Financing the Maryland Health Security Act

Gerald Friedman
Professor of Economics
The University of Massachusetts at Amherst
Amherst, MA 01003
gfriedma@econs.umass.edu

February, 2013

1 I am grateful to Michael Ash, Ben Day, Ida Hellender, and Eric Naumburg for suggestions. All mistakes remain my own.
Contents
Introduction .................................................................................................................. 2
Health Care spending in Maryland ............................................................................. 2
Funding Maryland Health Care .................................................................................. 4
Anticipated savings from Maryland Health Security Act 2013 .............................. 5
Financing the Maryland Health System Trust .......................................................... 11
Who would bear the burden? .................................................................................... 12
Effect of MHST on employment .............................................................................. 14
The future of Maryland health care ......................................................................... 14
Conclusion: found money ......................................................................................... 16
Bibliography ............................................................................................................... 17
Appendix 1: Estimating Maryland health care expenditures .................................... 20
Appendix 2: Estimating the sources of Maryland health care expenditures ............. 21
Appendix 3: Estimating savings from Maryland Health Security Act .................... 22
Appendix 4: Revenue sources for Maryland Health System Trust ........................ 25
Appendix 5: Estimating the net burden of the MHST .............................................. 26
Appendix 6: Projecting Maryland health expenditures under MHST, PPACA, and current financing system .................................................................................. 28
Appendix 7: Maryland revenue needs with MHST and PPACA .............................. 29

Tables
Table 1. Savings (in $billions) from enactment of MHSA in Maryland, 2013.................. 8
Table 3. Financing of Maryland Health Security Trust, 2013, in billions ....................... 11
Table 4. Expenditures by activity, 1990-2013 estimates (in $billions) ......................... 22
Table 5. Estimated savings by activity, 2013 (in $billions) ........................................... 23
Table 6. Estimated administrative savings from MHST (in $billions) ......................... 24
Table 7. Income group, average income, and share of income from wages and from selected unearned income sources, projected 2013 ................................................................. 27

Figures
Figure 1. Maryland health care expenditures, 1991-2011 ........................................ 3
Figure 2. Sources of Maryland Health Care Expenditures, 2013 ............................... 5
Figure 3. Savings from Maryland Single Payer, 2013, in billions................................................................. 6
Figure 4. Effect of MHST on net income by income quintile, 2013................................................................. 13
Figure 5. Maryland health expenditures, alternative financing programs, 2013-2023, billions.................. 16
Figure 6. Effect of PPACA on MHST revenue needs .................................................................................. 29
Introduction

This policy memo explores the economic implications of enacting the Maryland Health Security Act (MHSA) and establishing the Maryland Health System Trust (MHST) a single-payer system to finance health care in Maryland. The proposed trust would finance virtually all necessary medical care including hospital care, doctor visits, dental care, mental health, prescribed occupational and physical therapy, prescription drugs, medical devices as well as medically necessary nursing home care and home health care. Medical care would be financed through the MHST without co-payments or deductibles.

The MHST 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 15 percent of nonelderly adults in Maryland without insurance and to improve coverage for the growing number with inadequate coverage. In addition to improving access to health care, the MHST would reduce economic inequality by replacing the current regressive system of health insurance finance with progressive and proportional taxes. By reducing administrative and other waste, the MHST would increase real disposable income for most Maryland residents while reducing the burden of health care on Maryland businesses.

Health Care spending in Maryland

Health care spending has been rising at an unsustainable pace in Maryland, tripling between 1991 and 2011 (see Figure 1). Health care costs have risen faster than income, raising the share of health care in the Maryland economy from under 12 percent in 1991 to nearly 16 percent in 2011. Had health care spending remained at the 1991 share of income, the average resident of Maryland would have spent $2000 less on health care, or $8000 less for a family of four in 2011.
Rising health expenditures can reflect an income effect when an affluent population spends more for improved health care.² In Maryland, however, health care expenditures have risen despite several measures of declining quality. The proportion of the population in fair or poor health has increased over the past decade and the non-white infant mortality rate remains distressingly high.³ While the proportion of the population with health insurance has remained stable, there has been a shift from private towards public coverage due to a decline in the provision of insurance by employers. Rising costs have led a growing number of Maryland employers to drop or to restrict health insurance for their employees.⁴ By expanding Medicaid and other safety-net programs, the Maryland state government has mitigated the fall in the proportion of the non-elderly population with health insurance and has even reduced the proportion of uninsured children.

Funding Maryland Health Care

By replacing private insurance, co-payments, deductibles, and most other out-of-pocket payments, the MHST would replace most private and public health care expenditures with a publicly funded system. Currently, over 40 percent of expenditures are through private health insurers.\(^5\) Private health insurance accounts for a higher proportion of expenditures in Maryland than elsewhere, largely because of the high proportion of Maryland workers employed in the public sector with more comprehensive health insurance plans.\(^6\) Employment-based private insurance for public employees and their families will cost over $9 billion in 2013, by itself over 17 percent of total spending.

Public sources other than spending for public employee’s health insurance account for 42 percent 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 (SCHIP).\(^7\) The state of Maryland 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, and charges not covered by insurance or disallowed for other reasons account for 14 percent 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.
Figure 2. Sources of Maryland Health Care Expenditures, 2013

Note: Total expenditures in 2013 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.

**Anticipated savings from Maryland Health Security Act 2013**

The Maryland Health Security Act (MHSA) would establish the Maryland Health System Trust (MHST) to fund all health care in the state except for 20 percent of out-of-pocket expenditures that are assumed not to be medically necessary. The MHST would provide all the services currently provided by private and public health insurance, as well as paying for medically necessary services currently purchased out-of-pocket.

The MHST would produce substantial savings over current health care financing through economies in administration and by reducing inflated prices within health care. These economies would allow the MHST to save 24 percent while providing the same health services as the current system. Even after extending coverage to the uninsured, raising some provider reimbursements, and allowing for increased utilization of health services, the cost of health

---

care in Maryland would be almost 13 percent lower under the MHST, with savings of over $6 billion or about $1,000 per Maryland resident.

Figure 3. Savings from Maryland Single Payer, 2013, in billions.

Note: This shows the projected savings from a single-payer system in Maryland. The largest area of savings would be in provider officers’ 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 privileged providers. In brief they are as follows:

- **Savings in the administration of private health insurance:** The Maryland Health Care Commission and the Maryland Insurance Administration estimates that private health insurance plans have administrative costs of 15%. Lowering the administrative costs to the level of Medicare (about 2 percent) would reduce costs by $3.1 billion.\(^{10}\)

---

\(^{10}\) 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. 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”; Maryland Health Care Commission, “Health
• **Savings in billing and insurance related expenses in provider offices and hospital administration.** Simplifying the reimbursement process would allow providers to save $4.6 billion in administrative costs.\(^\text{11}\)

• **Savings from reduced monopolistic pricing.** Much of the recent increase in health care costs has not been related to costs, quality of care or the degree of illness, but is due to the exercise market leverage by elite hospitals and providers.\(^\text{12}\) By balancing this market leverage, a single-payer system would allow a five percent reduction in prices.\(^\text{13}\) Applying this savings rate to hospital prices and durable medical supplies in Maryland would produce savings of $1.0 billion.

• **Savings from reduced pharmaceutical pricing.** Drug prices are about 60 percent higher in the United States than in Europe or Canada. A single-payer could negotiate prices at world levels, saving $3.3 billion.\(^\text{14}\)

• **Savings from reduced administrative expense in government programs.** Administrative costs in Medicaid are over 16 percent of benefits. Integrating these programs into a single-payer system would save over 1.2 billion in administrative costs.\(^\text{15}\)

---


\(^\text{13}\) We use a conservative estimate of the savings here because Maryland already has hospital rate setting by the state and it has successfully held down the rate of hospital price increases; the Rand Study cited above suggests that rate setting can lower hospital price inflation by 2 percentage points *per annum. John A. Kastor and Eli Y. Adashi, “Maryland’s Hospital Cost Review Commission at 40,” *JAMA: The Journal of the American Medical Association* 306, no. 10 (2011): 1137 -1138. Note that Maryland is the last state with rate setting; see J E McDonough, “Tracking the demise of state hospital rate setting,” *Health Affairs* 16, no. 1 (January 1, 1997): 142 -149.


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

Table 1. Savings (in $billions) from enactment of MHSA in Maryland, 2013.

<table>
<thead>
<tr>
<th>Administrative savings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Insurance</td>
<td>$3.1</td>
</tr>
<tr>
<td>Provider offices and hospitals</td>
<td>$4.6</td>
</tr>
<tr>
<td>Medicaid and SCHIP administration</td>
<td>$1.2</td>
</tr>
<tr>
<td><strong>subtotal:</strong></td>
<td><strong>$8.9</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market power reduction savings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals and durable equipment</td>
<td>$1.0</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>$3.3</td>
</tr>
<tr>
<td><strong>subtotal:</strong></td>
<td><strong>$4.3</strong></td>
</tr>
</tbody>
</table>

| **Total savings:**              | **$13.2** |
| **Savings as share of total spending:** | **24.4%** |

*Note: This table reports the projected savings (in $ billions) from the MHSA 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.*

These savings would come to over $2,250 per resident, savings that would be achieved in large part through eliminating unpleasant as well as wasteful administrative forms and bureaucratic barriers to care. These savings would allow Maryland to finance expanding access to care for some of the state’s neediest. These include those, generally among low-wage employees, currently without health insurance, an expansion which would cost $2.7 billion.16

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 Maryland would

---

16 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. About 104,500 of the 761,000 newly insured would be covered by Medicaid. (Because this estimate is done for 2013, it does not include the Medicaid expansion to begin in 2014 under the PPACA.) In Maryland, the uninsured in 2013 will spend about $4488 per person per year compared with $8161 for the insured. (This is under a single-payer system after accounting for administrative and other savings.) Assuming that utilization for those currently uninsured rose to the level of the currently insured, spending would increase by $2.7 billion.
raise costs for medical services by nearly $1.1 billion.\textsuperscript{17} 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 under MHSA for dental care. In addition, we have assumed a doubling of utilization of home health care under the assumption that most currently are uninsured for these costs.

By folding Medicaid into single-payer health system, the MHSA would raise reimbursement rates by about 19 percent at a cost of about $1b.\textsuperscript{18} 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.\textsuperscript{19}


Table 2. Extra costs to Maryland associated with single-payer plan in 2013 ($ billions)

<table>
<thead>
<tr>
<th>Source of increased spending</th>
<th>Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of insuring uninsured</td>
<td>$ 2.7</td>
</tr>
<tr>
<td>Medicaid rate adjustment</td>
<td>$ 1.2</td>
</tr>
<tr>
<td>Utilization increase(^{20})</td>
<td>$ 2.5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>$ 6.4</strong></td>
</tr>
</tbody>
</table>

Note: These extra costs associated with the establishment of a single-payer system come from the expansion of coverage and expanded access to health care services and from the incorporation of Medicaid into a larger single-payer system.

While most of these additional costs would have to be covered by Maryland residents, some will be reimbursed by the Federal government through Medicare and Medicaid.\(^{21}\) Medicaid funding would also increase because some of the extension of coverage would be to the 15 percent of the Medicaid-eligible population currently not enrolled.

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 Maryland would drop by almost 13 percent, from $54 billion to $47 billion.\(^{22}\)

In this analysis, we have not taken account of the provisions of the Patient Protection and Affordable Care Act (PPACA) of 2010 which would dramatically increase federal funding of health care for low and moderate income residents of Maryland. Under the PPACA, Maryland will be receiving an additional $2 billion from the Federal government for Medicaid expansion and to help individuals to purchase health insurance in 2014, over $3 billion in 2015, and $4

---

\(^{20}\) Note that we assume only a 3% increase in nursing home utilization because the MHSA as currently proposed provides only for medically necessary nursing home care. While this may understate the cost of nursing home care under the MHSA, increased access to home health care may help many seniors to remain in their homes.

\(^{21}\) We are assuming that the Federal government will continue to fund health care for persons eligible under these programs through the MHST.

\(^{22}\) The MHST would replace only $46 billion of this because it would not cover 20% of out-of-pocket spending which is assumed to be not-medically necessary. Out-of-pocket spending has been calculated by applying the same provider savings rate as applies to all other spending under the MHST.
billion in later years. These funds would largely offset the costs to Maryland of expanding access, and would significantly reduce the tax burden of the MHST.

Financing the Maryland Health System Trust

After taking account of the savings realized and additional costs, and without including extra state moneys under the PPACA, the MHST would need to fund $46 billion in services. While less than is currently spent on health care in the state as a whole, this would require $23 billion in additional revenues over and above current state spending.\(^{23}\) These funds would come from a 10 percent payroll tax on establishment payrolls beyond $30,000, and a 12 percent tax on nonwage income from capital gains, dividends, profits, rents, and interest income beyond $500 per person.

Table 3. Financing of Maryland Health Security Trust, 2013, in billions.

<table>
<thead>
<tr>
<th>Spending</th>
<th>Revenues or Other Available Funds</th>
<th>Funds needed for MHST</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 spending</td>
<td>$ 54.3</td>
<td></td>
</tr>
<tr>
<td>minus savings</td>
<td>$ 13.2</td>
<td></td>
</tr>
<tr>
<td>minus 20% of out of pocket spending</td>
<td>$ 1.2</td>
<td></td>
</tr>
<tr>
<td>plus new costs from greater utilization</td>
<td>$ 6.4</td>
<td></td>
</tr>
<tr>
<td><strong>subtotal: Funds needed for MHST</strong></td>
<td></td>
<td>$ 46.2</td>
</tr>
<tr>
<td>Federal Medicare, Medicaid, SCHIP</td>
<td>$ 16.1</td>
<td></td>
</tr>
<tr>
<td>Current state spending</td>
<td>$ 6.7</td>
<td></td>
</tr>
<tr>
<td><strong>subtotal: New revenue needed for MHST</strong></td>
<td>$ 23.3</td>
<td></td>
</tr>
<tr>
<td>New revenue from 10% payroll tax</td>
<td>$ 15.0</td>
<td></td>
</tr>
<tr>
<td>New revenue from 12% unearned income tax</td>
<td>$ 9.3</td>
<td></td>
</tr>
<tr>
<td><strong>Net (excess of revenue above MHST needs)</strong></td>
<td>$ 1.0</td>
<td></td>
</tr>
</tbody>
</table>

\(^{23}\) 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.
Note: This table gives revenue projections from a 12% tax on unearned income over $500 per person (that is income from dividends, interest, rents, and profits) and a 10% tax on payrolls over $30,000 per establishment. When added to existing state spending on health care, apart from employment related premia, there is enough revenue here for the MHST.

By replacing existing employment based health insurance, which costs employers approximately 10.5 percent of payroll, the payroll levy would be less than most employers now pay for health insurance while also saving employers the administrative expense and uncertainty of dealing with health insurance. Taking account of these two new taxes and the savings on health insurance and health care costs, most Marylanders would save substantially. In addition, reducing the burden of health insurance premiums would also help Maryland businesses compete, attracting investment and jobs to the state.

**Who would bear the burden?**

The single-payer system described here 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 non-wage income (dividends, rents, profits, and capital gains). This would dramatically change the basis of funding, leading to substantial savings for lower- and middle-income residents. Shifting the basis of payments from individuals and the sick and disabled to those with more income produces substantial savings for those with lower incomes. This effect is magnified by the substantial savings that a single-payer system would produce for all residents.

The impact of the single-payer system for those at different income levels is presented in Figure 4. There are substantial savings for Maryland households for the poorest 80 percent of households with savings extending into the top quintile. These savings are financed by the efficiency gains of a single-payer system plus increases for the wealthiest Marylanders.

---

24 At establishments with health insurance, employers (and their employees) pay 11.8 percent of payroll.

Figure 4. Effect of MHST on net income by income quintile, 2013.

Note: This figure shows the percentage change in disposable income, income net of proposed taxes and health care expenditures, for Maryland households of different incomes. Average income is shown for each category.

Businesses will benefit on average but the greatest benefits from the MHST will go to those that have been paying the highest health insurance premiums. These include small private establishments that offer health insurance at relatively high cost. The public sector will also benefit. 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 save the federal government and Maryland’s state and local governments over $3 billion. While about half of this would be savings for the Federal government in the cost of health insurance for its employees living in Maryland, the state government would save half a billion dollars and there would be savings of over $1 billion for local governments in Maryland.\(^\text{26}\)

\(^{26}\) It might be possible to capture some of the Federal government’s gains by charging a supplemental fee on Federal government use of the MHST that would bring the Federal government’s health care costs closer to what they would be without the MHST while sharing with Maryland some of the gains the Federal government would reap from Maryland’s initiative.
**Effect of MHST on employment**

The proposed reform would increase employment in Maryland by increasing health care employment and by making Maryland businesses more competitive. Employment losses due to reduced spending in billing and insurance operations would be balanced because of dollar-for-dollar increases in spending either on health care services or by consumers, businesses, and governments able to reduce their health-care spending.\(^{27}\) In addition, Maryland would gain jobs when employers are able to capture new markets because of savings on payroll because the proposed payroll tax is less than the current cost of health insurance coverage.\(^{28}\) The reduced cost of health insurance, the difference for employers between what they are paying now and the payroll tax proposed to fund the MHST, should bring over 20,000 additional jobs to Maryland. When combined with the employment effects from keeping more health care dollars in the state, rather than in out-of-state insurance and pharmaceutical companies, Maryland employment might increase by over 70,000 workers.  

**The future of Maryland health care**

Provisions of the Patient Protection and Affordable Care Act (PPACA) of 2010 may eventually slow the increase in health care costs.\(^{29}\) Over the next decade, however, few expect the act to have much effect on costs except to the extent that the extension of insurance to millions previously uninsured will increase health care spending.\(^{30}\) Estimates of spending over the next decade are presented in Figure 5. These are made assuming that the PPACA will have no effect

---

\(^{27}\) Employment losses within Maryland will be limited because many of the displaced jobs are based elsewhere in insurance companies and back-offices. These will lead to employment losses in Connecticut and elsewhere where insurance company operations are based.

\(^{28}\) This employment effect is multiplied when the additional wages are spent throughout Maryland leading to further hiring. Note that the employment gains will increase over time because the MHST will be able to slow the growth in health care costs.


\(^{30}\) Center for Healthcare Research and Transformation, *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”; Lewin Group, *Patient Protection and Affordable Care Act (PPACA): Long Term Costs for Governments, Employers, Families and Providers*. 
on costs except that it will lower the proportion uninsured in Maryland by 60 percent, from 14.7 percent to 6.0 percent, from 736,000 to 300,000.\(^{31}\)

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 2001-9, 5.8 percent per year, and that the population would continue to increase at the rate of increase from 2001-9, 0.7 percent per year. Annual expenditures under the PPACA 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 Maryland Health Security Act (MHSA). First, expenditures for 2013 are adjusted downward to reflect the savings that would be realized if the act is enacted in 2012. 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 Figure 5). This lower rate reflects the difference between Canadian experience with a single-payer system and the experience of the United States from 1970-2008. The dynamic savings would reflect the continuing efficiency gains to be realized through better coordination of care and the use of global budgeting.\(^{32}\)

---

\(^{31}\) This would lower the uninsured rate to 6%, comparable to the proportion uninsured in Massachusetts which has a state policy similar to the national PPACA. It is assumed that the reduction in the uninsured achieved by 2019 is due equally to the extension of Medicaid and enrollment through the Health Insurance Exchanges. Medicaid enrollment is assumed to increase by 32 percent by the Kaiser Family Foundation; estimates of the increase in coverage through participation in Insurance Exchanges are from the Congressional Budget Office. It is assumed that the cost of coverage for new enrollees is the average for current enrollees adjusted for the rising cost of coverage through 2019. Congressional Budget Office and Joint Committee on Taxation, “Fiscal Impact of Reconciliation Act of 2010”; Kaiser Family Foundation, “State Health Facts.org”, n.d.

**Figure 5. Maryland health expenditures, alternative financing programs, 2013-2023, billions.**

**Note:** This gives the share of health care under alternative plans. Expenditures under the “Single Payer” are assumed to start from a lower base in 2013, based on the estimates discussed below, and then growth is 1.1 percent slower per year, as has been the case for Canada compared with the US since 1971. The PPACA 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**

A single-payer health care finance system would produce substantial health and economic gains for Maryland. 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, a single-payer system would produce large savings for the great majority of Maryland residents. Finally, by reducing business costs, it would also lead to expansion in employment.
Bibliography:


Kaiser Family Foundation. “State Health Facts.org”, n.d.


McDonough, J E. “Tracking the demise of state hospital rate setting.” Health Affairs 16, no. 1 (January 1, 1997): 142 -149.
Pritchard, Colin, 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.
Appendix 1: Estimating Maryland health care expenditures


Expenditures for 2010 and 2011 have been projected assuming the same rate of increase in percapita expenditures as for 1991-2009. Total expenditures have then been estimated as the state population times projected 2010 and 2011 percapita 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 Maryland 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 Maryland, Department of Budget and Management at http://dbm.maryland.gov/agencies/operbudget/Documents/2009/fy09_budgethighlights.pdf.

Out-of-pocket spending is calculated as a residual: total expenditures minus private health insurance and public spending.
Appendix 3: Estimating savings from Maryland Health Security Act

Savings have been calculated for 2013 in three steps.

First, expenditures for nine types of services have been calculated for 2013 from CMS data for 1991 through 2009 on the assumption that expenditures for that service will continue to increase from 2009-13 at the same annual rate of increase as 1991-2009 (see Table 4).

Table 4. Expenditures by activity, 1990-2013 estimates (in $billions).

<table>
<thead>
<tr>
<th>Activity</th>
<th>1990</th>
<th>2009</th>
<th>Annual increase</th>
<th>4 year increase</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Care</td>
<td>$ 5.5</td>
<td>$ 15.7</td>
<td>5.55%</td>
<td>24.9%</td>
<td>$ 19.7</td>
</tr>
<tr>
<td>Physicians and Clinical Services</td>
<td>$ 3.8</td>
<td>$ 10.2</td>
<td>5.13%</td>
<td>22.8%</td>
<td>$ 12.5</td>
</tr>
<tr>
<td>Other Professional Services</td>
<td>$ 0.4</td>
<td>$ 1.5</td>
<td>7.15%</td>
<td>33.1%</td>
<td>$ 2.0</td>
</tr>
<tr>
<td>Dental Services</td>
<td>$ 0.7</td>
<td>$ 1.9</td>
<td>5.39%</td>
<td>24.1%</td>
<td>$ 2.4</td>
</tr>
<tr>
<td>Home Health Care</td>
<td>$ 0.3</td>
<td>$ 0.8</td>
<td>6.36%</td>
<td>29.0%</td>
<td>$ 1.1</td>
</tr>
<tr>
<td>Drugs and other Medical nondurables</td>
<td>$ 1.4</td>
<td>$ 6.3</td>
<td>8.12%</td>
<td>38.4%</td>
<td>$ 8.7</td>
</tr>
<tr>
<td>Durable Medical Products</td>
<td>$ 0.2</td>
<td>$ 0.6</td>
<td>4.81%</td>
<td>21.2%</td>
<td>$ 0.7</td>
</tr>
<tr>
<td>Nursing Home Care</td>
<td>$ 0.9</td>
<td>$ 3.4</td>
<td>7.04%</td>
<td>32.5%</td>
<td>$ 4.6</td>
</tr>
<tr>
<td>Other Personal Health Care</td>
<td>$ 0.4</td>
<td>$ 2.1</td>
<td>8.90%</td>
<td>42.8%</td>
<td>$ 3.0</td>
</tr>
</tbody>
</table>

Second, provider savings for each category have been estimated by applying a savings rate to each activity.
Table 5. Estimated savings by activity, 2013 (in $billions).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Savings rate</th>
<th>Provider savings (sum of Administrative and Market Power)</th>
<th>Administrative</th>
<th>Market Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Administrative</td>
<td>Market Power</td>
<td></td>
</tr>
<tr>
<td>Hospital Care</td>
<td>15.1%</td>
<td>$3.0</td>
<td>$2.0</td>
<td>$1.0</td>
</tr>
<tr>
<td>Physicians and Clinical Services</td>
<td>10.1%</td>
<td>$1.3</td>
<td>$1.3</td>
<td>-</td>
</tr>
<tr>
<td>Other Professional Services</td>
<td>10.1%</td>
<td>$0.2</td>
<td>$0.2</td>
<td>-</td>
</tr>
<tr>
<td>Dental Services</td>
<td>10.1%</td>
<td>$0.2</td>
<td>$0.2</td>
<td>-</td>
</tr>
<tr>
<td>Home Health Care</td>
<td>10.1%</td>
<td>$0.1</td>
<td>$0.1</td>
<td>-</td>
</tr>
<tr>
<td>Drugs and other Medical nondurables</td>
<td>37.5%</td>
<td>$3.3</td>
<td>-</td>
<td>$3.3</td>
</tr>
<tr>
<td>Durable Medical Products</td>
<td>15.1%</td>
<td>$0.1</td>
<td>$0.1</td>
<td>$0.0</td>
</tr>
<tr>
<td>Nursing Home Care</td>
<td>10.1%</td>
<td>$0.5</td>
<td>$0.5</td>
<td>-</td>
</tr>
<tr>
<td>Other Personal Health Care</td>
<td>10.1%</td>
<td>$0.3</td>
<td>$0.3</td>
<td>-</td>
</tr>
</tbody>
</table>

A savings of 10.1 percent is assumed for billings and insurance related expenses. In addition, it is assumed that there is a 5 percent savings by reducing inflated prices for some hospitals and durable medical products. A savings of 37.5 percent is assumed for pharmaceuticals.

Savings for each activity are calculated as the savings rate times the 2013 expenditures.

Savings are allocated to administrative cost (due to the billings and insurance economies) or market power.
Third, administrative savings in the financing process are estimated for two activities: private insurance and Medicaid and SCHIP. For each, spending in 2013 is estimated from the CMS estimates of 2009 spending assuming that expenditures increase from 2009-13 at the same annual rate of increase as 1991-2009. Savings are then estimated assuming that MHST would have administrative expenses of 2 percent. It is assumed that Medicaid/SCHIP administration is 16 percent, leaving 14 percent for savings; and private health insurance has administrative expense of 15 percent, leaving 13 percent for savings.

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

**Table 6. Estimated administrative savings from MHST (in $billions).**

<table>
<thead>
<tr>
<th>Program</th>
<th>Spending</th>
<th>Administrative Ratio</th>
<th>Administrative Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>$8.3</td>
<td>0.16</td>
<td>$1.2</td>
</tr>
<tr>
<td>SCHIP</td>
<td>$0.4</td>
<td>0.16</td>
<td>$0.06</td>
</tr>
<tr>
<td>Private</td>
<td>$23.7</td>
<td>0.15</td>
<td>$3.1</td>
</tr>
</tbody>
</table>
Appendix 4: Revenue sources for Maryland Health System Trust

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

Personal income for 2013 has been estimated as the 2010 rate times the 2000-10 rate of increase.

Capital gains is not reported as income by the BEA. For 2013, we have used the average level reported for 2003-9 in: http://www.marylandtaxes.com/finances/revenue/reports/estimated/2009_BRE_December_Report.pdf

Revenue from the payroll tax is estimated as 10 percent of income from wages and salaries minus $30,000 times the number of establishments in the state. The number of establishments is from the Medical Expenditure Panel Survey for 2009 at http://www.meps.ahrq.gov/mepsweb/

Revenue from the unearned income tax is estimated as 10 percent of income from capital gains, dividends, interest, and rent, and proprietor’s income.
Appendix 5: Estimating the net burden of the MHST

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 2013 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.\(^{33}\)

Payroll and unearned income taxes for each group are calculated using national data on sources of income (see Table 7). Tax payments are estimated for each group as the tax rate times the estimated income from each source calculated as the rates in Table 7 times the average income level for the group.

---

Table 7. Income group, average income, and share of income from wages and from selected unearned income sources, projected 2013.

<table>
<thead>
<tr>
<th>Group</th>
<th>Average income</th>
<th>Share earned</th>
<th>Share unearned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom 20%</td>
<td>$16,285</td>
<td>48%</td>
<td>7%</td>
</tr>
<tr>
<td>2nd 20%</td>
<td>$42,396</td>
<td>57%</td>
<td>5%</td>
</tr>
<tr>
<td>middle 20%</td>
<td>$69,314</td>
<td>60%</td>
<td>5%</td>
</tr>
<tr>
<td>4th 20%</td>
<td>$111,709</td>
<td>63%</td>
<td>6%</td>
</tr>
<tr>
<td>next 15%</td>
<td>$193,001</td>
<td>49%</td>
<td>31%</td>
</tr>
<tr>
<td>Next 4%</td>
<td>$411,305</td>
<td>38%</td>
<td>46%</td>
</tr>
<tr>
<td>Top 1%</td>
<td>$2,487,483</td>
<td>26%</td>
<td>59%</td>
</tr>
</tbody>
</table>

Net income after health care costs and taxes is calculated as the income level minus payroll and unearned income taxes minus health care costs.
Appendix 6: Projecting Maryland health expenditures under MHST, PPACA, and current financing system.

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 MHST is projected to start from a lower base in 2013. 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. (This is also the experience of the US Medicare system.)

Spending under the 2010 PPACA 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

Appendix 7: Maryland revenue needs with MHST and PPACA.

The 2010 PPACA involves a substantial increase in federal funding for the Medicaid program and to subsidize health insurance for low- and moderate-income households. For Maryland, it is projected that these programs will raise the share of the population with health insurance from 85 percent to 95 percent by 2016. By 2016, the PPACA is expected to raise health care costs by over $5 billion of which $3.7 billion would be from federal funds. Most of these would be for the expansion of the Medicaid program, where additional costs will be fully covered by the Federal government for the first three years before the Federal share drops to 97 percent, 94 percent, and then 90 percent. 34

Beginning in 2014, the PPACA will fund health insurance for many citizens of Maryland who are otherwise receiving care paid for through tax revenues going to the MHST. The PPACA will thus substantially reduce the MHST’s funding needs. Applying the projected additional federal funding to the state revenue needs under MHST reduces the need for state revenues by over $3 billion in 2015, allowing the state to fund the MHST with a 9 percent payroll tax and a 9 percent tax on unearned income.

Lowering the needed tax revenues would provide a further bonus to Maryland by increasing business and employment.

Figure 6. Effect of PPACA on MHST revenue needs

34 The major other Federal expenditures would be to subsidize the purchase of private insurance through the new Maryland Insurance Exchange. See the discussion of the fiscal impact of the PPACA in Congressional Budget Office and Joint Committee on Taxation, “Fiscal Impact of Reconciliation Act of 2010”. Also see the summary of the act’s implications for states in: Center for Healthcare Research and Transformation, The Patient Protection and Affordable Care Act at the State and Local Level.