

How We Can Pay for Health Care Reform

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July 2009


Robert Wood Johnson Foundation

 **Urban Institute**

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Introduction

Paying for health reform will be one of the most challenging tasks facing the Congress. Providing universal coverage through a combination of Medicaid expansions and income-related subsidies could cost over \$1.5 trillion dollars over 10 years, depending on how the plan is structured. Several ideas for financing health reform have been proposed, but all seem to generate opposition from some quarter. Similarly, proposals to reduce or contain costs impact provider revenues and are generally opposed by those who are affected. Other proposals such as greater use of health information technology, the use of medical homes and chronic care management programs suffer from limited evidence on their effectiveness at restraining spending.

In this paper, we argue that there are many realistic sources of savings and many sources of revenue that could be used to support health reform. In some cases, policy initiatives plausibly would improve quality and patient experience with care while reducing spending. However, all of the measures could negatively affect some stakeholders financially and will likely be opposed by them because of that. Nevertheless, health reform will only happen if we are willing to take advantage of a variety of savings opportunities and revenue sources, thus spreading the costs broadly and minimizing burden on any single group. In this paper we show that it is possible to obtain more than enough savings or revenue to fully finance comprehensive health care reform.

In delineating an array of savings and financing strategies, we assume a health reform approach consistent with the broad outlines being actively considered by Congress and the Obama administration. The plan would have a Medicaid expansion for all those with incomes less than 100 percent of the federal poverty level; those

currently on Medicaid and CHIP with higher incomes would obtain coverage in the new health insurance exchange (described below). There would be an individual mandate for all individuals to obtain health insurance coverage. The plan would have an insurance exchange offering private health insurance plans to individual and small employer purchasers (fewer than 50 workers).¹

There would be income-related subsidies for families up to 400 percent of the federal poverty level obtaining coverage through exchanges plans.² For those with incomes below 400 percent of the poverty level, the government pays the difference between the premium and a specified percent of income. Consequently, strategies that would lower the premiums will reduce the cost of government subsidies.³

We assume that the net costs of the Medicaid expansion are fully borne by the federal government⁴ and would increase net federal Medicaid spending by \$42.7 billion in 2010. Over 10 years net federal Medicaid spending would increase by an estimated \$550 billion.⁵ We estimate the cost of subsidies to be \$1.26 trillion over 10 years if no public plan option is included in the exchange, only private plans being offered. The costs shown in table 1 reflect these government obligations. As a whole, we estimate that this hypothetical plan would cost \$1.81 trillion. This would extend coverage to all except undocumented immigrants and assumes instantaneous implementation in 2010; in other words, we do not have low early-year costs because of a phase-in process. Costs would be lower if the mandate is not fully effective, or if subsidies or benefits are less generous.

In this paper, we describe a range of policies that could reduce health care spending, both overall and for government. We examine a number of options that would generate savings to

Table 1
Health Care Reform Budget
(billions of dollars)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Medicaid Expansion (Net)	42.7	44.8	47.0	49.4	52.2	55.4	58.9	62.6	66.6	70.8	550.4
Baseline Subsidies (No savings from Public Plan)	97.6	102.2	107.2	112.8	119.3	126.5	134.5	143.0	152.0	161.6	1,256.6
Total Reform Spending	140.3	147.0	154.2	162.3	171.5	182.0	193.4	205.6	218.6	232.3	1,807.1

the government by reducing provider payments within the Medicare program.

We first examine the cost savings from reducing payments to Medicare and Medicaid. These include

- reducing the pricing advantage of Medicare Advantage plans,
- reducing prices of selected physician services,
- reducing payment rates to hospitals and post-acute care providers, and
- reducing funds that currently go to safety net providers (most of which would not be needed if we had universal coverage),

We then examine a set of delivery system reforms. The cost estimates for these are more questionable but we make the argument that the research evidence supports assumptions of some savings for several of these measures and that, taken together, they can make an important contribution. We recognize that significant commitment is required on the part of the federal government to make these initiatives successful. These are

- investing in chronic care management and coordination programs,
- reducing hospital payments for readmissions within 15 days,
- addressing health spending at the end of life,
- introducing a prevention program targeted at preventing diabetes and hypertension,

- adoption of health information technology,
- malpractice reform,
- increased health system reliance on primary care/medical homes,
- comparative effectiveness/public- and private-payer coverage of new technologies.

Next we estimate the savings that could result from providing a public insurance plan option in the health insurance exchange. We estimate significant savings from introducing such an option, which would provide the advantage of somewhat lower administrative costs and provider payment rates between current Medicare and private insurance levels.

Finally, we examine a number of options for raising revenues:

- revenues that would come from an assessment on employers with 10 or more workers who do not provide health insurance coverage to their workers,
- a revenue increase from capping the current income and payroll tax exclusions of employer contributions to health insurance, and finally
- the revenue possibilities from sin taxes and selective increases in federal income taxes.

Estimates for the health system options are provided in table 2.

Table 2
Health Reform Savings

(billions of dollars)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Reductions in Payments to Medicare and Medicaid											
Establish Competitive Bidding for Medicare Advantage Program ^a	4.4	8.9	11.3	12.1	13.0	14.1	15.2	16.6	18.0	19.4	133.0
Savings from Reduction in Payments for Overpriced Services	4.3	6.5	6.9	7.4	7.8	8.3	8.8	9.4	10.0	10.6	80.0
Reductions in Other Medicare Payments											
Reduce Update Factor for Hospitals' Inpatient Operating Payments ^b	0.0	1.5	3.1	5.0	7.0	9.2	11.7	14.7	18.2	22.4	92.9
Reduce Update Factor for Payments to Post-Acute Care Providers ^b	0.0	0.7	1.6	2.7	3.9	5.3	6.8	8.7	10.9	13.6	54.2
Reallocation of Safety Net Funds ^c	21.0	22.1	23.2	24.3	25.5	26.8	28.1	29.5	31.0	32.6	264.1
Government Savings	29.8	39.6	46.1	51.5	57.3	63.7	70.8	78.9	88.1	98.6	624.2
Total Savings	29.8	39.6	46.1	51.5	57.3	63.7	70.8	78.9	88.1	98.6	624.2
Delivery System Reforms^c											
Savings from Chronic Disease Management for Dual Eligibles	14.2	15.1	16.1	17.3	18.6	20.1	21.8	23.7	25.7	27.8	200.5
Savings from Reducing Hospital Readmissions in Medicare and Medicaid	0.0	0.0	1.4	1.5	1.6	1.7	1.9	2.1	2.2	2.4	14.8
Savings from Improvements to End of Life Care for Medicare Beneficiaries	6.4	6.8	7.3	7.8	8.4	9.1	9.9	10.7	11.6	12.6	90.8
Savings from Prevention to Medicare and Medicaid, or Subsidy Cost	0.0	1.0	2.7	4.6	6.5	8.9	17.2	25.2	34.0	44.2	142.9
<i>Additional Savings to Health System</i>	0.0	0.3	0.9	1.5	2.2	3.0	5.7	8.4	11.3	14.7	48.1
Savings from Increased Use of HIT to Medicare and Medicaid, or Subsidy Cost	0.0	0.0	0.0	0.0	6.8	7.2	7.7	8.3	8.9	9.6	48.5
<i>Additional Savings to Health System</i>	0.0	0.0	0.0	0.0	6.8	7.2	7.7	8.3	8.9	9.6	48.5
Savings from Malpractice Reform to Medicare and Medicaid, or Subsidy Cost	9.6	10.1	10.7	11.4	12.2	13.0	13.9	15.0	16.0	17.2	129.2
<i>Additional Savings to Health System</i>	9.6	10.1	10.7	11.4	12.2	13.0	13.9	15.0	16.0	17.2	129.2
Increased Health System Reliance on Primary Care/Medical Homes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Comparative Effectiveness/Public and Private Payer Coverage of New Technology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government Savings	30.3	33.1	38.3	42.7	54.1	60.1	72.4	84.9	98.5	113.7	626.8
Total Savings	39.9	43.6	49.9	55.6	75.1	83.3	99.8	116.5	134.8	155.3	852.6

^aTen year estimate from Congressional Budget Office. Information on the Options for the Medicare Advantage Program's Benchmarks for Federal Payments. Letter to the Honorable Mike Crapo. 2009 May 18. Individual year estimates were derived using the predicted growth rate of Medicare, assuming a three year phase-in period.

^bThe Congressional Budget Office, "Budget Options Volume 1: Health Care," December 2008, Chapter 7, p. 108-109.

^cResearch evidence and assumptions for these estimates are described in the text.

Reducing Medicare and Medicaid Payments to Providers

Payment Reductions for Medicare Advantage Plans

Payments for Medicare Advantage (MA) plans are linked to benchmarks established by Medicare in each geographic area. The benchmark is the maximum amount set by law that Medicare can pay a MA Plan for Part A and Part B benefits. Plans bid to provide services to Medicare beneficiaries. If their bid is above the benchmark then Medicare will pay the plan a rate equal to the benchmark and the plan must collect the difference from enrollees. If the bid is below the benchmark the plan is paid its bid and 75 percent of the difference between the bid and the benchmark. The 75 percent must be returned to beneficiaries through lower premiums or greater benefits. The problem is that benchmarks are set well above traditional Medicare program's

average cost per beneficiary. As a result, MA payments are well in excess of both plan bids to provide the statutory Part A and Part B services and of traditional Medicare spending. Plans use the overpayments to provide additional benefits beyond statutorily mandated ones and for additional profits.

MedPAC has estimated that payments to MA plans in 2009 are 114 percent of average fee for service program spending.⁶ MedPAC has argued that the Medicare program should pay the same amount for the same set of benefits across all options. Paying MA plans in the current system means higher cost to government and greater benefits to those who are in many of these plans than are available to other Medicare beneficiaries. MedPAC recommends payment neutrality between traditional Medicare and private plans, with the benchmarks for MA plans set at the level of spending in the traditional Medicare program.

Recently, the CBO scored a specific option from MedPAC to set benchmarks equal to a blend of local average per capita spending (75 percent) and national average per capita spending in the fee-for-service program (25 percent). The CBO estimate would reduce federal spending by \$133 billion over the 2010-2019 period.⁷

The Obama administration has proposed that there be a more market-oriented competitive bidding approach for Medicare Advantage plans, in which the benchmarks that determine the federal contribution are set as a function of the actual MA plan bids, rather than spending in the traditional Medicare program, as is true currently and as is the case in the MedPAC proposal. The CBO scored savings for this approach at \$177 billion over the same 10 year period. We question whether a national regime of competitive bidding only among MA plans, without reference to spending in traditional Medicare, is administratively feasible in the short term or politically likely. Accordingly, we assume the lower figure of \$133 billion in our savings projections by adopting the administered pricing approach recommended by MedPAC (see table 2).

Reducing Prices of Overpriced Physician Services

Recent growth in Medicare expenditures on physician services is attributable to increasing utilization rather than rising physician fees. Spending on physician services per beneficiary grew by 45 percent between 2000 and 2006 while fees grew only 4.5 percent.⁸ In recent years, studies have documented that physician payment rates for many services under Medicare and commercial payer fee schedules are distorted in relation to the underlying costs of production. Distorted fees in turn may distort physician behavior, sometimes facilitated by the ability that many physicians have to self-refer. If fees were closer to underlying resource costs, there would be less financial incentive for self-referrals.⁹

In recent years, growth in the number and intensity of services has been modest for major procedures and evaluation and management (E&M) services, higher for minor procedures and imaging, and highest for non-imaging tests.¹⁰ Evidence suggests that the profitability of the

fastest growing services tended to be relatively high, creating incentives for providers to develop clinical service lines in these areas and to promote the services to patients and referring physicians.¹¹ More beneficiaries are receiving care, more services are being provided per beneficiary, and the intensity of the services is increasing.

Greater attention to setting fees to avoid distortions would reduce spending directly by reducing the payments for overpriced procedures and sometimes indirectly by reducing the incentives for physicians to self-refer for services of dubious appropriateness. There has been a long debate among health services researchers about whether physicians respond to fee cuts by increasing volume – the so-called “behavioral offset.” In fact, the evidence suggests that there is no simple physician behavioral response to fee cuts – it varies by procedure, specialty, baseline payment, and other factors. Volume may increase, stay the same, or decrease in response to payment changes.¹²

In fact, one of the more successful cost-containing initiatives Medicare has used in recent years was the 2005 Deficit Reduction Act (DRA) limitation that office-based imaging services fees not exceed the prices used for reimbursement to outpatient hospitals. In the first year under the new pricing structure, overall costs of imaging in physicians’ offices were reduced by 13 percent.¹³ But, importantly, the decreased costs resulted not only from the price reductions themselves but from a lower volume of imaging services; per-beneficiary utilization of imaging services, which has been rising about 6 percent per year from 2000 to 2006 continued to rise in 2007 but at about half the prior rate.

Rather than rely on across-the-board fee cuts that would occur if the sustainable growth rate (SGR) imposed cuts were permitted to go into effect, the success of this DRA provision suggests that a more targeted approach to reducing payments for overvalued services could be successful. Medicare fee schedules could be modified to reduce payment distortions that result in overpayments. MedPAC has made a number of suggestions for reducing overreliance of CMS on the AMA’s Resource-Based Relative Value Scale

Update Committee (RUC), which has had trouble identifying and reducing overvalued “work” associated with services within the Medicare Fee Schedule.¹⁴ Similarly, there are opportunities for CMS to more actively correct the distortions in the “practice expense” component of relative value units.¹⁵ CMS has recently promulgated proposed regulations that would begin correcting flaws in the practice expense calculations.¹⁶

Increased administrative discretion and tools to identify and reduce (and selectively increase) service-specific valuations will allow CMS to make selective modifications of values rather than across-the-board reductions that treat all services the same. So, if there is evidence that a service is over-priced, its Medicare payment rate can be cut without necessarily increasing the rates for any other services.

Commercial plans are not able to simply adopt the same pricing changes that Medicare adopts, even though most non-Medicare payers now use the Medicare Fee Schedule as the basis for their own fee schedules. On average, commercial plans pay physicians about 20 percent more than Medicare. Nevertheless, many commercial health plan executives agree that changes in the Medicare Fee Schedule to reduce payments for overpriced imaging, tests, and minor procedures would make it easier for them to reduce their own fees for these services. However, given uncertainty about whether commercial insurers and self-funded employers would be able to pass through reductions in overpriced services that Medicare can accomplish by changing its fee schedule, we do not assume additional savings on top of Medicare savings.

The Obama administration has assumed that the sustainable growth rate (SGR) formula would be eliminated and replaced with an assumption of modest growth in physician payments over the next ten years. The cost of this increase is included in the administration’s budget. Last December, the CBO scored significant savings from an approach that would establish service-specific updates for Medicare’s physician payment rates—essentially substituting multiple expenditure targets for the single one represented by the SGR mechanism.¹⁷ The approach we

recommend would rely more on targeting reductions to specific services than relying on target-generated across-the-board reductions for large numbers of services. We consider our approach less arbitrary and sounder than across-the-board cuts but also more difficult to implement. One could combine the two approaches by first reducing overpriced services and then relying on expenditure targets if there is any residual overspending compared to targets. Nevertheless, this targeting approach is likely to generate fewer savings than under an aggressive—and actually implemented—expenditure target approach. Accordingly, we assume about half the savings—\$80.0 billion over 10 years—than CBO assumed in their analysis of a new service-specific expenditure target policy to replace the SGR.

Reducing Medicare Payment Rates to Hospitals and Post-Acute Care Providers

The Obama administration has made proposals for reducing Medicare provider payments to help finance health reform. One proposal is to reduce the update factor for hospitals and patient payments under Medicare by 1.0 percentage point. Medicare adjusts its rates under its prospective payment systems to acute care hospitals each year. Payments are made on a per case basis using Medicare’s diagnostic-related group system. The update factor is based on the projected increase in the costs of labor and equipment hospitals purchases. It is essentially an adjustment for inflation. MedPAC argues that the annual update factor overcompensates hospitals because it ignores productivity gains that occur in part because of the Medicare payment system.¹⁸ CBO estimates this would save \$92.9 billion between 2010 and 2019.¹⁹

A second option is reducing the update factor for payments to providers for post-acute care under Medicare by 1.0 percentage point. CBO also estimated the impact of reducing the update factor by 1.0 percentage points for payments to nursing facilities, home health agencies, long-term care hospitals, and rehabilitation facilities. All of these are paid through prospective payment systems with rates adjusted each year to adjust for increases in input costs. An analysis done by the

MedPAC concluded that Medicare payments for post-acute care services were too high relative to provider costs. MedPAC recommended that payment rates for all types of post-acute care providers be reduced and that this would improve provider efficiency without harm to Medicare beneficiaries.²⁰ CBO estimated that reducing the update factor would save \$54.2 billion between 2010 and 2019.²¹

Reducing the Amount of Safety Net Funds

Hadley et al. estimated that the uninsured received approximately \$56 billion in uncompensated care while uninsured in 2008.²² Further, government programs financed about 75 percent of uncompensated care or \$42.0 billion. Some of these funds could be reallocated to help finance coverage. If the primary purpose of these funds is to support uncompensated care to the uninsured, and there are fewer uninsured remaining it is hard to justify the use of these funds for the same purposes; thus these dollars could be reallocated. Hadley and colleagues estimated that, through Medicaid disproportionate share hospital (DSH) payments, the federal government contributed \$8.6 billion to hospitals and contributed another \$12.2 billion through supplemental provider payments. These payments exclude the DSH expenditures and supplemental payments that go to mental hospitals, nursing homes, and other nonhospital providers. The supplemental payment expenditures were largely offset by Medicaid underpayments. Net of these underpayments, the amount spent on the uninsured from Medicaid DSH, and supplemental payment programs was \$9.6 billion in 2008.

The Medicare program also subsidizes uncompensated care through its own DSH program and indirect medical education hospital payments. Medicare's DSH payments are added to the payment rate for hospitals that treat a large number of poor patients. MedPAC has shown that these payments are only loosely tied to hospital costs.²³ While they are intended to help hospitals with low income patients, they are distributed much more broadly across hospitals than is hospital uncompensated care. We estimated that half of Medicare DSH payments, \$5.1 billion in 2008, actually supported uncompensated care.

Similarly, Medicare's indirect medical education (IME) adjustment provides some indirect support to uncompensated care because teaching hospitals provide a large amount of care to the poor. But MedPAC has also shown that much of this spending does not support care to the uninsured. Based on MedPAC estimates, we assumed that one-third of IME payments, \$2.1 billion in 2008, could be attributed to the uninsured.²⁴

Thus, there was a total of \$16.8 billion, between Medicare and Medicaid, in federal payments that supported care for the uninsured in 2008. There is an additional amount of state payments (\$1.3 billion in 2008) in Medicaid. There is also \$10.6 billion in state and local tax appropriations and public assistance that serve the uninsured.

Finally, there are other federal programs such as the Veterans Health Administration (VHA), the Indian Health Service, and community health centers that provide care to the uninsured. We estimated the share of these programs' spending that provides acute care to the uninsured as opposed to being directed to other purposes. We estimated that \$8.8 billion was used to provide care to the uninsured in 2008. If we assume 25 percent of this amount could be redirected, that would add another \$2.2 billion.

Thus, we estimate that \$19.0 billion in federal dollars could be reallocated to support income-related subsidies to lower income people. When we adjust the \$19.0 billion to 2010 dollars, we derive a one-year estimate of \$21.0 billion. Over the 10 year period we estimate that \$264.1 billion could be reallocated. This would leave states with \$17.2 billion they now devote to uncompensated care²⁵ (\$230 billion over 10 years) which could be used to support any remaining uncompensated care left in the system because of failure to reach certain individuals and to care for undocumented immigrants. This is in addition to remaining federal funds supporting community-based care. States would also receive considerable financial relief to their safety net systems through the federal income-related subsidies provided through health reform.

Delivery System Reforms

Chronic Care Management and Coordination

It has been well documented that individuals with multiple chronic conditions generate a highly disproportionate amount of health spending. This is true not only in Medicare but for Medicaid and for commercial health plans as well. Further, the share of health care spending associated with those with chronic diseases is increasing over time. In 1987, 31 percent of Medicare beneficiaries received treatment for five or more conditions, accounting for about half of total spending. Fifteen years later, more than half of Medicare beneficiaries were treated for five or more conditions, accounting for 75 percent of total spending. Virtually all of Medicare's spending growth in that period could be traced to spending for this subpopulation of Medicare beneficiaries.²⁶

Medicaid also bears enormous costs attributable to its chronically ill enrollee population. Most of these individuals are eligible for both Medicare and Medicaid, the dual eligibles. There were 7 million Medicaid enrollees in 2005 that received full Medicare benefits, accounting for about one-seventh of the Medicaid population. This group accounted for \$131.9 billion in 2005 or 46 percent of Medicaid spending.²⁷ Elderly dual eligibles were more likely than non-dual eligibles to have a diagnosis of diabetes, heart disease, lung disease, mental illness and Alzheimer's disease. Nonelderly duals were more likely to have diagnoses of mental illness and mental retardation.

Unfortunately a range of interventions using various approaches to chronic care coordination and care management tested in Medicare demonstrations have not been successful in producing sustained spending reductions, although many did improve quality and patient experience with care.²⁸ However, recently, Randall Brown, using evidence from Medicare demonstrations, suggests particular approaches that if seriously pursued offer real cost savings potential.²⁹

Brown suggests that there are three effective cost reducing care coordination models. The first is short term transition interventions designed to

reduce hospital readmissions. It is also possible that similar approaches might reduce initial hospitalizations, particularly if focused on ambulatory sensitive conditions. The current evidence is that 20 percent of Medicare patients are readmitted within 30 days and 50 percent of the patients discharged to their homes have no physician care between discharge and readmission.³⁰ A developing literature shows that particular interventions, including enhanced discharge planning, heart failure education, and coordination of after care services reduces the rate of readmissions. Naylor and colleagues using advanced practice nurses and Coleman and colleagues using a Care Transitions Intervention have demonstrated the effectiveness of this kind of intervention using randomized controlled trials at a number of different hospitals.³¹ Various combinations of interventions have shown decreases in avoidable re-hospitalizations of about 25 to 40 percent.

The second model is short term interventions providing patient "activation" and self care management. These interventions engage patients for four to seven weeks in community-based programs designed to acclimate them in the management of their chronic conditions. Randomized controlled trials by Lorig and colleagues and by Wheeler have demonstrated that such interventions significantly reduce hospitalizations and costs over a period of 6 to 21 months. Lorig's study showed that treatment subjects had one-third fewer hospital stays and 50 percent fewer hospital days than controls over six months.³² Wheeler showed that over a 21 month period following the intervention's completion, the treatment group experienced 39 percent fewer inpatient days and 43 percent lower inpatient costs than controls.³³ The interventions enabled patients to self manage symptoms/problems, engage in activities that maintain function and reduce health decline, participate in diagnostic and treatment choices and collaborate with their providers.

The third approach is a subset of models from the Medicare Coordinated Care Demonstration which showed significant cost reductions. Brown argues that there are certain common characteristics to the successful demonstrations: targeting in-person contact, access to timely

information of hospital admissions and emergency room visits, close interaction between care coordinators and primary care physicians, and emphasis on teaching self management skills. In three successful programs hospitalizations were reduced 17 to 24 percent and total Medicare costs by 10 to 20 percent.

Providing some corroborating findings, initial pilots of Guided Care, an approach that provides specially trained registered nurses to primary care practices to help with management of patients whose chronic care diagnoses suggest that they will be high users of care in the upcoming year, seem successful.³⁴ This approach combines care management with support for patient self-management and caregiver support. The preliminary findings found double digit reductions in hospital days, skilled nursing facility days, emergency room visits, and home health episodes.³⁵ In summary, the accumulated findings from more careful targeting of chronic care management interventions provides evidence that improved management of chronic illness can yield substantial savings.

We assume that if these interventions were adopted on a broad scale, initially for dual eligibles in Medicare and Medicaid, substantial savings could be achieved. We acknowledge that this will require greater commitment and coordination between Medicare and state Medicaid programs than we have seen historically. In 2009 dollars, we estimate that Medicaid and Medicare costs for dual eligibles will be \$271 billion.³⁶ If we assume 5 percent savings on the cost of dual eligibles from these interventions, excluding the reduction in readmissions discussed below, this would yield \$14.2 billion in 2010; over the 10-year 2010–2019 period, savings would be about \$200.5 billion (see table 2). We believe that there would be additional savings from adoption of these techniques for other populations, but we have not assumed additional savings for purposes of this analysis. For example, there are over 4 million disabled individuals in Medicaid that are not dual eligibles; there are large numbers of Medicare beneficiaries with multiple chronic conditions that are not dual eligibles. Thus, these estimates seem conservative.

Reducing Payments to Hospitals for Readmissions within 15 Days

As discussed in the previous section on chronic care management, strategies such as “transition care” have proved effective at reliably reducing hospital readmissions. The impact is perhaps greatest for those with multiple chronic conditions but is also likely to affect readmission rates for patients with many conditions because of the common breakdown in communication involved with the transfers of care between hospital staff and staff at skilled nursing facilities, home care workers, community physicians, family members, etc. Researchers have developed the concept of “potentially preventable readmissions” – those that in many cases may be prevented with proven standards of care; not all potentially preventable readmissions can be avoided even if hospitals and other providers follow best practices, but hospitals that adhere to best practices will have lower rates of potentially preventable readmissions.³⁷ Rates of Medicare readmissions vary significantly across hospitals -- hospitals at the 90th percentile have twice as high a 15 day readmission rate as those at the 10th percentile,³⁸ -- suggesting that greater attention to the quality of discharge instructions, improved communication with patients’ usual source of care, and direct follow-up by transition nurses can reliably reduce readmission rates and their associated high expenses.

Currently, with some exceptions, Medicare pays hospitals an entirely new, full payment for a readmission, treating them as new hospital admissions, regardless of how soon after the prior discharge the admission occurs. Using 2005 Medicare data, MedPAC estimated that Medicare spent \$5 billion for cases readmitted within 7 days, \$8 billion for cases readmitted within 15 days, and \$12 billion for cases readmitted within 30 days.³⁹

MedPAC and the CBO have estimated cost savings from reducing payments to hospitals with high 30-day readmission rates. Indeed, the CBO has scored potential Medicare savings of nearly \$10 billion over ten years by reducing payments by 20 percent to hospitals with readmission rates above the median for a targeted condition or procedure.⁴⁰

The problem with this approach is that incentives to reduce readmissions would apply only to hospitals near or above the threshold for financial penalties, which among other things might cause some gaming behavior for hospitals near the cut-off threshold. Alternatively, routinely reducing payment for readmissions for potentially preventable readmissions within 15 days of discharge to 60 percent of the usual payment for a hospital stay would provide all hospitals an incentive to reduce preventable readmissions. Payments would be pegged near the variable cost of a hospital stay, that is, the share of expenses that change in proportion to the direct activity of caring for individual patients, rather than the average costs, which also cover fixed overhead. Fifteen days rather than a longer post-hospital period is selected to target the policy to activities the hospitals have more control over.

For two years, hospitals in aggregate would be “made whole.” That is, the anticipated savings from the reduced payment for readmissions within 15 days would be put into the base rates for the conditions selected as potentially preventable readmission conditions. After that, we would impose a shared savings formula in which hospitals in aggregate would keep 40 percent of the savings from reduced readmissions and the government would keep 60 percent. To calculate potential savings, we use the MedPAC estimate of \$8 billion in 2005 dollars trended forward. Government savings would not be captured in the first two years. We assume a 25 percent reduction in 15 day readmissions from years 3-10, with the government retaining 60 percent of the savings. This would provide \$14.8 billion in savings over the 2010-2019 period.

Health Spending at the End of Life

Health care at the end of life is very expensive. There is an opportunity to reduce spending without having to deny care, even that which provides small benefit relative to costs. Between 27.2 and 30.6 percent of Medicare expenditures in a given year were for the 5 percent of beneficiaries who died during that year,⁴¹ and this share of Medicare spending has been quite constant over a couple of decades.⁴² One study found that spending for the last 60 days of life

accounted for 52 percent and that spending for the last 30 days accounted for 40 percent of total spending for the patient’s last year of life.⁴³ About half of spending in the last month was for hospital care, and one in five patients die in an intensive care unit (ICU). Of those who die in an ICU, their average stay was about 13 days.⁴⁴

Clearly, most of the spending for patients in their last months is inevitable and, in some ways, desirable. Spending is appropriately directed to patients who are seriously ill, only some of whom die. Indeed, studies that focus only on those dying often ignore the reality that other patients who might have been comparably sick but received high intensity, “rescue” care did not die. Further, much of the end-of-life spending is not designed for rescue, but rather attempts to treat progressive, disabling symptoms that require some amount of active medical intervention, including hospitalization and even intensive care in some situations.

Nevertheless, there is substantial and growing evidence that much end of life spending is not sought by patients and is counter to patients’ and their families’ expressed preferences.⁴⁵ End of life care is also often associated with *worse* outcomes in terms of quality of remaining life.⁴⁶ A recent Institute of Medicine (IOM) conference was devoted to the topic of the futility of very expensive, end-stage cancer chemotherapy and the various reasons for its proliferation, including reluctance of health professionals to undertake difficult discussions about terminating aggressive treatment and the profitability of chemotherapy administration to oncologists.⁴⁷ The IOM conference emphasized approaches that would result in improved information to patients about prognosis and treatment options. Overall, there is evidence that patients with various terminal conditions may not be well informed about the costs and benefits of treatment, and that physicians may prescribe treatments known to be ineffective.⁴⁸

There are several potential options to reduce the excess costs of medical care at the end of life, while improving the quality of that care. Clearly, a move away from a health system dominated by single specialty practices and toward one centered

on integrated delivery systems could provide the mix of professional skill sets and perspectives that would facilitate a more patient-centered approach to end-of-life care options.

But progress can be made even in the absence of a major reorganization of health care delivery. Currently, hospital palliative care teams and units have been shown to improve pain management and physical symptoms as well as family satisfaction with the care their loved one is receiving.⁴⁹ Although access to palliative care has increased substantially over recent years, its availability can be further encouraged through broader deployment, which can be promoted through basic reimbursement for palliative care activities. Additionally, while hospice is covered by Medicare, there is evidence that it is more accessible in some geographic regions than others. In addition, there is significant evidence that hospice is brought into care too late to have its maximal benefit—with services often being initiated within the last few days of life.⁵⁰ Encouraging providers to discuss hospice earlier and working to standardize access geographically could increase use.

Several studies have examined the cost savings associated with palliative care use, earlier and improved end-of-life discussions with patients and their families, greater use of “ethics” consultations, and earlier referral for hospice use.⁵¹ Studies have also found that the use of hospice and other palliative care is not associated with shorter life expectancy, and is in some cases associated with longer survival times, suggesting that savings are not due to rationing of care.⁵² Finally, reimbursement and aspects of practice, such as consent forms, should be altered to encourage physicians to discuss end of life care with patients earlier in the treatment process and to provide more forthcoming assessments of risks and benefits of continued treatment.

The last year of life costs represents more than 25 percent of Medicare spending. We estimate significant savings from modest approaches to alter clinical decisions for patients at the end of life. A 5 percent reduction in end of life costs would save Medicare 1.25 percent. This would amount to \$6.4 billion in 2010 and \$90.8 billion

over 10 years. There would likely be savings to Medicaid as well which we do not include here. There are also potential savings for younger patients as well, but these are probably much smaller – there are relatively fewer affected patients and an understandably greater willingness to spend aggressively on younger patients compared to what informed, aged Medicare patients want for themselves.

Prevention of Diabetes and Hypertension

The burden of preventable chronic diseases—for example, type 2 diabetes, hypertension, coronary artery disease, kidney disease, and stroke—on the health care system is well known.⁵³ Since diabetes and hypertension are clinical precursors of more serious and more costly conditions, primary prevention activities targeted at these “entry-level” diseases are the most likely to have long-lasting positive effects on health and reduce health care spending. We estimate that uncomplicated cases of diabetes and hypertension will account for \$129 billion in medical expenditures in 2009. When the costs of stroke, heart and renal disease are added, these expenditures will likely be more than \$430 billion.⁵⁴ Analyses of the effect of disease reduction on medical costs suggest that, on average, a prevented case of diabetes or hypertension without heart/stroke/kidney complications would reduce average annual spending on that adult by 11 percent and reduced complications that would otherwise result from these diseases would reduce spending by another 25.6 percent.⁵⁵

It has also been demonstrated that, if addressed early enough, prevention of these first stage diseases can be relatively straightforward and does not need to involve expensive clinical intervention. Increased physical activity, improved nutrition, and smoking cessation have been shown to greatly reduce both diabetes and hypertension disease risks.

Previous analyses have expressed skepticism about the cost-effectiveness of some disease prevention strategies.⁵⁶ While there are many examples of approaches that do not result in cost savings, these reviews identify several factors that are likely to lead to savings from prevention. As noted by the CBO, “Certain types of preventive

services have been found to yield substantial net savings, largely because the initial costs are low and the long-term benefits are large.”⁵⁷

In particular, prevention needs to be well targeted at a population at high risk of developing chronic disease. Second, interventions that require expensive clinical and pharmaceutical inputs (e.g., widespread use of cholesterol lowering drugs, and the use of routine colonoscopies to screen for cancer) are often very effective and have been shown to increase life expectancy, but the high cost of these approaches often means that they are more expensive than the costs of the diseases they avoid. For these types of interventions, it is appropriate to prioritize those that improve health and prolong life for the lowest net cost.

Because “disease prevention” includes both medical and lifestyle interventions, when taken together, the sum of all prevention activities may not be cost saving, but there are examples of less expensive and better targeted interventions with demonstrated effectiveness. Focusing on these types of interventions, one example of which we describe here, can produce net savings in medical spending. While we do not include them in our discussion, the effectiveness of lifestyle interventions is likely to be heightened by broader prevention efforts including social marketing and public education, food and restaurant labeling requirements, and school-based initiatives to promote more physical activity and improved nutrition among students. The hugely successful public health campaign to reduce smoking serves as an example of how coordinated education and smoking cessation efforts can change social norms and individual behavior.

Evidence from the Diabetes Prevention Program (DPP) has shown that structured lifestyle intervention programs targeted at those at highest risk of developing diabetes and identified by relatively simple diagnostic screening, can reduce the incidence rate of diabetes by more than half.⁵⁸ The approach, originally designed to be implemented in physicians’ offices by medical professionals, has been adapted to a community setting.⁵⁹ Trained nonclinicians can direct the intervention to groups of individuals in the community at a cost that is approximately 12

percent of the cost of the original DPP intervention. This approach is currently the subject of a randomized control trial. While long term results on disease onset are yet to be established, interim measures of behavior modification and weight loss are quantitatively similar to those achieved by the one-on-one DPP approach. Finally, while diabetes is the focus of these studies, the weight loss, increased physical activity, and improved diet that these interventions produce have also been shown to reduce blood pressure. Inclusion of sodium intake reduction in the diet modification would likely produce further reductions in hypertension.

A national program modeled on this approach could use regular contacts with health care providers (including, for example, the “Welcome to Medicare” visit) and providers’ existing patient base with already diagnosed risk factors to identify individuals to refer to a structured group exercise and nutrition program that would be located in existing public spaces (e.g., community centers, YMCAs, school gyms, churches). Health care providers would receive an incentive payment for each at risk individual who enrolls in a program, and programs would be reimbursed on a per-enrollee per-year basis, with a higher payment for first year enrollees when education and training require extra resources.

Based on first year referral and program costs of \$300 per enrollee and follow-up program costs of \$150 per enrollee per year, we estimate that the program will cost \$1.3 billion in the first year, and grow to \$3.3 and \$5.7 billion in years 5 and 10, respectively. Analyses of programs of this type estimate a 50 percent reduction in diabetes cases among participants.⁶⁰ Based on arguably conservative assumptions detailed in the appendix to this report (e.g., only 20 percent of those referred by a doctor enroll and 25 percent drop out each year), we estimate that the net savings of this program would be 0.6 percent of personal health care expenditures over 10 years. Total savings over 10 years would be \$191 billion. Based on previous estimates that a large portion of the burden for these diseases falls on the poor and elderly,⁶¹ we assume that 75 percent of this, or \$142.9 billion would be savings to Medicare or Medicaid.

Health Information Technology (HIT)

The amount of savings that are possible from the widespread adoption of health information technology has been broadly debated. The CBO in particular has suggested that HIT can potentially save money, but that many estimates most likely overstate the savings.⁶² A review of 42 articles by RAND researchers suggests significant potential savings from the specific elements of HIT. RAND estimated annual potential savings of \$80 billion at 80 percent implementation nationally, with the largest savings coming in the inpatient sector -- mostly from shorter lengths of stay and increased nurse productivity.⁶³ In 2009, \$80 billion would be approximately 4 percent of personal health spending. Another RAND study estimated \$77 billion per year savings attributable to information exchange across different providers, facilitated by improved ability of different information systems to readily communicate with each other, a feature known as interoperability.⁶⁴

The RAND analysis was criticized by the CBO and others because it looked only at studies that had positive effects. Further, the RAND analysis did not account for the fact that current payment incentives constrain the effective use of HIT even if the technology was widely adopted. Specifically, fee for service is pervasive throughout the nation's health care system. Thus, while physicians and hospitals would bear most of the cost of the adoption of HIT, they would lose revenues to the extent that HIT reduces redundancy in the number of unnecessary office visits, tests, imaging procedures, and admissions.

The Veterans Administration has demonstrated the potential benefits in both the quality of care provided and reduced health spending as a result of its more than ten year commitment to adoption of many elements of HIT strategies throughout the VA system. Electronic medical records are available immediately at all VA health centers and include all physician notes, test results, radiology images and other clinical findings. In addition, their HIT system includes monitoring of patient outcomes, adherence to best practice standards, clinical decision support, electronic ordering and drug dispensing facilitated with barcodes, and a range of in-home

technologies that permit electronic transmission of patient clinical status. Studies of the VA have shown cost reductions of as much as 25 percent per patient attributed to the adoption and implementation of robust HIT.⁶⁵

While we agree with the CBO that the RAND research has overestimated the cost savings from HIT and do not think one can easily extrapolate from savings in a closed system like the VA to the broader health care system, we do not believe that it is correct to assume that there are no savings. As part of health reform, various approaches to better aligning incentives between physicians and hospitals are likely to be adopted, including the use of bundled payments, which provide one reimbursement for an entire episode of care. The more efficiently the care is delivered, the more the providers benefit financially from the bundled payments. Hence, bundled payments would create stronger incentives for providers to institute HIT strategies. In addition, there is renewed interest in integrated delivery systems or accountable care organizations that would be paid based on a full or partial capitation. It is therefore reasonable to assume a gradual shift away from current fee for service payment models over the ten year budget window. Assuming these changes in incentives and the formation of larger organizations, the likelihood of achieving some savings from HIT would be increased. Even within fee for service, it is possible to use a combination of regulatory and payment incentive approaches to achieve some efficiencies from HIT adoption. In addition, the American Recovery and Reinvestment Act of 2009 (ARRA) has introduced new subsidies to spur the adoption of new HIT modalities.

We conclude that it is difficult to carefully estimate the impact on national health spending of more widespread adoption of HIT, but that to assume no effect is excessively cautious. We assume that HIT will bring about no net savings for the first four years of our ten year budget window because government and providers will bear the cost of adoption and implementation, which would offset any savings from increased efficiencies. But in the last six years of the budget period, we assume that there will be savings in national health expenditures, i.e., less duplication of services, fewer hospitalizations, of 0.5 percent

per year off the baseline. This results in estimated savings of \$97.0 billion. Because Medicare, Medicaid and subsidy costs will be about half of personal health spending (excluding long term care) after reform, we estimate that half or \$48.5 billion would be savings to Medicare and Medicaid.

Malpractice Reform and Health Care Cost Containment

Reforms of medical liability—"tort reform"—can be expected to save close to 1 percent of total health spending or health insurance premiums. As described below, savings might be achieved in three ways: (1) through lower liability premiums, (2) by reducing the excessive services of "defensive medicine," and (3) by helping make other reforms more effective. Finally, reforming liability as part of health reform also adds value for patients; successful health reform can offer better ways than do liability laws to promote patient safety and compensate people who are nonetheless injured.

First, tort reforms save providers money by lowering malpractice premiums, which in turn lowers the cost of health coverage. Some state tort reforms have reduced malpractice payouts⁶⁶ and hence also the associated liability premiums charged to medical care providers.⁶⁷ The biggest impact comes from a "cap" on total malpractice awards or on their nonmonetary component, that is, "pain and suffering."⁶⁸ The Congressional Budget Office has estimated that implementing California-style reforms nationally, most importantly a \$250,000 cap on non economic damage awards would reduce physician liability premiums by an average of 25 to 30 percent, more in states with weak tort reform than where reform is already strong.⁶⁹ These findings are consistent with providers' persistent lobbying for tort reforms.

Changes in provider costs for malpractice insurance should thereafter be reflected in lower patient charges and hence in health insurance premiums.⁷⁰ The CBO estimate implies a savings on malpractice premiums of \$7 to \$9 billion for 2007 (most recent data available)—or some 0.3 percent to 0.4 percent of national health spending in that year.⁷¹

Second, malpractice reforms reduce the amount of "defensive medicine," the extra tests and procedures that medical providers say that they add to reduce the risk of lawsuit or facilitate any needed legal defense. Practitioners have long reported such wastefulness, as early as the first Congressional hearing on malpractice, in 1969.⁷² How much have state tort reforms reduced defensiveness? The highest peer-reviewed estimate is that caps and similar reforms save about 4 percent, by cutting hospital spending;⁷³ a more recent study found a 3 to 4 percent cut in state health care expenditures.⁷⁴ Most studies, however, find savings in the range of 0 to 0.27 percent of health spending.⁷⁵ A recent review of medical liability pegged the costs of defensive medicine at 1 percent of health spending for purposes of estimating potential health system savings from altered tort reform.⁷⁶ We consider it plausible – and conservative -- that savings from a reduction in defensive medicine might equal or slightly exceed those on liability premiums, perhaps another 0.5 percent of total health spending.

Greater changes might be feasible if defensive services were simultaneously targeted by altered payment incentives, more effective utilization review or in other ways. President Barack Obama has suggested willingness to work with physicians to reduce defensive practices by creating some liability protection for defendants in compliance with authoritative guidelines.⁷⁷ There is logic to this position, along with some evidence that guidelines can protect against liability, but new approaches are needed to improve on unsuccessful prior state use of guidelines.⁷⁸

Malpractice reforms can interact with other measures in practical implementation. For example, as just noted, evidence-based medicine and other utilization initiatives may help promote the hoped-for reductions in defensive practices beyond what has previously been observed. Simultaneously, tort reform undercuts provider resistance to utilization oversight based on allegations that any change in accustomed practice subjects them to unacceptable legal liability. Nevertheless, we assume conservatively savings only from a reduction in malpractice

premiums and defensive medicine—or 0.9 percent of health care spending.

A 0.9 percent reduction in all personal health spending would create some \$19.2 billion in public-sector savings in 2010 and about \$258.5 billion over the 2010–2019 period. Public-sector spending (Medicare, Medicaid, and subsidies) will represent about half of personal health spending. We therefore anticipate that the savings from malpractice reform would be split between the public and private sector; thus there would be \$129.2 billion in government savings.

Finally, apart from dollar savings, making tort reform part of larger health reform also makes changes in liability more positive for patients. It thus greatly alters the political-legal context from that of prior battles over tort reform. Stand-alone tort limits, in contrast, have had a very contentious history, starting with mid-1970s California reforms.⁷⁹ Caps and other limits have been resisted politically as a mere takeaway of patient rights that undercut patient compensation and incentives for safety—notably by President Obama and other Democrats. Some courts have similarly found state caps unconstitutional, holding for example that a short-term insurance crisis does not justify legislative changes to court-made liability rules.⁸⁰

However, if tort changes help to build coalitions for comprehensive health reform, they will benefit all patients. People permanently injured during medical care would especially benefit, as otherwise their injuries might make them difficult or impossible to insure, and very few now receive liability awards. A system that provides nearly universal coverage will ensure that individuals do not have to rely upon tort awards to finance their medical care. Legislators and judges should appreciate these broader public benefits.⁸¹ Health reform also provides a platform for redoubling federal efforts to prevent medical injury, which should form part of health reform’s promotion of better medical care. The incidence of avoidable injury remains unacceptably high, despite generations of increasing liability pressure. Patient-safety efforts have the potential to reduce health spending but, regardless of their

impact on spending, are important in their own right.⁸²

Increased Health System Reliance on Primary Care/Medical Homes

There is increasing evidence to suggest that health systems with relatively high primary care physician to specialty ratios and organized around primary care as the first point of entry into the health care system are associated with higher quality and lower costs.⁸³ A major basis for cost savings presumably is greater alignment of patients with primary care practices as the usual sources of care.

Supported by enhanced financial support for after hours care, availability of urgent care appointments within hours, active participation of the physician with ER decisions, support for more real-time communication with patients, continuity with the same clinician over time, reliance on the medical home for referrals, all supported by a robust EMR, models of enhanced primary care practice capabilities – encapsulated into the concept of the “patient-centered medical home” offer promise that an expanded and reinvigorated primary care work force would be able to decrease reliance on avoidable cost drivers, including unnecessary emergency room visits and hospitalizations, complications from use of multiple medications, and redundant or contradictory care recommendations from uncoordinated physician care. Advocates also emphasize the potential of enhanced primary care practices as instrumental in improving care for the growing number of patients, particularly in Medicare, with multiple chronic conditions and limitations of activities of daily living, as discussed earlier.⁸⁴

At this time we do not assume savings from a comprehensive strategy to enhance the primary care workforce and provide new organizational practice models. The desired commitment to expanding the size of the primary care workforce – especially physicians – would not necessarily pay off in the short term, because of the long pipe line needed to educate and train physicians. Further, the promise of approaches such as the patient-centered medical home need to be demonstrated and, if positive, then broadly scaled

to serve the country. We believe a commitment in this area would be a prudent investment for the long term but would not necessarily produce cost savings within the 10-year window for these estimates.

Comparative Effectiveness/ Public and Private Payer Coverage of New Technology

There is growing interest in developing a quasi-independent, possibly public-private partnership entity to perform comparative effectiveness analysis not only to better inform clinicians, patients, and payers but also to help produce the evidence needed for making evidence-based, rather than political, decisions. Potential savings from more consistent reliance on evidence of effectiveness and consideration of costs would apply not only to Medicare coverage of new technology but that of private payers as well. Indeed, it is hard for commercial insurers to not cover services for payment unless Medicare has come to the same decision. Commercial insurers and large self-funded companies have joined in calling for a focus on comparative effectiveness.

The need is evident from Medicare's experience in making coverage decisions. There are numerous examples of Medicare's attempt to limit coverage of new technologies that are overturned because of political pressure applied by Congress.^{85, 86} Thus, there are many approvals when the evidence on effectiveness is relatively weak.⁸⁷ Many of these coverage decisions have had major cost implications and it is questionable that the higher expenditures represent good value for the program.⁸⁸

However, for the purpose of projecting savings, we think the uncertainty about the role of comparative effectiveness in general and the ability of payers to resist covering technology lacking evidence of comparatively greater effectiveness prevents us from assuming savings. Further, although there are examples of costly new services that might not be justified, no one has systematically looked at the potential for system wide cost savings from adopting a disciplined, evidence-based approach to covering new technology.

Summary

Taken together, we estimate that all of the savings initiatives described would result in savings over a 10 year period of about \$1.3 trillion. Adding the additional private-sector savings leads to system-wide savings of \$1.5 trillion. The largest overall savings come from malpractice reform (\$258.5 billion) and from the reallocation of current payments to safety net providers (\$264.1 billion). Reductions in payments to Medicare Advantage plans (\$133.0 billion) and other Medicare providers (reductions in update factors and payments for overpriced services) also provide substantial savings (\$227.1 billion). Finally, we estimate that there will be savings from chronic disease management for dual eligibles of \$200.5 billion, increased use of HIT of \$98.5 billion, savings from improving end of life care for Medicare beneficiaries of \$90.8 billion and savings from prevention programs targeted to diabetes and hypertension of \$192.9 billion. Some additional savings from several of these initiatives accrue to those with private coverage.

Savings from the Public Plan Option

We examine the possible savings from a public plan option which competes with private insurance plans within the health insurance exchange.⁸⁹ The public plan would be available across the nation through the new health insurance exchange and would pay providers based upon local prices, just as the traditional Medicare program does. The public program would abide by all insurance market reforms and offer a limited set of insurance packages consistent with new federal standard benefit guidelines, just as the private plans in the exchange would. These plans would likely look similar to typical employer-based insurance packages. The public plan would have the same type of administrative structure as the traditional Medicare program does today and would use the Medicare payment systems, although the rates would be set between Medicare and average private payment levels. The public plan would be financially self-sustaining using premium payments made by and on behalf of enrollees, just as is the case with private plans.⁹⁰

We estimate that considerable savings are possible by making a public plan option available

in the health insurance exchange due to somewhat lower administrative costs and lower provider payment rates that such a plan would use. Savings are possible even if the public plan sets rates between current Medicare and private plan rates. Currently, provider payment rates by commercial insurers are about 30 percent above Medicare rates on average. We estimate savings from the public plan option based upon the health reform plan we used to estimate the costs of reform, although there are still a large number of unknowns related to this approach. Savings will depend in large part on how many people enroll in a public plan and the level of premiums and subsidy structure. It would also depend on how attractive the public plan is relative to alternatives, that is, whether it is viewed as a plan for low income people or whether it will be more broadly attractive. These estimates are taken from the analysis laid out in Holahan and Blumberg.⁹¹

In order to determine the size of enrollment in the public plan and thus the potential savings, we first estimate the size of enrollment in the exchange, as the public plan would be offered exclusively through the exchange. All estimates provided here exclude the population below 100 percent of the FPL from the base, since that income group would be enrolled in Medicaid coverage. Given the design contours of the reform, almost all individuals and families who are self employed or working in small firms as well as those who have nongroup coverage pre-reform would enroll through the exchange. We assume that about a third of low income people who work in larger firms (50 or more workers) would enroll in the exchange as well, with the share enrolling in the exchange decreasing as incomes increase. This occurs because some low income workers in large firms could find that the subsidies available in the exchange are greater than the employer contribution to their coverage, but this becomes increasingly less true as incomes increase. For those above 400 percent of the FPL there is significantly less reason to join the exchange and we anticipate that less than 20 percent of higher income workers in larger firms would end up in the exchange. The vast majority (90 percent) of low-income previously uninsured families will likely obtain coverage through the

exchange. The share of previously uninsured enrolling through the exchange would fall as income increases since the exchange subsidies become less attractive relative to employer-based coverage as income rises. Based on these assumptions, we estimate that about 92 million Americans would purchase insurance through the exchange.

Of those enrolled in exchange-based coverage, the public plan will be most attractive to the lowest income enrollees. Because subsidies are tied to the premiums for the three lowest cost plans, and since the public plan is expected to be one of the lowest cost plans, we estimate that roughly 70 percent of the low income exchange enrollees (those under 200 percent of the federal poverty level) would choose the public plan. The likelihood of choosing the public plan would fall as income increases, down to about a third of those with incomes of 400 percent of the poverty level and above since higher income people are not as price sensitive as are the low-income. The result is that roughly half of the total exchange population would purchase private plans after weighing the somewhat higher premiums in most of the private plan offerings against other features, i.e. access and service, and about 47 million would enroll in coverage through the public plan. The public plan would enroll a high share of the previously uninsured, about 13 million by our estimates,⁹² and a disproportionate share of those who would receive income-related subsidies. About 161 million Americans would continue to have private coverage (including private administration of self funded plans for large employers), in contrast to 177 million without reform. This includes over 45 million who would purchase private coverage through the exchange.

We next estimated the savings to the federal government from providing a public plan option in the health insurance exchange, assuming the same structure outlined above. All savings estimates are presented relative to the government cost of the same reform with only private plans offered within the insurance exchange. We estimated the government savings under two sets of assumptions. First, we assumed that the public plan would be able to reduce costs by 15 percent relative to the base case (the rough equivalent of

Medicare rates plus 20 percent, plus modest administrative savings relative to private plans) and that the private plans operating within the exchange would respond to competition by the public plan by reducing their costs by 5 percent (through reductions in provider payment rates and stronger utilization management). These costs savings are then passed on as lower premiums. Second, we assumed greater savings potential (lower public plan payment rates), with the public plan costs 25 percent below the base case premium (the rough equivalent of Medicare rates plus 10 percent, and modest administrative savings relative to private plans) and the private exchange plans responding with 15 percent savings through rate reductions and stronger care management.

The savings from the public plan are shown in table 3. Under the first set of savings assumptions and assuming a fully phased-in reform in 2010, we estimate that the public plan would save the federal government \$17.4 billion in 2010 through reduced subsidy costs, and approximately \$224.1 billion over the first 10 years after reform. Under the more optimistic savings assumptions, we estimate that the presence of the public plan would save the federal government about \$31.0 billion in 2010, and about \$399.8 billion over the first 10 years after reform. Total savings shown in

table 3 include both private and government savings. These amount to \$412 billion in the first option and \$788 billion in the second over 10 years.

Savings from the public plan are surprisingly large because of the structure of low-income subsidies. Because individual premium contributions are capped at a percentage of family income, a change in premium does not translate into a change in individual payments for those eligible for subsidies—the individual/family continues to pay the appropriate fixed percentage of their income. Consequently, as the public plan lowers premiums for the population covered through the exchange, the resulting savings among the subsidized population accrue almost entirely to the government. The public plan also generates additional private savings to unsubsidized individuals and employers who purchase coverage through the exchange due to the availability of lower cost plans.

Revenue Options

In addition to or instead of funding health reform through cost savings, the United States could finance reform with increased revenues. We examined a variety of revenue raising options. These include the following:

Table 3
Savings from the Public Plan^a

(billions of dollars)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Subsidies, No Public Plan	97.6	102.2	107.2	112.8	119.3	126.5	134.5	143.0	152.0	161.6	1,256.6
Savings From Public Plan											
Medicare rates +20 percent ^b											
Government Savings	17.4	18.2	19.1	20.1	21.3	22.6	24.0	25.5	27.1	28.8	224.1
Total Savings	32.0	33.5	35.2	37.0	39.1	41.5	44.1	46.9	49.8	53.0	412.0
Medicare rates +10 percent ^c											
Government Savings	31.0	32.5	34.1	35.9	37.9	40.3	42.8	45.5	48.4	51.4	399.8
Total Savings	61.2	64.1	67.2	70.8	74.8	79.3	84.3	89.7	95.3	101.3	788.0

^aMethods for estimating savings are described in John Holahan and Linda Blumberg. 2009. "Is the Public Plan Option a Necessary Part of Health Reform?" Washington, DC: The Urban Institute.

^bResults in 15% savings on public plan, including administrative costs, as well as lower costs for private plans.

^cResults in 25% savings on public plan, including administrative costs, as well as lower costs for private plans.

- Caps on the exclusion of employer health insurance contributions from taxation:

We examine two types of limits on the employer-based insurance tax subsidy. Both would tax employer health insurance contributions that exceeded the 75th percentile of current premiums, but one would index the cap to increase with the consumer price index (CPI), while the other would use the increase in gross domestic product (GDP) as the index.

- A payroll assessment on employers that can be offset by contributions the employers make to their workers' health insurance:

We estimate revenue from two alternative assessments. One would assess employers 4 percent of total payroll, with a variant that would cap the assessment at the social security wage base (\$106,800 in 2009). The second alternative would vary the assessment with the level of workers wages.

- “Sin” taxes on sugar-sweetened beverages, cigarettes, and alcohol; and
- Income tax options:

One option would raise tax rates on ordinary income by 1 percentage point. The second option would limit the tax rate at which itemized deductions reduce taxable liability, as proposed by the Obama administration, but exempting charitable deductions from the limit. The third option would apply the Medicare tax to unearned income. A fourth option would create a new higher marginal tax bracket for those with the highest incomes.

Table 4 provides estimates from these revenue options for the 2010 to 2019 period.

Capping the Exclusion of Employer Contributions to Health Insurance from Taxation

Capping the current tax exclusion of employer contributions to employee health insurance has been suggested as a way to raise revenue to help finance health reform. The exclusion reduces

federal tax revenues by an estimated \$246 billion annually in 2007.⁹³ The current tax exclusion has several problems. It is highly regressive, it contributes to high and rising health care costs, and it costs the federal government a substantial amount of money. Burman has estimated that the reduction in federal tax revenues because of the exclusion between 2010 and 2019 is \$3.5 trillion.⁹⁴ Eliminating the exclusion entirely would generate a large amount of money but could significantly decrease the number of employers offering health insurance to their workers and could be highly disruptive to insurance markets. Placing a cap on the exclusion may be much more politically feasible than eliminating it, primarily because it would have less of an impact on the current employer-based insurance market.

Clemens, Zuckerman, and Williams used the Urban-Brookings Tax Policy Center Microsimulation Model to estimate the impact of capping the tax exclusion in several alternative ways.⁹⁵ They provide estimates of the revenues from capping the tax exclusion over the 10-year period 2010–2019—at the median and 75th percentile of premiums, with four alternative indexing options applied to each. These include no growth (unindexed), a cap based on the consumer price index (CPI), a cap based on the growth in gross domestic product (GDP), and a cap based on the rate of growth in national health expenditures.

In this paper we use two alternative estimates from Clemens, Zuckerman, and Williams. Both would cap the exclusion at the 75th percentile of premiums, which would limit the immediate effect on the employer-based system. (The 75th percentile in 2009 is estimated to be \$5,346 and \$12,696 for single and family policies, respectively.) We use the estimates that index the exclusion by the CPI and, alternatively, by GDP. The former would increase tax revenues of \$722 billion over 10 years, the latter \$354 billion. Of these increases, \$456 billion and \$224 billion are increases in income tax revenues, which could be used to help finance health reform. The differences between the two sets of numbers

Table 4
Revenue Options

(billions of dollars)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Cap on exclusion for ESI at the 75th percentile											
-Indexed to CPI, income tax revenue	6.6	11.3	18.7	26.6	35.6	45.6	57.0	69.3	84.5	101.0	456.2
-Indexed to CPI, income and payroll tax revenue	11.1	18.5	30.4	42.9	57.0	72.6	90.4	109.3	132.6	157.6	722.4
-Indexed to GDP, income tax revenue	4.8	6.5	9.5	12.4	16.2	20.9	26.6	33.0	42.1	52.1	224.1
-Indexed to GDP, income and payroll tax revenue	8.0	10.6	15.4	19.9	25.8	33.2	42.2	52.0	65.9	81.4	354.3
Employer assessment											
-4% payroll tax, no cap	36.6	37.8	39.1	40.5	41.8	43.3	44.7	46.3	47.8	49.5	427.4
-4% payroll tax capped at Social Security wages	26.4	27.3	28.2	29.1	30.1	31.2	32.2	33.3	34.5	35.6	307.9
-Tax rate varies with worker wages, no cap	48.8	50.4	52.2	53.9	55.8	57.7	59.6	61.6	63.7	65.9	569.7
-Tax rate varies with worker wages, capped at Social Security wages	33.5	34.6	35.8	37.0	38.3	39.6	40.9	42.3	43.8	45.2	391.1
Sin Taxes ^a											
All Sin Taxes	11.4	14.4	14.4	14.6	14.8	15.0	15.1	15.3	15.6	15.8	146.4
-Sugar-sweetened beverages, add excise tax of 3¢ per 12 oz	4.6	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	51.4
-Cigarettes, increase excise tax by \$1 per pack, adjusted for CHIPRA tax	2.0	3.8	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	34.1
-Alcohol, increase excise tax to \$16 per proof gallon	4.9	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.6	6.7	61.0
Income Tax Options											
-Raise all tax rates on ordinary income by 1 percentage point ^b	30.3	43.7	50.8	51.8	52.7	53.8	54.8	55.8	56.9	58.0	508.5
-Limit the tax rate at which itemized deductions reduce taxable liability for all deductions except charitable contributions ^c	0.0	8.3	22.4	23.7	25.6	27.4	29.0	30.6	32.2	33.8	232.9
-Extension of individual share of Medicare tax to cover unearned income ^d	34.6	36.3	38.1	40	42	44.1	46.3	48.6	51.1	53.6	434.7
-Raise the income tax on ordinary taxable income over \$1 million for joint filers and \$500,000 for individuals by 5 percentage points ^e	16.9	19.0	21.3	21.9	22.5	23.2	23.8	24.5	25.2	25.9	224.3

^a From Congressional Budget Office, "Budget Options Volume 1: Health Care," December 2008, Chapter 11, p. 192-196. The estimated revenue from cigarette taxes is adjusted to account for increased tobacco taxes under CHIPRA legislation by subtracting JCT estimated revenue under CHIPRA from baseline revenue estimates (Joint Committee on Taxation, "Estimated Revenue Effects of the Internal Revenue Code Provisions Contained in H.R. 2, Fiscal Years 2009-2018, As Amended by the Senate on January 29, 2009.")

^b The Congressional Budget Office, "Budget Options," February 2007, Chapter 3, page 277.

^c Base estimates from the Joint Committee on Taxation, "Estimated Budget Effects Of The Revenue Provisions Contained In The President's Fiscal Year 2010 Budget Proposal," 30 March 2009. Estimates are adjusted to retain full deductions for charitable contributions by subtracting the weighted average share of total deductions taken for charitable contributions for taxpayers with over \$200,000 in income from 2006 IRS data, Internal Revenue Service, "Table 2.1, Returns with Itemized Deductions: Sources of Income, Adjustments, Itemized Deductions by Type, Exemptions, and Tax Items, by Size of adjusted Gross Income, Tax Year 2006."

^d Citizens for Tax Justice. 2009. "Progressive Revenue Options to Fund Health Care Reform."

^e Congressional Budget Office, "Budget Options," February 2007, p. 255.

represent payroll tax revenues that are dedicated to finance Social Security and Medicare.

Clemans, Zuckerman, and Williams show that the biggest impacts in terms of tax increases would be on those in the two highest income quintiles. The results show that the lowest-income people will face relatively modest increases in taxes. For example, those in the fourth and fifth quintiles would face tax increases from \$1,430 to \$1,920 in 2019 for a cap at the 75th percentile of premiums indexed by the growth in GDP. In contrast, those at the two lowest income quintiles would see increases in taxes of \$550 and \$810 respectively. The small effects on the lowest income quintile occur because their marginal tax rates are substantially lower. There are also fewer people affected in these tax brackets because fewer have employer sponsored insurance. Thus the cap could provide a substantial amount of revenue and be quite progressive.

There are other distributional issues, however. The cap will have a larger effect in higher-cost areas, on firms with older workers, and on small firms, those for whom premiums tend to be higher. These effects, while true, seem to us to be swamped by the favorable distributional effects from the cap on those in higher tax brackets. In addition, depending upon the design choices made, changes in health insurance rating under health care reform may reduce the increased impact on smaller firms and older workers. For example, if rating reforms reduce the variation in premiums across workers of different ages relative to today, the cap will not hit older workers as hard as it otherwise would. If small employers can reduce administrative costs by purchasing coverage through a health insurance exchange, the disproportionate impact of a cap on them will also be lessened.

An Employer Assessment

One financing option that has received considerable attention is an assessment on employers who do not provide insurance coverage. Most commonly referred to in the context of an employer “pay or play” mandate, such an approach places part of the health care reform financing responsibility on employers. This policy, a version of which has been implemented in Massachusetts, imposes an assessment on employers, and can be structured as a percent of payroll, as a flat amount per worker, or another configuration. If an employer offers health insurance to its workers, the assessment amount is reduced dollar-for-dollar by the amount the employer contributes to the workers’ coverage. The revenue collected is then used to help finance income-related subsidies under the reform.

Those individuals who do not obtain coverage through an employer could do so through a purchasing pool or “exchange,” through a public program if they are eligible for one, or through another private source of coverage that might be available. Depending upon their income, they may be eligible for premium subsidies when purchasing exchange-based coverage. Some also consider the employer assessment under “pay or play” to be an additional incentive for employers to continue to offer health insurance coverage to their workers even in the presence of new options for individual purchase of insurance.

The employer assessment could take many forms and could be of any size. For example, it could be structured as a flat per-worker amount or it could be assessed as a percentage of payroll or as a payroll tax only applied to Social Security wages (\$106,800 in 2009). One could set the payroll tax rate to approximate the share of payroll employers offering coverage contribute to their workers’ insurance on average. The assessment could vary with size and/or average wage of the firm, with smaller or lower wage firms paying lower rates, and the smallest or newest firms or part-time or seasonal workers could be exempted from the tax completely. Another alternative is to have the tax rate vary with the wage of individual workers, for example, by having low assessments on low-wage workers, somewhat higher rates on mid-wage workers, and the largest rate on high-wage workers.

Given that any payroll assessment paid by employers creates a hiring disincentive and is likely to reduce worker wages by commensurate amounts over time, the approach that varies with individual worker wages reduces the impact of the assessment on lower-wage workers’ employment and wages. Distributional effects on workers are particularly important because the assessment will largely effect those employers who currently do not offer health insurance coverage—the vast majority of employers who offer today will continue to do what they are already doing and be unaffected by the change. And employers currently not offering coverage tend to be smaller and have a lower-wage workforce.

We estimated the revenue that could be generated under two types of employer assessments—the first, a 4 percent pay-or-play payroll assessment on all firms, and the second, an assessment that varies from 2 to 6 percent, increasing with the wage of the worker. Both would be limited to firms with more than 10 workers. All these assessment rates can be considered relatively modest, well below the average share of payroll devoted to health insurance coverage by employers that currently offer insurance to their workers.

The 4 percent assessment would generate \$36.6 billion in 2010 and \$427.4 over the 2010–2019 period. If the assessment is only applied to Social Security wages, it would generate \$26.4 billion in 2010, or \$307.9 over the 2010–2019 period. Exempting the smallest firms from an assessment makes it more politically attractive; however, it reduces the revenue potential of the approach since the smallest firms are those least likely to offer coverage today.

An employer assessment of 2 percent of wages per worker with annualized wages of less than \$20,000, 4 percent of wages per worker with annualized wages of \$20,000 to \$60,000, and 6 percent of wages per workers with annualized wages of over \$60,000, would generate \$48.8 billion in revenue in 2010 and \$569.7 billion over the 2010–2019 period. Again, firms with fewer than 10 workers are exempt. If the assessment is only applied to Social Security wages, it would raise \$33.5 billion in 2010 and \$391.1 billion over the 2010–2019 period.

Sin Taxes

Many policymakers have proposed funding health reform with excise taxes on unhealthy products such as tobacco, alcohol, and fattening foods, commonly referred to as sin taxes.⁹⁶ The intent of this type of excise tax is twofold; to produce revenue and to improve health by reducing obesity and other behaviors that adversely affect health. Excise taxes on unhealthy products are common: in 2007, the federal government collected \$8.4 billion in tobacco taxes and \$9.3 billion from excise taxes on alcohol.⁹⁷ States also tax those products—the average state tax on cigarettes is now \$1.18 per pack. Even taxes on junk food are common. Nineteen states taxed soft drinks at a higher rate than other foods in 2006, and many states also applied higher tax rates to snack foods, candy, or food products sold in vending machines.

A major downside of this approach is that excise taxes are regressive. Not only do low-income families spend a larger share of their income on consumption in general—demand for food and tobacco is fairly inelastic with respect to income, so food or cigarette consumption does not increase in proportion to income—but low-income people are also more likely to smoke, to drink heavily, and to eat larger quantities of junk food.⁹⁸ However, many people find sin taxes more acceptable than other regressive taxes, such as a general sales tax, because the tax applies only to nonessential items that are detrimental to health. The political viability of tobacco excise taxes showed clearly in the strong bipartisan support for the Children’s Health Insurance Reauthorization Act (CHIPRA) passed earlier this year, which funded an expansion in public insurance with a 62-cents-per-pack increase in cigarette taxes and increases in taxes on other tobacco products.⁹⁹ Also, while low-income families will spend more on taxes under this proposal, they will also be the primary beneficiaries of the Medicaid expansion and income-related subsidies under health reform.¹⁰⁰

Our estimates of revenues from these taxes derive from those produced by the Joint Committee on Taxation (JCT) and used by the CBO, which we adjusted to the 2010 to 2019 period.¹⁰¹ The CBO estimates account for reduced consumption due to the tax increases but assume no savings from

improved health because that effect is uncertain. Although obese individuals or those who smoke or drink heavily incur higher average health care costs in a given year, they also have shorter life expectancy. It is unclear how the savings from the reduction in treating medical conditions would compare to the increased Medicare and Social Security expenditures from longer life spans, so we exclude both effects.

The JCT estimates of revenue from tobacco taxes predate CHIPRA’s enactment, and thus do not account for the higher taxes already used to fund Children’s Health Insurance. We account for this by subtracting the JCT estimates of revenue from CHIPRA from the revenue estimates from excise taxes, resulting in around \$34 billion in estimated revenue from tobacco taxes over the 10-year period. We estimate \$51 billion in revenue over 10 years from a 3 cent tax on every 12 ounces of sugar-sweetened beverage and \$61 billion from increasing the excise tax on alcohol to \$16 per proof gallon from the current rates of about \$13.50 for distilled spirits, \$6.40 for beer, and \$5.14 for wine.¹⁰²

Income Tax Increases

Another potential financing mechanism is to increase income taxes. We examine a one percentage point increase in the rate for each tax bracket, which would generate \$508 billion in revenue over 10 years.¹⁰³ A benefit of this type of tax increase is that the burden of the tax would be shared across individuals in all income groups. This kind of broad tax increase would be less likely to face potential political opposition than would a narrower increase focused only on high-income groups.

However, an income tax increase across the board is also somewhat regressive. A 1.0 percentage point rise in tax rates would generate a much higher percentage tax increase for taxpayers in lower brackets than for those in higher brackets. Additionally, higher-income taxpayers are more likely to be subject to the alternative minimum tax (AMT), which would not increase under this proposal; anyone subject to the AMT would therefore experience no increase in tax liability. On the other hand, as noted above, a large share of the benefits from health reform will go to lower-income groups.

Another proposal would limit the tax benefit of itemized deductions to 28 percent, as proposed in President Obama's 2010 budget. This proposal would be extremely progressive, as it would affect only taxpayers in tax brackets above 28 percent—in 2009, an individual earning more than about \$180,000 or a married couple with two children earning at least \$235,000 per year.¹⁰⁴ Only a tenth of 1 percent of the revenue generated under this tax would come from tax filers earning less than \$200,000, and more than 65 percent of the tax would be paid by filers earning over \$1 million in income a year.¹⁰⁵ When proposed by the Obama administration, this option was met with strong opposition, partly due to its potential negative consequences on charitable contributions.¹⁰⁶ Therefore, the option we model would not limit the value of deductions for charitable contributions.¹⁰⁷ Applied to all other itemized deductions, the tax would generate roughly \$233 billion over 10 years.

A third option would be to expand the worker portion of the Medicare tax to all adjusted gross income. Currently the 1.45 percent tax applies only to wages, and this approach would apply it equivalently to unearned income as well, with the increased revenue being used to help finance health care reform. According to the Center for Tax Justice, this expansion would raise \$34.6 billion in 2010 and \$434.7 billion over the 10 year period.¹⁰⁸

Finally, there have been discussions recently of increasing marginal tax rates on very high income individuals and families. One option is to introduce a new income tax bracket, higher by 5 percentage points, for individuals with ordinary taxable income of \$500,000 for individuals and \$1 million for joint filers. This would create a top marginal rate of 44.5 percent, assuming the expiration of the Bush tax cuts. Such a tax increase would raise \$224.3 billion over 10 years; substantially more could be raised if the income thresholds were lowered.

Summary of Revenue Options

These revenue options provide substantial amounts of money to support health reform. The cap on the exclusion at the 75th percentile of premiums indexed to grow at GDP would yield \$224.1 billion in income taxes (an additional \$130 billion in revenue would be devoted to the Social Security and Medicare systems as a result of this change). The

employer assessment with the tax rate that varies with worker wages capped at the Social Security wage base will yield another \$391 billion. The three alternative sin taxes would yield \$146 billion. Limiting the itemized deductions for the top two brackets for all deductions except charitable contributions would yield \$233 billion.

Raising marginal tax rates on ordinary income by 1 percentage point would yield \$509 billion over 10 years. The latter option would seem to be politically difficult except for the fact that the system savings from the variety of provisions we have discussed would yield far more than the amount raised by a 1 percentage point increase in income tax rates. That is, the amount that most individuals would save from system reforms would be greater than the new taxes they would face. Other options included here would shift much of the tax burden to the highest-income people. While perhaps politically attractive to some, it is also at odds with the way other nations finance public health insurance, through broad-based payroll or consumption taxes. Taken together, these revenue sources could provide much more in new revenues over 10 years than would be needed, but obviously require difficult choices.

Conclusion

This paper has shown that there are a variety of ways to raise money to pay for health reform. The essential results are summarized in table 5. These include selectively reducing Medicare reimbursement rates and adopting a variety of system reforms, introducing caps on malpractice liabilities, reallocating funds now devoted to the safety net, and adopting a public plan. Also, we examined a range of options for increasing revenues. There are a variety of combinations of these options that would yield more than enough money to pay for the prototypical health reform plan that we have outlined.

We estimate that health reform measures that we have discussed could save the government close to \$1.3 billion. These measures include reducing the payment differential for Medicare Advantage programs, reducing payments for overpriced physician services, and reducing update factors for inpatient hospital care and post-acute care. Together, these payment reductions would provide

savings of over \$350 billion. Reallocating some of the dollars that now pay for the uninsured through payments to safety net providers, both hospitals and clinics, could yield another \$264.1 billion. This assumes universal coverage, that care for undocumented immigrants would be a state and local responsibility, and that current state and local expenditures could be reallocated for this purpose. Modest savings to the private sector would also result from these initiatives.

Next we make estimates for measures where savings estimates are more controversial. Making what we believe to be conservative assumptions, we estimate savings of \$200 billion savings from management of chronic care for dual eligibles in Medicare and Medicaid and \$92 billion from improving the management of end-of-life care for Medicare beneficiaries. We suggest a prevention initiative that could save \$191 billion and estimate savings of \$97 billion from increased use of health information technology (HIT). We estimate that 75 percent of the savings from the prevention initiative and 50 percent of the savings from increased HIT used would lower government costs. Medical malpractice reform would yield another \$258 billion, with half lowering costs to the government.

Introducing a competitive public plan would provide savings to the government of between \$224.1 billion and \$399.8 billion. The difference depends on how Medicare rates are set. Significant private savings would also accrue to individuals not eligible for subsidies.

We also examine a variety of revenue options. A cap on the exclusion of employer-sponsored insurance could provide savings from \$224.1 billion to \$456.2 billion depending on whether the cap is indexed to GDP or the CPI. We recognize that a cap on the exclusion could have stronger effects on high-cost areas, on firms with large numbers of older workers, and small firms. But, in general, the distributional effects are progressive. We examine a variety of ways of placing an assessment on employers who do not provide insurance to their workers and estimate revenue of between \$308

billion and \$570 billion. We recognize that employer assessments can be regressive and can have adverse effects on worker wages and unemployment. Imposing a variety of sin taxes, including taxes on sugar-sweetened beverages, cigarettes, and alcohol could yield \$146.4 billion. Sin taxes are also regressive but we argue that the benefits from health reform are quite progressive and counterbalance such regressivity.

Finally, we looked at income tax options. We recognize that these are not likely to be popular but suggest they may be necessary if all else fails. Increasing tax rates on ordinary income by 1 percentage point would yield about \$500 billion. Another alternative is to limit the tax rate at which itemized reductions reduce taxable liability but retain the full reduction for charitable contributions; this would yield \$233 billion. Imposing a Medicare tax on unearned income and using the proceeds to pay for health reform would yield \$435 billion. A higher tax on very high earners would yield \$224.3 billion.

The main conclusion is that it is clearly possible to finance health reform but doing so requires difficult trade-offs. The fewer savings initiatives adopted, the more other measures must be relied upon. If the skepticism over savings from prevention, HIT, or reforms to end-of-life care prevails then it becomes more difficult to achieve savings without a public plan. Without reliance on the public plan it becomes more necessary to use such revenue measures as the cap on the ESI exclusion, an employer assessment or increases in income taxes, or limits on deductions. An unwillingness to reallocate safety net dollars or to enact malpractice reforms and inability to obtain “scorable” savings from the CBO on other measures makes it more imperative that the public plan be adopted. Finally and obviously, the more funds that can be taken out of the current system, the less the need there is to rely on new revenue sources. Alternatively, if there is little political appetite for new taxes, then stronger cost-containment measures and the adoption of the public plan will be essential.

Table 5
Paying for Health Reform

(billions of dollars)

2010-2019

The Cost of Health Reform		<u>Government Costs</u>	
Medicaid Expansion (Net)		550.4	
Subsidies, No Public Plan		1,256.6	
Total Reform Spending		1,807.1	
Reductions in Payments to Medicare and Medicaid		<u>Government Savings</u>	<u>Total Savings^a</u>
Establish Competitive Bidding for Medicare Advantage Program ^b		133.0	133.0
Savings from Reduction in Payments for Overpriced Services		80.0	80.0 *
Reductions in Other Medicare Payments			
-Reduce Update Factor for Hospitals' Inpatient Operating Payments ^c		92.9	92.9
-Reduce Update Factor for Payments to Post-Acute Care Providers ^c			
Reallocation of Safety Net Funds		264.1	264.1
Total		570.0	570.0
Delivery System Reforms			
Savings From Chronic Disease Management for Dual Eligibles		200.5	200.5 *
Savings from Reducing Hospital Readmissions in Medicare and Medicaid		14.8	14.8
Savings from Improvements to End of Life Care for Medicare Beneficiaries		90.8	90.8
Savings from Prevention to Medicare and Medicaid, or Subsidy Cost		142.9	191.0
Savings from Increased Use of HIT to Medicare and Medicaid, or Subsidy Cost		48.5	97.0
Savings from Malpractice Reform to Medicare and Medicaid, or Subsidy Cost		129.2	258.5
Increased Health System Reliance on Primary Care/Medical Homes		0.0	0.0
Comparative Effectiveness/Public and Private Payer Coverage of New Technology		0.0	0.0
Total		626.8	852.6
Public Plan Savings			
Savings from Public Plan			
Medicare rates +20% ^d		224.1	412.0
Medicare rates +10% ^e		399.8	788.0
Revenue Options			
Cap on Exclusion for ESI at the 75th Percentile			
-Indexed to CPI, income tax revenue		456.2	456.2
-Indexed to CPI, income and payroll tax revenue		722.4	722.4
-Indexed to GDP, income tax revenue		224.1	224.1
-Indexed to GDP, income and payroll tax revenue		354.3	354.3
Employer assessment			
-4% payroll tax, capped at Social Security wages		307.9	307.9
-4% payroll tax, no cap		427.4	427.4
-Tax rate varies with worker wages, capped at Social Security wages		391.1	391.1
-Tax rate varies with worker wages, no cap		569.7	569.7
Sin Taxes ^f			
-Sugar-sweetened Beverages, add excise tax of 3¢ per 12 oz		51.4	51.4
-Cigarettes, increase excise tax by \$1 per pack, adjusted for CHIPRA tax		34.1	34.1
-Alcohol, increase excise tax to \$16 per Proof Gallon		61.0	61.0
Income Tax Options			
-Raise all tax rates on ordinary income by 1 percentage point ^g		508.5	508.5
-Limit the Tax Rate at which Itemized Deductions Reduce Taxable Liability for All Deductions Except Charitable Contributions ^h		232.9	232.9
-Extension of individual share of Medicare tax to cover unearned income ⁱ		434.7	434.7
-Raise the income tax on ordinary taxable income over \$1 million for joint filers and \$500,000 for individuals by 5 percentage points ^j		224.3	224.3
Total Funds for Reform			
High^k		3,277.3	3,891.4
Low^l		2,323.6	2,737.3
Cost of Reform Less Estimated Available Funds			
High^k		-1,470.3	-2,084.3
Low^l		-516.5	-930.2

Notes on Table 5

*Additional savings to the privately insured were not estimated.

^aTotal savings include savings to the government, as well as those that accrue to individuals with private health insurance coverage.

^bTen year estimate from Congressional Budget Office. Information on the Options for the Medicare Advantage Program's Benchmarks for Federal Payments. Letter to the Honorable Mike Crapo. 2009 May 18. Individual year estimates were derived using the predicted growth rate of Medicare, assuming a three year phase-in period.

^cThe Congressional Budget Office, "Budget Options Volume 1: Health Care," December 2008, Chapter 7, p. 108-109. Annual estimates come directly from CBO for years 2010 to 2014 and for 2010-2019 total. Other years are estimated to reach total based on previous years and trends (estimates assume a constant third derivative of annual savings).

^dResults in 15% savings on public plan, including administrative costs.

^eResults in 25% Savings on public plan, including administrative costs.

^fFrom Congressional Budget Office, "Budget Options Volume 1: Health Care," December 2008, Chapter 11, p. 192-196. To estimate a tax implemented in 2010, a growth rate was calculated from years 2011 to 2013 annual estimates and 2009-2018 total revenue estimate. The first year after implementation is calculated by adjusting the 2009 revenues by this factor (i.e. baseline cigarette tax revenues are adjusted downward, baseline alcohol and beverage tax revenues are adjusted upward). The estimated revenue from Cigarette taxes is adjusted to account for increased tobacco taxes under CHIPRA legislation by subtracting JCT estimated revenue under CHIPRA from baseline revenue estimates (Joint Committee on Taxation, "Estimated Revenue Effects of the Internal Revenue Code Provisions Contained in H.R. 2, Fiscal Years 2009-2018, As Amended by the Senate on January 29, 2009."

^gThe Congressional Budget Office, "Budget Options," February 2007, Chapter 3, page 277. While CBO estimates were for years 2008 to 2012, the estimates shown are the CBO estimates for 2010 to 2012 (unadjusted) projected out using the average growth rate required to obtain the CBO estimate for total revenues from 2008 to 2017.

^hBase estimates from the Joint Committee on Taxation, "Estimated Budget Effects Of The Revenue Provisions Contained In The President's Fiscal Year 2010 Budget Proposal," 30 March 2009. Estimates are adjusted to retain full deductions for charitable contributions by subtracting the weighted average share of total deductions taken for charitable contributions for taxpayers with over \$200,000 in income from 2006 IRS data, Internal Revenue Service, "Table 2.1, Returns with Itemized Deductions: Sources of Income, Adjustments, Itemized Deductions by Type, Exemptions, and Tax Items, by Size of adjusted Gross Income, Tax Year 2006."

ⁱCitizens for Tax Justice. 2009. "Progressive Revenue Options to Fund Health Care Reform."

^kCongressional Budget Office, "Budget Options." February 2007, p. 255

^jHigh estimates of available funds include all savings from reductions in payments to Medicare and Medicaid and delivery system reforms, as well as savings from Medicare payment rates +10%; income tax revenue from a cap on exclusion for ESI at the 75th percentile, indexed to the CPI; revenue from an employer assessment that varies with worker wages and has no cap; all sin tax revenue; and revenue from raising all tax rates on ordinary income by 1 percentage point.

^lLow estimates of available funds include all savings from reductions in payments to Medicare and Medicaid and delivery system reforms, as well as savings from Medicare payment rates +20%; income tax revenue from a cap on exclusion for ESI at the 75th percentile, indexed to the GDP; revenue from a 4% employer payroll tax, capped at Social Security Wages; all sin tax revenue; and revenue from raising the income tax on ordinary taxable income over \$1 million for joint filers and \$500,000 for individuals by 5 percentage points.

APPENDIX

Description of a Diabetes and Hypertension Prevention Program

We assume a small incentive payment (\$50) to physicians or other providers who successfully refer patients identified as “pre-diabetic” to a group program delivered at a community center, or private facility (the demonstration program is delivered at YMCA facilities). The provider of the group program would be paid a fee for each participant who enrolls in the initial sessions (\$250) and further payments if the participant continues the program in subsequent years (\$150).

We assumed that 50 percent of the pre-diabetic population, estimated to be 57 million in 2007,¹⁰⁹ could be identified and referred through regular contact with a health care provider. We limit the potential target population to 76 percent of persons living in urbanized areas and in central places of urban clusters (as defined by the US Census bureau). We assume that 20 percent of the referred population would enroll initially. While long-term follow-up studies of clinical trial participants have yet to be completed, the effectiveness of lifestyle interventions in reducing body weight and increasing physical activity has been shown to persist for at least 4 years.¹¹⁰ However, because we do not expect lifetime adherence to lifestyle modification, we assume that 25 percent of enrollees would drop out every year.

Based on results from the DPP, we estimate that approximately 10 percent of pre-diabetics develop full diabetes within a year, but a systematic review of randomized clinical trials of lifestyle interventions estimates that this incidence rate could be reduced by 50 percent for program participants as long as they stay in the program.¹¹¹ We assume that the onset of hypertension responds to similar behavior modification (diet and exercise) in a similar way. Since approximately 40 percent of persons with diabetes or hypertension develop heart disease within five years, we assume that 40 percent of prevented cases of diabetes and hypertension will also prevent cases of more serious conditions five years after the initial effect. We assume that no disease prevention effect occurs before the second year.

Notes

¹ The employer coverage by large firms not included in the exchange would be permitted to enter the exchange if they chose in order to take advantage of available subsidies, with their employers making the same contribution to the exchange as they make for their workers taking up the firm's own coverage.

² Those with incomes between 100 and 149 percent of the poverty level would be subsidized such that their premium would not exceed 1 percent of income; those between 150 and 199 percent of poverty, 3 percent of income; those between 200 and 249 percent of poverty, 5 percent of income; those between 250 and 299 percent of poverty, 7 percent of income; those between 300 and 350 percent of poverty, 9 percent of income; and those between 350 and 399 percent of poverty, 11 percent of income.

³ Subsidies would be tied to a benchmark premium, most likely the average of the three lowest-cost plans in an area.

⁴ We recognize that Congress is considering maintenance-of-effort provisions by which states would have to continue covering currently enrolled people under Medicaid. For the purposes of this analysis, however, we do not assume a maintenance-of-effort requirement. A maintenance-of-effort requirement would keep more individuals and their health care costs in the Medicaid program, instead of shifting them to exchange-based coverage with the government costs associated with their insurance appearing under exchange subsidies.

⁵ These estimates are based on the analysis presented in Bowen Garrett, John Holahan, Allison Cook, Irene Headen, and Aaron Lucas, "The Cost and Coverage Impacts of Expanding Medicaid" (Washington, DC: Kaiser Commission on Medicaid and the Uninsured, 2009).

⁶ Medicare Payment Advisory Commission (MedPAC), *Medicare Payment Policy: Report to the Congress* (Washington, DC: MedPAC, 2009), 258.

⁷ Congressional Budget Office (CBO), "Information on the Options for the Medicare Advantage Program's Benchmarks for Federal Payments, Letter to the Honorable Mike Crapo" (Washington, DC: CBO, 2009).

⁸ Melinda Beeuwkes Buntin, Steven Zuckerman, Robert Berenson, Anant Patel, and Teryl Nuckols, "Volume Growth in Medicare: An Investigation of Ten Physicians' Services" (Washington, DC: The Urban Institute, 2008),

<http://aspe.hhs.gov/health/reports/08/medicarevolume/index.shtml>.

⁹ Lawrence P. Casalino, "Physician Self-Referral and Physician-Owned Specialty Facilities," Research Synthesis Report no. 15 (Princeton, NJ: Robert Wood Johnson Foundation, 2008),

<http://www.rwjf.org/files/research/062408.policysynthesis.physreferral.rpt.pdf>; Paul B. Ginsburg and Joy M. Grossman, "When The Price Isn't Right: How Inadvertent Payment Incentives Drive Medical Care," *Health Affairs* web exclusive August 9, 2005; Buntin et al., "Volume Growth."

¹⁰ MedPAC, *Medicare Payment Policy*, chapter 2B.

¹¹ Melinda Beeuwkes Buntin, Stephen Zuckerman, Robert Berenson, Anant Patel, and Teryl Nuckols, "An Investigation of Eight High-Utilization, High-Growth Physician Services Provided to Medicare Beneficiaries," submitted for publication.

¹² Jack Hadley, Jim Reschovsky, Catherine Corey, and Stephen Zuckerman, "Medicare Fees and the Volume of Physicians' Services" (Washington, DC: Center for Studying Health System Change).

¹³ U.S. Government Accountability Office, "Medicare: Trends in Fees, Utilization, and Expenditures for Imaging Services before and after Implementation of the Deficit Reduction Act of 2005," GAO-08-1102R (Washington, DC: GAO, 2008).

¹⁴ MedPAC, *Report to the Congress*.

¹⁵ MedPAC, *Medicare Payment Policy*.

¹⁶ Department of Health and Human Services, Centers for Medicare and Medicaid Services, "Medicare Program; Payment Policies under the Physician Fee Schedule and Other Revisions to Part B for CY 2010, Proposed Rule, Part II," *Federal Register*: July 13, 2009, 42 CFR Parts 410, 411, 414, et al. (vol. 74, no. 132): 33519–825, <http://edocket.access.gpo.gov/2009/E9-15835.htm>.

¹⁷ CBO, *Budget Options: Volume 1, Health Care* (Washington, DC: CBO, 2008).

¹⁸ CBO, *Budget Options*.

¹⁹ CBO, *Budget Options*.

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²¹ CBO, *Budget Options*.

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The views expressed are those of the authors and should not be attributed to any campaign or to the Robert Wood Johnson Foundation, or the Urban Institute, its trustees, or its funders.

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This research was funded by the Robert Wood Johnson Foundation. The authors thank Genevieve Kenney, Sharon Long, Jack Meyer, and Steve Zuckerman for their helpful advice and suggestions.

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