

Estimating cost and revenues for Sanders single-payer

Costs under existing system

I base estimates of future health care spending on the projections of National Health Expenditures from the CMS going through 2024. For 2025 and 2026, I project the 2024 numbers forward assuming spending will continue to grow at the average rate of 2015-24, or 5.7% (see Table 1).¹ I have used the same procedure to estimate out-of-pocket, private insurance, and public spending.

Table 1. Projected spending, 2015-26, existing health care system.

	CMS			Outofpocket	Private insurance	Public
	Old projection	New	Change			
2015	3417.9	\$3,244	\$174	\$ 351	\$ 1,085	\$ 1,807
2016	3632	\$3,403	\$229	\$ 361	\$ 1,140	\$ 1,903
2017	3849.5	\$3,587	\$263	\$ 376	\$ 1,198	\$ 2,013
2018	4080	\$3,786	\$295	\$ 393	\$ 1,258	\$ 2,134
2019	4346.5	\$4,020	\$327	\$ 415	\$ 1,329	\$ 2,276
2020	4638.4	\$4,274	\$365	\$ 438	\$ 1,406	\$ 2,430
2021	4927.454	\$4,543	\$385	\$ 463	\$ 1,489	\$ 2,591
2022	5234.52	\$4,825	\$409	\$ 489	\$ 1,572	\$ 2,764
2023	5560.722	\$5,119	\$441	\$ 515	\$ 1,658	\$ 2,946
2024	\$5,910	\$5,425	\$484	\$ 543	\$ 1,746	\$ 3,136
2025	\$6,280	\$5,744	\$536	\$ 570	\$ 1,841	\$ 3,334
2026	\$6,674	\$6,082	\$592	\$ 598	\$ 1,941	\$ 3,544
Sum	\$58,551	\$54,051	\$4,500	\$ 5,511	\$ 17,664	\$ 30,878
			92%			
	6.1%	5.7%		4.8%	5.3%	6.1%

Single payer costs

I make three adjustments to the projected costs: savings, additional expenditure, and dynamic savings over time.

First, I assume an immediate savings from the reduced administrative costs and lower prescription drug prices with a single payer system. I assume the system would be fully implemented in 2017 and would achieve administrative savings by:

¹ <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountsprojected.html>

1. *Reducing sponsor overhead, that is the share of insurance administration of total spending to a little above the Medicare level.* This means the Medical Loss Ratio would be raised to 98% for all coverage.
2. *Reducing provider overhead to the Canadian administrative level.* The Canadian rate is estimated from Himmelstein and Woolhandler.²
3. *Lowering US drug prices to the average level of other OECD member states.* The world level is estimated from McKinsey Global Institute.³

The share of spending that would be saved is in Table 2; the estimation procedure is described in my 2013 paper on funding HR 676.⁴

Table 2. Projected savings rates for US health care with single payer.⁵

	Savings rate
Hospital care	9.4%
Physicians and clinical services	10.7%
Other professional services	9.0%
Dental services	9.0%
Home health care	19.2%
Nursing home care	7.0%
Other personal health care	10.7%
Savings on pharmaceuticals	37.5%

Additional spending with Medicare-for-All

Medicare for All involves additional spending in three areas:

1. *Extension of coverage to the 29 million still uninsured.* I assume that the uninsured currently spend 55% as much on health care as the insured and would spend 80% with insurance; the lower spending is based on the age distribution of the uninsured.⁶

² Steffie Woolhandler, Terry Campbell, and David Himmelstein, "Cost of Health Care Administration in the United States and Canada," *New England Journal of Medicine*, no. 349 (2003): 768–75. Also see Steffie Woolhandler and David Himmelstein, "Administrative Work Consumes One-Sixth of U.S. Physicians' Working Hours and Lowers Their Career Satisfaction," *International Journal of Health Services* 44, no. 4 (January 1, 2014): 635–42, doi:10.2190/HS.44.4.a; Aliya Jiwani et al., "Billing and Insurance-Related Administrative Costs in United States' Health Care: Synthesis of Micro-Costing Evidence," *BMC Health Services Research* 14, no. 556 (2014), <http://www.biomedcentral.com/content/pdf/s12913-014-0556-7.pdf>.

³ McKinsey Global Institute, "Accounting for the Cost of Health Care in the United States," January 2007, http://www.mckinsey.com/mgi/rp/healthcare/accounting_cost_healthcare.asp.

⁴ "Friedman Analysis of HR 676: Medicare for All Would Save Billions - PNHP's Official Blog," accessed January 24, 2014, <http://pnhp.org/blog/2013/07/31/friedman-analysis-of-hr-676-medicare-for-all-would-save-billions/>.

⁵ Note that this is modified from Table 3 in my 2013 study.

⁶ Jack Hadley and John Holahan, "The Cost of Care for the Uninsured: What Do We Spend, Who Pays, and What Would Full Coverage Add to Medical Spending" (Kaiser Commission on Medicaid and the Uninsured, May 10,

2. *Improved access for those with insurance.* I assume that the removal of copayments and deductibles will lead to an increase in utilization of 3% for most personal health expenditures along with a 22% increase in dental spending, a 40% increase in home health care spending, and a 20% increase in nursing home care. In all, this gives a 6.3% increase in utilization overall. After taking out Medicaid, where there are no copayments or deductibles, and hospitalization and prescription drugs, where patients have little discretion in utilization, this is an assumed 16.0% increase in utilization (see Table 3).

Table 3. Magnitude of assumed increase in utilization, spending increase with single payer as share of non-single payer spending.

Share of personal health care	6.3%
Share of non-Medicaid	8.0%
Share of non-Medicaid, non-Hospital	16.0%

3. *Medicaid rate equity.* Establishing a single-payer system would necessarily mean that all providers would be paid from the same source with the same rates. This would end the discrimination against Medicaid providers. Medicaid rates are now 34% below those paid by Medicare, and it is assumed that they would rise to parity.⁷

Net change in spending with Improved Medicare-for-All

In my estimates for 2013, there are nearly \$600 billion in savings and \$400 billion in added costs for a net saving of \$200 billion, or nearly 8% reduction. Applying this ratio to 2017 gives savings of \$277 billion.

Spending after 2017 is assumed to increase at the projected CMS rate of increase in National Health Expenditures (see Table 1) *minus* 1.1%. This represents the difference between the gap between health care inflation rate in the United States over the past 45 years and the general CPI and that in Canada. It is also the difference between the health care inflation rate for private insurance and the United States' Medicare system.⁸

2004), <http://www.kff.org/uninsured/upload/The-Cost-of-Care-for-the-Uninsured-What-Do-We-Spend-Who-Pays-and-What-Would-Full-Coverage-Add-to-Medical-Spending.pdf>.

⁷ The ACA has provision to raise primary care fees for Medicaid but this program is slated to lose Federal funding and it is unclear how many states will maintain it; "How Much Will Medicaid Physician Fees for Primary Care Rise in 2013? Evidence from a 2012 Survey of Medicaid Physician Fees," accessed July 13, 2013, <http://kff.org/medicaid/issue-brief/how-much-will-medicare-physician-fees-for/>. The problem of losing provider participation in Medicaid is serious; see American Academy of Pediatrics, "Medicaid Reimbursement: Medicaid Rates and Provider Participation," July 2009, <http://www.sdsma.org/documents/MedicaidSummerStudy.final.pdf>.

⁸ Himmelstein DU and Woolhandler S, "Cost Control in a Parallel Universe: Medicare Spending in the United States and Canada," *Archives of Internal Medicine* 172, no. 22 (December 10, 2012): 1764–66, doi:10.1001/2013.jamainternmed.272; Gerard F. Anderson et al., "It's The Prices, Stupid: Why The United States Is So Different From Other Countries," *Health Affairs* 22, no. 3 (May 1, 2003): 89–105, doi:10.1377/hlthaff.22.3.89. For statistics, see my paper "The Creation of Waste and the Rising Cost of Health Care, 1970-2014" available upon request.

This gives the series on Medicare-for-All health care spending and savings compared with the current system (see Table 4).

Table 4. Projected single-payer spending compared with current system, 2015=26.

	CMS projections current system	Improved Medicare-for-All	
		Spending	Savings
2015	\$3,244	\$ 3,244	\$ -
2016	\$3,403	\$ 3,403	\$ -
2017	\$3,587	\$ 3,310	\$ 277
2018	\$3,786	\$ 3,466	\$ 320
2019	\$4,020	\$ 3,630	\$ 390
2020	\$4,274	\$ 3,801	\$ 473
2021	\$4,543	\$ 3,981	\$ 562
2022	\$4,825	\$ 4,169	\$ 657
2023	\$5,119	\$ 4,366	\$ 754
2024	\$5,425	\$ 4,572	\$ 853
2025	\$5,744	\$ 4,788	\$ 956
2026	\$6,082	\$ 5,014	\$ 1,068

Additional public spending

After taking account of savings and additional national health spending, three adjustments to calculate the new Federal spending, and revenues, needed for the Improved Medicare-for-All system.

1. *Current and projected public spending is subtracted under a “maintenance of effort” assumption.*
2. *20% of current and projected out of pocket spending is assumed to continue because it is spent on non-medically necessary activities.* This is assumed to include activities that would not be covered by the program, such as optional cosmetic surgery, supplements, and some hospital and nursing home amenities, such as HBO. This assumption sets the actuarial value of the program at about 98%.
3. *Medicare Part B premiums will be assumed by the program.* The establishment of universal coverage means that seniors currently paying Medicare Part B premiums would have no reason to continue to pay them.⁹

New Federal spending is then calculated as National spending minus projected public spending minus remaining out of pocket plus Medicare Part B premiums.

⁹ Note that Medicare Part B premiums paid by Medicaid will not be effected because that spending is already included in the total of projected public spending.

Table 5. Calculation of new federal spending: total minus existing public minus remaining out of pocket plus Medicare Part B premiums.

Year	Improved Medicare-for-All Spending	Projected public spending	Out of pocket	Medicare Part B	New public
2015	\$ 3,244	\$ 1,807	\$ 351	\$ 59	
2016	\$ 3,403	\$ 1,903	\$ 361	\$ 62	
2017	\$ 3,310	\$ 2,013	\$ 75	\$ 64	\$ 1,286
2018	\$ 3,466	\$ 2,134	\$ 79	\$ 67	\$ 1,321
2019	\$ 3,630	\$ 2,276	\$ 83	\$ 71	\$ 1,341
2020	\$ 3,801	\$ 2,430	\$ 88	\$ 74	\$ 1,358
2021	\$ 3,981	\$ 2,591	\$ 93	\$ 78	\$ 1,375
2022	\$ 4,169	\$ 2,764	\$ 98	\$ 82	\$ 1,389
2023	\$ 4,366	\$ 2,946	\$ 103	\$ 86	\$ 1,403
2024	\$ 4,572	\$ 3,136	\$ 109	\$ 90	\$ 1,418
2025	\$ 4,788	\$ 3,334	\$ 114	\$ 95	\$ 1,435
2026	\$ 5,014	\$ 3,544	\$ 120	\$ 99	\$ 1,449
Sum	\$ 47,741	\$ 30,878	\$1,671	\$ 928	\$ 13,773

Sources of new revenue

While the nearly \$14 trillion in new spending requires a large increase in Federal revenue, there are a variety of sources that could be utilized.

1. *Current tax expenditures.* The Federal government now subsidizes the private health insurance system through the tax code. The largest such subsidy is for the employer-provided health insurance premiums but there are other smaller subsidies such as the deductibility of health care expenses above 10% of adjusted gross income.¹⁰ These subsidies would automatically disappear with the new program *except* to the extent that it relies on a deductible employment based payroll tax. In the Sanders program, an additional \$3 trillion in revenue becomes available through the reduction in tax expenditures.
 - a. *The change in tax expenditures is calculated assuming a 6.2% payroll premium.* For each year, employment-based health insurance premiums as a share of payroll has been calculated. The difference between this ratio and 6.2% is the share of employment-related tax expenditures that would disappear.
 - b. *Other tax expenditures are assumed to disappear completely.* These include the deductibility of high medical expenses, and a few smaller items.

¹⁰ Treasury of the United States, "Tax Expenditures FY2015" (Washington, D. C.: Executive Office of the President, January 2015), <http://www.treasury.gov/resource-center/tax-policy/Documents/Tax-Expenditures-FY2015.pdf>; "The 2015 Long-Term Budget Outlook," *Congressional Budget Office*, accessed September 21, 2015, <https://www.cbo.gov/publication/50250>.

Table 6. Calculation of tax expenditure savings

Year	Tax expenditures			Reduced Tax expenditures			
	Insurance	MSA	Other (net)	Insurance	MSA	Other (net)	Total
2017	\$ 370,650	\$ 6,720	\$ 8,670	\$ 215,870	\$ -	\$ 8,670	\$ 224,540
2018	\$ 385,820	\$ 7,950	\$ 8,950	\$ 225,881	\$ -	\$ 8,950	\$ 234,831
2019	\$ 407,180	\$ 9,440	\$ 9,790	\$ 240,712	\$ -	\$ 9,790	\$ 250,502
2020	\$ 434,070	\$ 11,240	\$ 11,210	\$ 259,110	\$ -	\$ 11,210	\$ 270,320
2021	\$ 461,610	\$ 13,370	\$ 12,890	\$ 278,522	\$ -	\$ 12,890	\$ 291,412
2022	\$ 490,720	\$ 15,900	\$ 14,800	\$ 298,479	\$ -	\$ 14,800	\$ 313,279
2023	\$ 521,910	\$ 18,900	\$ 17,190	\$ 320,385	\$ -	\$ 17,190	\$ 337,575
2024	\$ 554,440	\$ 22,540	\$ 20,200	\$ 342,345	\$ -	\$ 20,200	\$ 362,545
2025	\$ 589,078	\$ 26,881	\$ 23,744	\$ 366,847	\$ -	\$ 23,744	\$ 390,591
2026	\$ 621,045	\$ 28,462	\$ 25,140	\$ 390,847	\$ -	\$ 25,140	\$ 415,988

2. *Other revenues are calculated using data from the staff of the Senate Budget Committee.*

Table 7. Revenue sources for Sanders Improved Medicare-for-All program, annual averages.

Additional Federal Spending	\$ 1,377
Reduced tax expenditures	\$ 309
2.2% income-based premium on households	\$ 210
Payroll at 6.20% income based health care premium paid by employers	\$ 630
Progressive Income Tax Reforms	
Responsible Estate Tax Act	\$ 21
Taxing capital gains and dividends the same as income from work	\$ 92
Limit tax deductions of the rich	\$ 15
Progressive income tax rates	\$ 110
Net (surplus)	\$ (10)

- American Academy of Pediatrics. "Medicaid Reimbursement: Medicaid Rates and Provider Participation," July 2009. <http://www.sdsma.org/documents/MedicaidSummerStudy.final.pdf>.
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