹⁶ The large

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/shear07/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.

¹⁴ 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 *ibid.*, 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.

¹⁵ 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. Families USA, *Falling Short: Medicare Prescription Drug Plans Offer Meager Savings*, December 2005, <http://www.familiesusa.org/assets/pdfs/PDP-vs-VA-prices-special-report.pdf>.

¹⁶ One may assume that producers are able to make a decent profit selling at 20% of the list price, which suggests that drug prices in the United States are 8-times as high as needed for normal profits, and that drug prices in Canada and Europe may be 5-times as high. Center for Devices and Radiological Health, “About the Center for Drug Evaluation and Research - Generic Competition and Drug Prices” WebContent, 1, accessed December 27, 2012, <http://www.fda.gov/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/CDER/ucm129385.htm>; Kaiser Family Foundation, *Prescription Drug Trends* (Kaiser Family Foundation, May 2010), 3, <http://www.kff.org/rxdrugs/upload/3057-08.pdf>.

premium 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 Pennsylvanians should be able to lower prices dramatically.¹⁷ If the Pennsylvania Plan could negotiate prices at world levels, it would save almost \$8 billion.¹⁸

- *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 Pennsylvania Plan would save almost a billion dollars in administrative costs.¹⁹
- *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.²⁰ This includes the “accidental fraud” caused by duplicate billing due to the confusing nature of the insurance process.²¹ The Pennsylvania Plan would lead to reduced fraud in two ways. First, eliminating multiple payers would at no cost eliminate the possibility of duplicate billing. In addition, public authorities have greater subpoena

¹⁷ 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. Families USA, *Falling Short: Medicare Prescription Drug Plans Offer Meager Savings*.

¹⁸ McKinsey Global Institute, “Accounting for the Cost of Health Care in the United States,” 56.

¹⁹ Ezekiel J Emanuel, *Healthcare, Guaranteed: A Simple, Secure Solution for America*, 1st ed (New York: PublicAffairs, 2008), 50 gives a much larger estimate. April Grady, *State Medicaid Program Administration: A Brief Overview* (Congressional Research Service, May 14, 2008), <http://aging.senate.gov/crs/medicaid3.pdf>; Diane Archer, “Medicare Is More Efficient Than Private Health Insurance,” *Healthaffairs*, September 20, 2011, <http://healthaffairs.org/blog/2011/09/20/medicare-is-more-efficient-than-private-insurance/>; Earl Hoffman, Barbara Klees, and Catherine Curtis, *Title XVIII and Title XIX of the Social Security Act as of November 1, 2005* (Washington D.C.: Centers for Medicare and Medicaid Services, November 2005), <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/downloads/MedicareMedicaidSummaries2005.pdf>.

²⁰ “Testimony of the National Health Care Anti-Fraud Association” (Harrisburg, PA., House Insurance Committee, House of Representatives, Commonwealth of Pennsylvania, January 28, 2010), http://www.legis.state.pa.us/cfdocs/legis/TR/transcripts/2010_0017_0014_TSTMNY.pdf; General Accounting Office, *Medicare and Medicaid Fraud, Waste, and Abuse: Effective Implementation of Recent Laws and Agency Actions Could Help Reduce Improper Payments* (Washington D.C., March 9, 2011), <http://www.gao.gov/new.items/d11409t.pdf>. A recent report by the Inspector General at Health and Human Services estimates that fraudulent and mistaken billing by one Medicare Advantage provider in California resulted in overpayments in 2007 of \$423 million, or nearly 13%, Daniel Levinson, *Risk Adjustment Data Validation of Payments Made to PacifiCare of California for Calendar Year 2007* (Washington, D. C.: Inspector General, Health and Human Services, November 2012), <http://www.scribd.com/doc/116760242/RISK-ADJUSTMENT-DATA-VALIDATION-OF-PAYMENTS-MADE-TO-PACIFICARE-OF-CALIFORNIA-FOR-CALENDAR-YEAR-2007>.

²¹ Anyone who has tried to interpret a hospital bill can appreciate how easy it would be to make mistakes.

and prosecutorial powers giving them more power to stop fraud. By reducing fraud and accidental overcharging, the Pennsylvania Plan could, conservatively, save 2.5% of total costs or over \$1.2 billion.²²

These savings are itemized in Figure 3 and in Table 1:

Table 1. Savings (in \$millions) from enactment of Pennsylvania Health Care Plan, 2014.

Employer administrative costs for employer-based health insurance	\$ 1,464
Administration in provider offices	\$ 12,815
Administration of private health insurance	\$ 6,167
Reduced market power and negotiated lower drug prices	\$ 7,983
Fraud reduction	\$ 3,369
Administrative costs, government	\$ 956
Total savings	\$ 32,754
Savings as share of total spending	22.6%

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.

Savings would come to over \$2,000 per resident, savings achieved largely by eliminating excessive prices as well as unpleasant and wasteful administrative forms and bureaucratic barriers to care. These savings would allow Pennsylvania to expand access to care for some of the state’s neediest. Expanding coverage to those currently uninsured, a group that consists mostly of low-wage employees and their families, would cost \$1.4 billion.²³

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. Assuming the same for Pennsylvania

²² 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 a system like the Pennsylvania Health Care Plan.

²³ 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>. Note that this estimate is made after taking account of the Affordable Care Act and under the assumption that 412,000 currently uninsured would be covered by the expansion of Medicaid and another 360,000 would be covered through the expansion of employer coverage through the new Exchange system. It is also assumed that because they are relatively younger, the 551,000 newly covered would spend about 80% as much per person as the Pennsylvania population in general, and that they currently spend 55% as much, so their new spending per person will come to about \$2500 per person for total new spending of \$1.4 billion.

would raise costs for medical services by \$3.0 billion.²⁴ We have made two further adjustments to this. First, because many health plans do not provide for dental care, we have assumed a 20 percent increase in utilization for dental care and for home health care under the assumption that most currently are uninsured for these costs. Allowing for these increases in dental and home health care raises the cost of increases in utilization to nearly \$4.6 billion.²⁵

The Plan would directly benefit providers and recipients of the Medicaid system. By folding in Medicaid, the Pennsylvania Plan would raise reimbursement rates by about 27 percent at a cost of about \$9.8 b.²⁶ 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.²⁷

²⁴ 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 Office 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>; 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/jfo/healthcare/FINAL%20VT%20Draft%20Hsiao%20Report.pdf>.

²⁵ Jennifer Haley, Genevieve M Kenney, and Jennifer Pelletier, *Access to Affordable Dental Care: Gaps for Low-Income Adults* (Kaiser Family Foundation, July 2008), <http://www.kff.org/medicaid/upload/7798.pdf>; Hua Wang, Edward C Norton, and R Gary Rozier, "Effects of the State Children's Health Insurance Program on Access to Dental Care and Use of Dental Services," *Health Services Research* 42, no. 4 (August 2007): 1544–1563, doi:10.1111/j.1475-6773.2007.00699.x; Genevieve M. Kenney, Joshua R. McFeeters, and Justin Y. Yee, "Preventive Dental Care and Unmet Dental Needs Among Low-Income Children," *American Journal of Public Health* 95, no. 8 (August 2005): 1360–1366, doi:10.2105/AJPH.2004.056523.

²⁶ 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.

²⁷ 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," July 2009, <http://www.sdsma.org/documents/MedicaidSummerStudy.final.pdf>; Kaiser Family Foundation, "State Health Facts.org."

Table 2. Extra costs associated with Pennsylvania Health Care Plan in 2014 (\$ millions)

Spending under ACA including cost of administration of health insurance system, 2014	\$ 144,736
<i>Total savings from ACA spending</i>	<i>\$ 32,754</i>
Net spending	\$ 111,982
<i>Added spending with PHCP</i>	
Net costs of health coverage for the uninsured	\$ 1,398
Medicaid rates	\$ 9,807
Increased utilization of health care services	\$ 4,616
<i>Added costs</i>	<i>\$ 15,820</i>
Spending under PHCP	\$ 127,802

Note: These extra costs associated with the establishment of the Pennsylvania Plan come from the expansion of coverage and expanded access to health care services and from the incorporation of Medicaid into a universal system. Note that these estimates are made net of the effect of the Affordable Care Act.

While most of these additional costs would have to be covered by Pennsylvania residents, some will be reimbursed by the Federal government through Medicaid.²⁸ Federal Medicaid funding to Pennsylvania would also increase when some of the extension of coverage would be to the 28 percent of the Medicaid-eligible population currently not enrolled.²⁹

After taking account of the cost of expanded coverage, including insuring the uninsured as well as the impact of greater utilization and higher Medicaid reimbursement rates, total health care spending in Pennsylvania would fall by over 11 percent, by over \$16 billion, from \$144 billion to \$128 billion.

The Plan would involve a dramatic shift in health expenditures in Pennsylvania away from administrative activities towards the provision of health care. Overall, expenditures are less under the PHCP, and all the reduction is in administrative activities which are \$18 billion lower, saving Pennsylvanians over \$1400 per person. Instead of paying for bureaucrats, advertising, and other administrative expenses unrelated to health care, payments to providers are greater the PHCP. Under the current system, administrative costs account for over 25% of total health care spending. Under the PHCP, this would be halved and provider payments would rise to 87% of the total.

Financing The Pennsylvania Health Care Plan

After taking account of the savings realized and additional costs, and without including extra state moneys under the Affordable Care Act (ACA), the Plan would fund \$128 billion in

²⁸ We are assuming that the federal government will continue to fund health care for persons eligible under these programs through the Plan.

²⁹ <http://www.statehealthfacts.org/profileind.jsp?ind=868&cat=4&rqn=7>

services.³⁰ While less than is currently spent on health care in the state as a whole, the Plan would require over \$49 billion in additional revenues over and above current state spending assuming continued federal Medicare, Medicaid, and ACA programs.³¹ These funds would come from a 10 percent payroll contribution on establishment payrolls and a general income tax of 3 percent. Together, these would raise almost \$50 billion, over a billion dollars more than is needed to fund the PHCP.³²

By replacing existing employment-based health insurance, which costs employers over 13.0 percent of payroll, the payroll levy would be substantially less than most employers now pay for health insurance while also saving employers the administrative expense and uncertainty of dealing with health insurance.³³ Taking account of net cost of the Plan and the savings on health insurance and health care costs, most Pennsylvanians would save thousands of dollars a year. In addition, reducing the burden of health insurance premiums would also help Pennsylvania businesses compete, attracting investment and jobs to the state.

³⁰ This comes to 95 percent of health care expenditures.

³¹ 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 PHCP'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.

³² After establishing a working reserve, surplus revenues would be returned to the public through a premium holiday at the end of the year.

³³ 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.

Table 3. Financing of Pennsylvania Health Care Plan, in \$ millions.

<i>Needed revenue</i>	
Spending 2014	\$ 127,802
<i>Existing spending sources</i>	
Medicare	\$ 31,527
Medicaid (Fed and State)	\$ 27,591
Medicaid adjustments (Federal)	\$ 9,807
VA	\$ 2,371
State other than Medicaid	\$ 332
Exchange subsidies	\$ 1,005
Employer subsidies	\$ 251
Workers' Compensation	\$ 1,060
20% of out-of-pocket spending	\$ 5,073
10% payroll	\$ 30,813
3% income tax	\$ 19,075
Net surplus	\$ 1,102

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 PHCP. It is assumed that 20% of current out-of-pocket spending will not be covered, including optional procedures (e.g. some cosmetic surgery, eyeglass frames) and some not-medically-necessary.

Who Would Bear The Burden?

The Pennsylvania Plan shifts the burden of health care from out-of-pocket payments and insurance premiums by individuals and businesses onto payments related to income, including payroll taxes and taxes on income (including dividends, rents, profits, and capital gains). This would dramatically change the basis of funding, leading to substantial savings for businesses as well as for lower- and middle-income residents.³⁴ Shifting the basis of payments from relatively low-income individuals, including the sick and the disabled, to those with more income produces substantial savings for those with lower incomes. This effect is magnified by the substantial savings that the Pennsylvania Plan would produce for all residents.

The impact of the Pennsylvania Plan for those at different income levels is presented in Figure 5. There are substantial savings for Pennsylvania households for the poorest 80 percent of

³⁴ 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 – 1646, doi:10.1377/hlthaff.2010.0712.

households with savings extending well into the top quintile so that even those earning between the 80th and 95th percentile would pay only slightly more on average.³⁵ These savings are financed by the efficiency gains of the PHCP plus some increases for the very wealthiest Pennsylvanians.

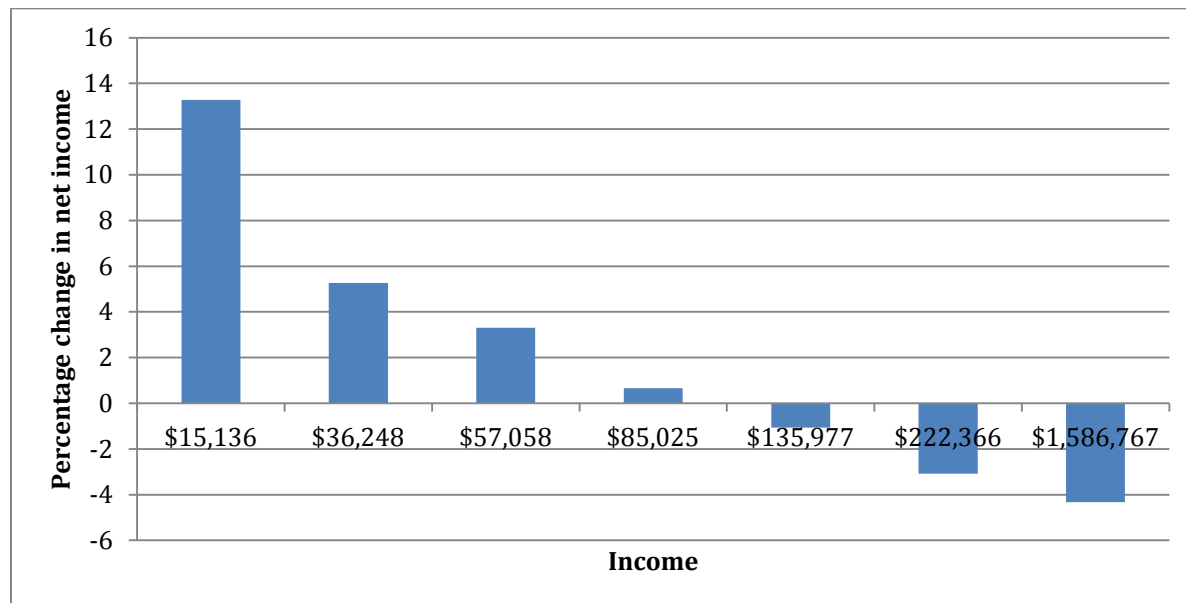


Figure 5. Net effect on income of PHCP on income by quintile and top 5% and top 1%, 2014.

Note: This figure shows the percentage change in disposable income, income net of proposed contributions and health care expenditures, for Pennsylvania households of different incomes. The first four bars show the percentage change for the bottom four quintiles (the bottom 20%, the second 20%, et al.); the last three bars on the right show the effect on the next 15%, the next 4%, and the top 1% respectively.

Combined with the efficiency gains from the PHCP, the increase in federal funding coming from the expansion of coverage and the Medicaid rate adjustment will lead to savings throughout Pennsylvania so that all funding groups (including employers, state and local governments, and consumers) will pay less for health care (see Figure 7). Even after taking account of income and payroll taxes, households will save from the reduction in out-of-pocket costs and private premiums.³⁶ Businesses will benefit on average with the greatest benefits going to those that

³⁵ This would shift the cost of health care towards those who have benefited more from economic changes in the past decades. In Pennsylvania, over the last decade, household income in the lower 20% has fallen by nearly 8% while income among the richest 20% has risen by 7% and by 11% for the richest 5%; Center on Budget and Policy Priorities, “State Fact Sheets: Income Inequality Over the Past Two Decades — Center on Budget and Policy Priorities,” accessed June 29, 2011, <http://www.cbpp.org/cms/index.cfm?fa=view&id=2716>; Elizabeth McNichol et al., *Pulling Apart: A State-by-State Analysis of Income Trends* (Center for Budget and Policy Priorities and Economic Policy Institute, November 15, 2012), <http://www.cbpp.org/files/11-15-12sfp.pdf>.

³⁶ They will also benefit to the extent that savings in health care premiums are passed along to workers, as is discussed below.

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; and the small businesses that do not now provide health insurance to their employees will lose because they will now be contributing to the public burden of providing health care. The public sector will also benefit. First, public employers pay relatively high premiums because they offer plans that provide more comprehensive coverage and plans that enroll a larger share of their employees and families. The shift to a payroll tax would reduce payroll costs for Pennsylvania’s state and local governments by over \$4 billion, including over \$3.5 billion saved by local and county governments and school boards (see Table 4).³⁷ They will also save over \$250 million in administrative expense while also reducing the uncertainty associated with the provision of health care by many relatively small local governments.³⁸

Table 4. Savings to local governments and Pennsylvania state government from PHCP financed with 10% payroll tax, 2014 (\$ millions).

Local governments (counties, boroughs, towns, cities)	\$	1,342
School districts	\$	2,189
Total local:	\$	3,531
State government	\$	581
Total payroll savings	\$	4,112

Note: Payroll and health care spending from 2008 are from <http://healthcare4allpa.org/resources/taxpayer-savings/>. Payroll and spending projected forward to 2014 assuming average state-wide growth in wages and health insurance premiums. Savings estimated as difference between health care spending and 10% payroll levy.

³⁷ State and local governments would also save over \$7 billion in 2014 by transferring the cost of retiree health care to the PHCP.

³⁸ Assuming the same costs as for private businesses, administrative costs associated with the provision of private health insurance for their employees will cost local governments and school boards over \$250 million in 2014; this is estimated using the administrative cost ratio in Woolhandler, Campbell, and Himmelstein, “Cost of Health Care Administration in the United States and Canada.”

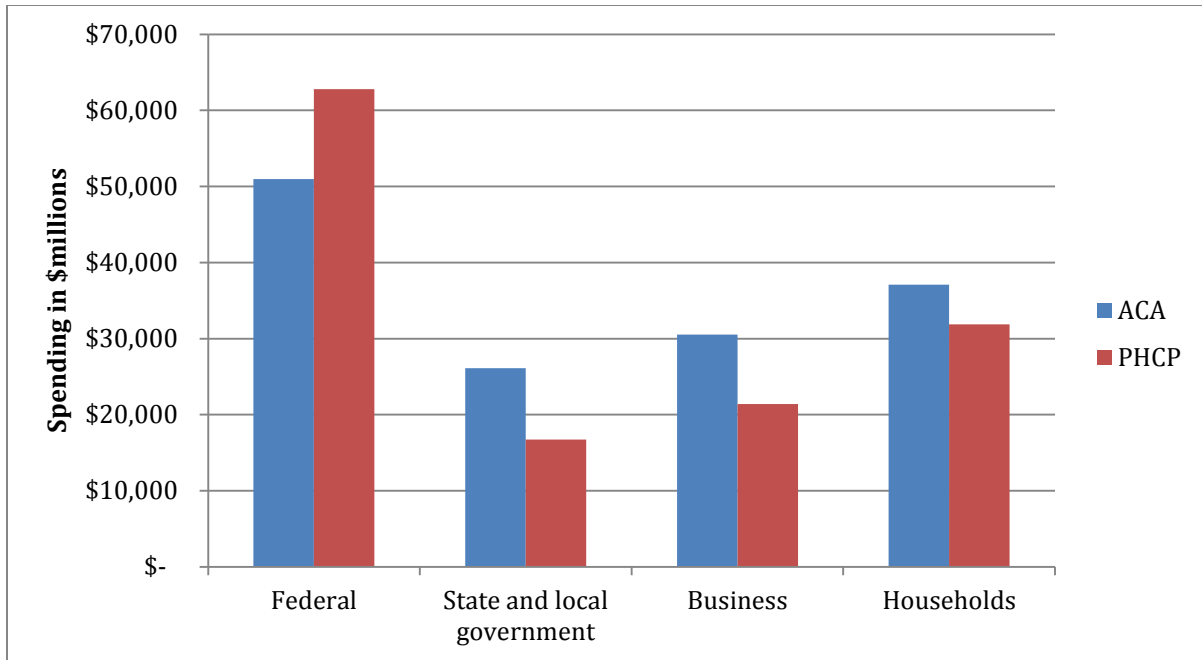


Figure 6. Funding Sources for ACA and for Pennsylvania Health Plan, 2014.

Effect Of Pennsylvania Health Care Plan On employment

The analysis thus far understates the economic gains from the PHCP 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, the PHCP would increase employment and income in Pennsylvania by putting money back into the economy and by making Pennsylvania businesses more competitive.

The PHCP would reduce overall health care spending while shifting some of the cost from Pennsylvanians to the federal government. By increasing federal reimbursements, the PHCP will reduce the cost of health care borne directly by Pennsylvanians; and by lowering the overall burden of health care spending and shifting some of the burden from payroll costs to income taxes, it will lower the relative cost of labor to employers, potentially giving Pennsylvania producers a competitive advantage against those based in other states with less efficient health care finance systems.

The PHCP will also promote employment by making Pennsylvania businesses more competitive to the extent that lower health care costs translate into lower labor costs.

- *Increased Federal spending.* Other workers would find new employment in growing sectors because the extension of coverage and higher Medicaid reimbursements will

bring over \$15 billion in additional federal money into Pennsylvania.³⁹ Federal spending will produce over 120,000 new jobs in Pennsylvania, including 40,000 through the ACA funding and 80,000 from the PHCP.⁴⁰

- *Declining payroll costs.* Replacing current health insurance premiums with the proposed contribution would immediately save businesses the over \$1.5 billion now spent on administering employer provided health insurance while lowering business costs for hired labor by almost \$6 billion in 2014, or over 2 percent of payroll.⁴¹ Most Pennsylvania businesses will benefit because the 10% payroll contribution in the Plan will be significantly less than the 13% currently spent on health insurance premiums, in part because of the use of the state income tax to pay for some of the cost of the PHCP. While the income tax will lower consumer spending, reducing employment, this effect would be cancelled if wages rise to balance to lower cost of hiring workers because of lower health care costs. While economists expect that wages will *eventually* rise because employers face lower health insurance costs, this may take some time and, to the extent that wages do not adjust, there will be less consumer spending *and* an incentive for employers to substitute lower cost labor for capital *and* to lower prices to attract new business.⁴² Both of these latter effects may lead to persistent employment gains from lower payroll costs.⁴³

³⁹ Note that over \$5 billion will be coming from the ACA through the expansion in Medicaid coverage and subsidies given to individuals and some businesses in buying health insurance. Additional funds would be expected under the Pennsylvania Plan because of increased utilization of health care services, higher Medicaid reimbursements, and the extension of Medicaid beyond that anticipated under the ACA.

⁴⁰ Medicare tax increases for high-income households included in the ACA will also cost Pennsylvania over 18,000 jobs. These are not included in Table 5 because they are already built into the comparison.

⁴¹ 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.

⁴² Paul Oyer, "Salary or Benefits?," February 2007, <http://faculty-gsb.stanford.edu/oyer/wp/benefits.pdf>; Paul Oyer, "Can Employee Benefits Ease the Effects of Nominal Wage Rigidity? Evidence from Labor Negotiations," August 2005, <http://faculty-gsb.stanford.edu/oyer/wp/rigidity.pdf>; John Budd, "Non-Wage Compensation: Monopoly Power, Collective Voice, and Facilitation," February 7, 2005, <http://www.legacy-irc.csom.umn.edu/faculty/jbudd/research/benefits05.pdf>; Richard B. Freeman, "The Effect of Unionism on Fringe Benefits," *Industrial and Labor Relations Review* 34, no. 4 (July 1, 1981): 489–509, doi:10.2307/2522473; There may be a persistent form of money illusion where workers do not value nonwage compensation at the same rate as money wages, George A. Akerlof and Robert J. Shiller, *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism* (Princeton: Princeton University Press, 2009).

⁴³ This employment effect is multiplied when the additional wages are spent throughout Pennsylvania leading to further hiring. Note that the employment gains will increase over time if the Plan slows the growth in health care costs.

- *If wages do not rise*, then the loss of consumer income and spending will lead to a reduction in employment of about 36,000 jobs.
- *If wages do not rise*, then employers keep the savings from lower administration costs and lower premiums, the cost of labor would be dramatically lower, and they would adopt more labor-intensive production technologies, substituting workers for other inputs.⁴⁴ Employers, for example, will find it more economical to use more expensive cleaning equipment and fewer workers, and more assembly robots and fewer workers. While many of these changes will take time, they will lead to nearly 70,000 new jobs in Pennsylvania.
- *If wages do not rise* then lower labor costs would allow Pennsylvania employers to attract business from out-of-state competitors. Viewing Pennsylvania as a small state in a large free-trade area, we can apply an elasticity of demand for the state's products similar to that of small countries.⁴⁵ Pennsylvania manufacturers will gain a small but significant edge over manufacturers in Ohio or Michigan, for example; and Philadelphia hotels and Pocono Mountain resorts will be a little more economical compared to their competitors in Boston or Vermont. All this may add an extra 83,000 jobs in Pennsylvania
- In sum, the infusion of additional federal moneys under the ACA alone will increase employment in Pennsylvania by about 43,000 jobs. The PHCP will add an additional 160,000 – 235,000 jobs depending on the extent to which wages rise to capture the lower cost of employee health care. This is an increase of 3-4 percent of total employment (see Table 5).

The estimates in Table 5 for the employment increase with fixed wages overstate employment gains because workers will eventually capture some of the savings from lower health care costs in higher wages. Over time, competition for workers will bid wages up to absorb the savings from lower health care costs and this eventual wage gain will come sooner if there is as substantial an increase in employment as I project in Table 5. Paradoxically, this wage gain will reduce employment gains because the new employment from rising consumption will be less than the losses from the substitution effect and the loss of out-of-state markets.⁴⁶ In other ways, however, these estimates *understate* the employment gains from lower health care costs. Employers would benefit, for example, because eliminating the responsibility of

⁴⁴ Kim B. Clark and Richard B. Freeman, *How Elastic Is The Demand for Labor?* NBER Working Paper (National Bureau of Economic Research, Inc, 1979), <http://ideas.repec.org/p/nbr/nberwo/0309.html>.

⁴⁵ This is done only for products assumed to be subject to interstate (or international) competition, mining, manufacturing, financial services, and hospitality and tourism. The elasticity of demand used is 3.0.

⁴⁶ There may be a gain in productivity coming from higher wages which will encourage some substitution and will lower costs and prices; see *Efficiency Wage Models of the Labor Market* (Cambridge [Cambridgeshire] ; New York: Cambridge University Press, 1986).

administering health care programs will remove a distraction, allowing them to focus on their core business mission.⁴⁷ Furthermore, we would expect additional employment gains over time because the PHCP will better control costs and will limit administrative costs and drug prices that shift health care dollars out of state. Furthermore, Pennsylvania employers will benefit if the Plan improves the general health of residents so that they are more productive workers. Finally, these employment and income gains would also generate revenues to state and local governments which might allow lower contribution rates, leading to further savings and employment gains.

The analysis in Table 5 is conservative in another way because it assumes no net gain from lower health care costs that lower both spending on health care administration and costs to consumers and business. In such cases, it is assumed in preparing Table 5 that jobs due to savings to consumers, the extra employment created by their additional spending, are balanced by the loss of administrative spending and employment (in health insurance companies and provider offices). This assumption understates the gains to Pennsylvania businesses because many of the lost administrative jobs in the health insurance industry are out of state while the additional employment due to Pennsylvania consumer and business spending is within the state; such shifts in spending, therefore, will *increase* employment in Pennsylvania businesses even while administrative jobs will be lost in Connecticut, Minnesota, New Jersey, Ohio, and other states where insurance businesses operate.⁴⁸ Shifting spending from health insurance administration to consumer spending within Pennsylvania, therefore, will increase employment in Pennsylvania, probably by about 40,000 additional jobs.

⁴⁷ Nick Zieminski, "Healthcare Costs Top U.S. Executives' Concerns: Adecco Survey," *Reuters* (New York, October 22, 2012), <http://www.reuters.com/article/2012/10/22/us-adecco-election-survey-idUSBRE89L12T20121022>.

⁴⁸ 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. By contrast, Pennsylvania has only 40% as many insurance jobs as its share of the national population. If 60% of Pennsylvania insurance administrative dollars go to creating jobs in other states, then bringing home 60% of health insurance administrative costs would create nearly 40,000 additional jobs in Pennsylvania.

Table 5. Change in employment with PHCP, 2014

	ACA	<i>If wages rise with lower health care payroll cost</i>	<i>If wages do not change</i>
Additional federal funding of coverage expansion	43,586	124,300	124,300
Spending loss from payroll tax without wage increase	0	0	(36,085)
Substitution of now-less-expensive labor for other inputs	0	13,991	69,853
Employment gain from increased sales due to lower prices coming from lower labor costs	0	30,192	83,232
	43,586	168,483	241,300

Note: This table gives estimates of the effect on employment of the PHCP compared with the ACA using estimates from the IMPLAN regional employment model of the effect of changes in income on employment. The first line gives the effect of additional federal moneys coming from the further extension of coverage beyond the ACA. The second line gives the employment effect of an increase in the payroll tax borne by employees without any balancing wage increase. The next two lines give the employment gains if wages do *not* rise and employers substitute now-cheaper labor for capital and can lower prices to compete with employers in other states. The employment gains with wage increases are due to administrative savings for employers who no longer need to administer private health insurance plans; employment gains without wage increases include these gains and the gains for employers facing lower labor costs because of lower health insurance costs.

There is another conservative assumption built into the estimates in Table 5 because these estimates ignore second-order dynamic effects, including the way economic expansion and increased employment will generate increased tax revenues. The addition of thousands of new private sector jobs will produce billions in additional tax revenue to fund additional public services or reductions in contribution and tax rates. An increase in employment of 200,000 would produce over \$2 billion in additional tax revenues to Pennsylvania, allowing a lower contribution rate to support the PHCP, leading to further employment gains.

The Future Of Pennsylvania Health Care

Provisions of the Patient Protection and Affordable Care Act (ACA) of 2010 may eventually slow the increase in health care costs.⁴⁹ Over the next decade, however, few expect the act to have

⁴⁹ The White House anticipates that changes in Medicare payment systems and the spread of Accountable Care Organizations will slow the rate of health care inflation; .Stephanie Cutter, "Health Care Costs," *White House Blog*,

much effect on costs except that the extension of insurance to millions previously uninsured will increase health care spending.⁵⁰ Estimates of spending over the next decade are presented in Figure 8. These are made assuming that the ACA will have no effect on costs except the costs coming from extending Medicaid coverage and private insurance.⁵¹

While expenditure data are only available through 2009, expenditures for later years through 2023 have been projected on the assumption that past trends will continue into the future except as modified in specified ways. Baseline expenditures through 2023 are projected assuming that past trends continue unchanged. Per-capita expenditures would continue to increase at the rate of increase from 1997-2009, 5.5 percent per year, and that the population would continue to increase at the rate of increase from 2001-9, 0.2 percent per year. Annual expenditures under the ACA are adjusted for the expansion of coverage in Medicaid and private insurance through the new system of state exchanges. Two adjustments are made to project annual expenditures under the Pennsylvania Health Care Plan. First, expenditures for 2014 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 (see Figures 7 and 8).⁵² This lower rate reflects the difference between Canadian experience with a health care system like that envisioned here for Pennsylvania and the experience of the United States from 1970-2008; it also approximates the difference

January 26, 2011, <http://www.whitehouse.gov/blog/2011/01/26/health-care-costs>; Stephanie Cutter, "Better Medicare in Your State," *White House Blog*, May 6, 2011, <http://www.whitehouse.gov/blog/2011/05/06/better-medicare-your-state>; White House, "The Affordable Care Act -- Implementation Timeline" (White House, n.d.), <http://www.whitehouse.gov/healthreform/timeline>; The CBO sees little cost saving; Congressional Budget Office, *The 2012 Long-Term Budget Outlook* (Washington, D. C., June 2012), http://www.cbo.gov/sites/default/files/cbofiles/attachments/06-05-Long-Term_Budget_Outlook_2.pdf.

⁵⁰ 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, Families and Providers* Staff Working Paper, June 8, 2010, <http://www.lewin.com/content/publications/LewinGroupAnalysis-PatientProtectionandAffordableCareAct2010.pdf>.

⁵¹ 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."

⁵² The lower share of administrative costs under the PHCP 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.

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 efficiency gains to be realized through better coordination of care and the use of global budgeting.⁵⁴

As has been discussed, the Pennsylvania Health Care Plan produces significant savings in its first year of operation, savings of almost \$1000 per person or \$4000 for a family of four. Because of its superior dynamic efficiency, the Pennsylvania Plan will produce growing savings over time, savings of over \$2000 per person in 2020 and over \$3000 by 2024. While providing health insurance coverage to all residents and allowing greater utilization of health care services, the Pennsylvania Plan will save almost 10% of health care spending in 2014 and nearly 20% in 2024.

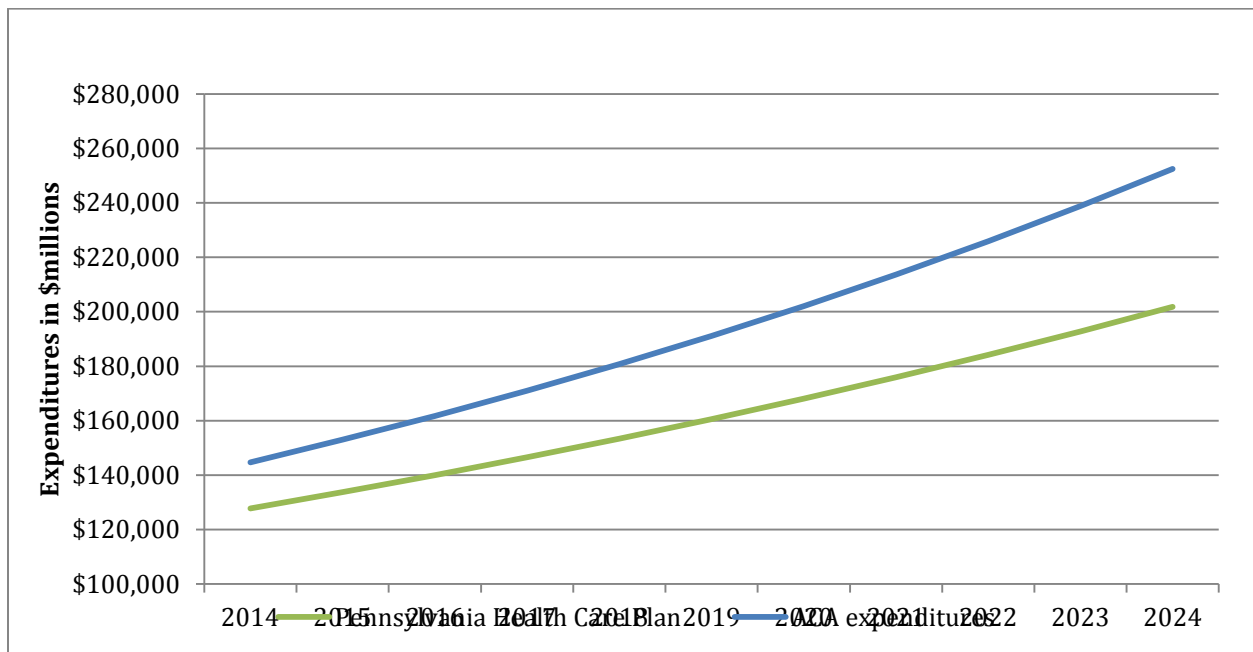


Figure 7. Health care costs, current system and Pennsylvania Health Care Plan.

⁵³ 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>.

⁵⁴ This is based on OECD data described in Friedman, “Universal Health Care: Can We Afford Anything Less?”; General Accounting Office, “Canadian Health Insurance: Lessons for the United States,” June 1991, <http://archive.gao.gov/d20t9/144039.pdf>; McKinsey Global Institute, “Accounting for the Cost of Health Care in the United States”; Colin Pritchard and Mark Wallace, “Comparing the USA, UK and 17 Western Countries’ Efficiency and Effectiveness in Reducing Mortality.,” *Journal of the Royal Society of Medicine, Short Reports 2*, no. 7 (July 2011), <http://shortreports.rsmjournals.com/content/2/7/60.full>; The savings on the US Medicare system may significantly understate the savings from a universal single-payer system; see Woolhandler, S. Himmelstein DU, “Cost Control in a Parallel Universe: Medicare Spending in the United States and Canada,” *Archives of Internal Medicine* (October 29, 2012): 1–2, doi:10.1001/2013.jamainternmed.272.

Note: This gives total health spending (including administrative costs) under alternative plans. Expenditures under the Pennsylvania Health Care Plan start from a lower base in 2014 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 includes the gradual implementation of the Patient Protection Affordable Care Act of 2010 with the expansion of coverage under the law but assumes no reduction in health care costs per covered person.

Conclusion: Found Money

The Pennsylvania Plan would produce substantial health and economic gains for Pennsylvania. 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, the Pennsylvania Health Care Plan would produce large savings for the great majority of Pennsylvania residents. Finally, by reducing business costs, it would also lead to expansion in employment.

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Appendix 1: Estimating Pennsylvania 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/res-tables.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 States, Bureau of the Census:

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

Appendix 2: Estimating the sources of Pennsylvania 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 the Pennsylvania Department of Budget at

http://www.oabis.state.pa.us/SGWS/2012/SGWS_MAIN.swf.

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

Appendix 3: Estimating savings from Pennsylvania Health Care Plan

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).

Table 6. Expenditures by activity, estimates for 2014 (in \$millions).

Activity	1991	2009	Rate of increase	2014
Hospital Care	\$ 15,728	\$ 36,021	4.6%	\$ 45,344
Physicians and Clinical Services	\$ 8,341	\$ 21,349	5.2%	\$ 27,718
Other Professional Services	\$ 963	\$ 3,048	6.4%	\$ 4,198
Dental Services	\$ 1,523	\$ 3,521	4.7%	\$ 4,444
Home Health Care	\$ 616	\$ 2,122	6.9%	\$ 2,992
Drugs and other Medical nondurables	\$ 3,604	\$ 14,022	7.5%	\$ 20,451
Durable Medical Products	\$ 599	\$ 1,248	4.1%	\$ 1,530
Nursing Home Care	\$ 2,997	\$ 8,818	6.0%	\$ 11,900
Other Personal Health Care	\$ 1,695	\$ 7,265	8.1%	\$ 10,885

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

Table 7. Estimated savings by activity, 2014 (in \$millions).

Activity	2014 with ACA	Savings rate	Savings
Hospital Care	\$ 47,198.92	0.109139611	\$ 5,151
Physicians and Clinical Services	\$ 28,851.22	0.124560986	\$ 3,594
Other Professional Services	\$ 4,369.39	0.105550596	\$ 461
Dental Services	\$ 4,625.69	0.105550596	\$ 488
Home Health Care	\$ 3,114.35	0.22400064	\$ 698
Drugs and other Medical nondurables	\$ 21,287.02	0.375	\$ 7,983
Durable Medical Products	\$ 1,592.85	0	\$ -
Nursing Home Care	\$ 12,387.08	0.0816669	\$ 1,012
Other Personal Health Care	\$ 11,329.70	0.124560986	\$ 1,411

The savings rate is the difference between administrative cost in Canada and the United States.⁵⁵ A savings of 37.5 percent is assumed for pharmaceuticals.⁵⁶

Savings for each activity are calculated as the savings rate times the 2014 expenditures.

Administrative savings in the financing process are estimated for two activities: private insurance and Medicaid and SCHIP. For each, spending in 2014 is estimated from the CMS estimates of 2009 spending assuming that expenditures increase from 2009-14 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 18.97 percent, leaving 16.97 percent for savings.

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

⁵⁵ Woolhandler, Campbell, and Himmelstein, "Cost of Health Care Administration in the United States and Canada."

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

Table 8. Estimated administrative savings from Health Plan (in \$millions).

	Administration rate	Savings
Medicare	0.018	\$ -
Medicaid total spending	0.057	\$ 918
VA	0.02	\$ 5
Private employee health insurance	0.14	\$ 3,736
Individual insurance	0.2	\$ 353
Workers Comp	0.1897	\$ 240
State other than Medicaid	0.15	\$ 33
Government employees and retirees	0.1	\$ 1,451

Appendix 4: Revenue sources for Pennsylvania Health Care Plan

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

Personal income for 2014 has been estimated as the 2010 rate times the 2009-10 rate of increase.

Appendix 5: Estimating the net burden of the Pennsylvania Health Care Plan

Income for different quintiles and for the top 5 percent and top 1 percent is from the Current Population Survey for 2007 and adjusted for 2014 on the assumption that income in all groups grows at the rate of personal income growth for the state as a whole from 2000-2010. Health care spending is estimated for each group using the national data from Ketsche, et al.⁵⁷

Payroll and unearned income taxes for each group are calculated using national data on sources of income.⁵⁸

Net income after health care costs and taxes is calculated as the income level minus payroll and unearned income taxes minus health care costs.

⁵⁷ Ketsche et al., “Lower-Income Families Pay A Higher Share Of Income Toward National Health Care Spending Than Higher-Income Families Do.”

⁵⁸ See the appendix data for Thomas Piketty and Emmanuel Saez, “Income Inequality in the United States, 1913-1998,” *The Quarterly Journal of Economics* 118, no. 1 (February 1, 2003): 1–39.

Appendix 6: Projecting Pennsylvania health expenditures

Health care expenditures under the current funding system are projected assuming the same annual rate of increase in per capita spending and population growth as 1991-2009.

Because of the net savings discussed above, per capita spending under the PHCP is projected to start from a lower base in 2014. It is then projected to increase at a rate 1.1 percentage points lower, reflecting the experience of Canadian health care versus the United States since 1971.⁵⁹ (This is also the experience of the US Medicare system.)

Spending under the 2010 Affordable Care Act is calculated assuming the same per capita spending increases as under the current system. In addition to current costs, it is assumed that there are costs associated with the expansion of coverage where the newly covered will increase their annual health care expenditures from 55 percent of the average for the insured up to 100 percent. The increase in coverage is estimated using data from the Congressional Budget Office at

<http://www.cbo.gov/ftpdocs/113xx/doc11379/AmendReconProp.pdf>.

⁵⁹ Himmelstein DU, "Cost Control in a Parallel Universe."