



Limiting Federal Spending as a Proportion of Total Gross Domestic Product (GDP) Case Study: Variations on the "Commitment to American Prosperity Act (CAP)"

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### **Executive Summary**

Concern over the growing deficit has resulted in the introduction of several legislative proposals in Congress to limit the growth in federal spending. The "Commitment to American Prosperity Act" (CAP) is one of several bills that would do so by setting a specific target or cap beyond which spending would not be allowed to grow. The CAP Act would limit federal spending so that by 2021, total federal spending would be reduced from a projected 24 percent of gross domestic product (GDP) under current law to about 20.8 percent of the GDP under the CAP Act.

The Act includes a "sequestration" procedure that would automatically cut spending across all federal programs in any year where spending is projected to exceed the spending cap. The process is designed to allocate the greatest cuts to programs experiencing the greatest growth, which would concentrate the cuts among major mandatory programs such as Social Security, Medicare and Medicaid. Because the spending cap is set based on spending, changes in taxes could not be used to reduce the level of cuts required.

The purpose of this case study is to illustrate the impact that these spending reductions would have on people who depend upon federal programs for income and healthcare. Because health care is such a large portion of federal spending, we also present estimates of the impact that these cuts would have on health care provider revenues and the resulting effects on access to care for Medicare and Medicaid beneficiaries. The sequestration is generally implemented through a percentage reduction in payments to beneficiaries and health care providers. A number of proposals now before Congress would also use a spending cap.

Our key findings include:

- Based on data from the CBO, we estimate that the CAP Act would reduce federal spending by \$4.2 trillion between 2013 and 2021;
- Programs would be cut in proportion to their rate of growth in costs in the most recent year. Social Security, Medicare and Medicaid would see the largest cuts because the aging of the population, poor economy and coverage expansions contribute to high growth in these programs;
- Spending under mandatory programs would be reduced by 14.3 percent over the 2013 through 2021 period. Cuts for major programs over his period would be:
  - \$1.3 trillion in Social Security;
  - \$859 billion under Medicare; and
  - \$575 billion in federal Medicaid payments to states.
- By 2019, Social Security benefit payments would be reduced by 19 percent;
- The reductions in spending for Social Security and other cash assistance programs would increase the number of people living below the Federal poverty Level (FPL) by:
  - 2.3 million people by 2014;
  - 3.8 million people by 2021; and



- About 350,000 children would fall below the FPL over the period.
- The number of people age 65 and older living below the FPL would increase by:
  - 1.1 million seniors in 2014, an increase of 29 percent; and
  - 2.1 million seniors by 2021, an increase of 44 percent.
- The number of uninsured would increase by 5.1 million people due to reductions in the amount of the premium tax credit created under the Affordable Care Act (ACA) and Premium increases due to increased cost shifting;
- Reductions in government spending for healthcare would reduce employment in the healthcare sector by up to 1.3 million jobs by 2021, primarily in support positions;
- Payments to all health providers from Medicare would be reduced by an average of 14.3 percent over the 2013 through 2021 period;
- The cuts in federal Medicaid payments to states would likely be passed-on to providers in the form of reduced payments under the Medicaid program, averaging 8.1 percent over the 2013 through 2021 period;
- These cuts in payment under government healthcare programs would reduce total provider revenues by an average of 5.3 percent over the 2013 through 2021 time period, depending upon then provider's payer mix. Total revenue reductions would average:
  - 6.2 percent for hospitals;
  - 3.7 percent for physicians;
  - 6.5 percent for nursing homes; and
  - 5.5 percent for home health providers.
- The cuts in physician reimbursement under the CAP Act would reduce patient access for Medicaid and Medicare beneficiaries, resulting in a reduction the number services supplied by physicians by up to 11 percent under Medicare and up to 4 percent under Medicaid;
- If implemented together with the scheduled physicians cuts of 29.5 percent in 2012 under the Medicare sustainable growth rate (SGR) formula, we estimate that:
  - Medicare payment levels would be at or below Medicaid payment levels in most states, which are already so low that many physicians do not participate in Medicaid; and
  - Physician supply of services for Medicare beneficiaries would fall by up to 24 percent.
- Because Medicaid pays for about half of all long-term care spending nationally, the cuts in Medicaid could have a significant impact on access to long-term care services. By 2021, total long-term care provider revenues would be reduced by:
  - 8.3 percent for nursing home care;
  - 11.6 percent for home health care; and



— 9.3 percent for home and community-based care programs.

- Annual premiums for private insurance would increase by \$721 per worker by 2021 through cost-shifting. Studies show that about 40 percent of payment cuts for public programs are passed back to privately insured people in the form of increased payment rates, in a process called cost-shifting;
- The number of Medicare beneficiaries covered under Medicare Advantage plans would fall by 1.6 million people due to cuts in payments to health plans under the CAP Act (averaging 14.3 percent over the 2013 through 2021 period);

This analysis demonstrates that legislation using across-the-board budget cuts to meet arbitrary federal spending caps can have extremely serious consequences for the most vulnerable members of our society. Changes to programs that aged, disabled and poor people rely upon for sustenance and healthcare must be considered explicitly in the context of their impacts on the beneficiary.



#### Introduction

The Congressional Budget Office (CBO) estimates that the federal budget deficit will total \$6.97 trillion over the 2012 through 2021 period. Concern over the growing deficit has resulted in legislation introduced in the U.S. Senate and the House of Representatives that would cap spending at specified levels of Gross Domestic Product (GDP). These bills would result in unprecedented cuts in federal spending for health, defense and other discretionary programs.

This study focuses on an example of these bills called the *Commitment to American Prosperity* (CAP) *Act,* which has been introduced in both the Senate (S. 245) and the House of Representatives (H.R. 1605). The CAP Act would limit federal outlays (i.e., federal spending) so they do not exceed pre-determined levels of spending as a percentage of the Gross Domestic Product (GDP). By 2021, total federal spending would be reduced from a projected 24 percent of the GDP under current law to about 20.8 percent of the GDP under the CAP Act. Using data from the CBO, we estimate that the CAP Act would reduce federal spending by \$4.2 trillion between 2013 and 2021.

The spending cap under the CAP Act would apply to all federal spending except payments on the national debt. Entitlement programs such as Medicare and Social Security would be included, as would Medicaid, defense and other federal programs. The Act includes a "sequestration" procedure that will automatically implement reductions in spending across all federal programs in any year where spending is projected to exceed the spending cap.

Under a sequestration, these reductions in spending would be allocated to three major spending groups in proportion to the growth in spending for these programs in the prior fiscal year. These include: mandatory programs such as Medicare, Medicaid and Social Security; discretionary security spending including defense; and other discretionary programs. Because spending is growing fastest for Social Security, Medicare and Medicaid – due to the aging of the population, a poor economy and coverage expansions – the spending cuts would be greatest for these entitlement programs.

The purpose of this study is to illustrate the impact that these spending reductions would have on people who depend upon federal programs for income and health care. Because health care is such a large portion of federal spending, we also present estimates of the impact that these cuts would have on health care provider revenues and the resulting effects on access to care for Medicare and Medicaid beneficiaries.

We first estimate the impact of the CAP Act proposal assuming that federal spending is sequestered according to the process prescribed in the Act. Because Congress may adopt other approaches to meet the spending limits, we also show the effect of alternative scenarios of budget reductions which achieve the same overall levels of spending reductions. Our analysis is presented in the following sections:



- The CAP Act;
- Impacts of a CAP Act sequester;
- Alternative policy options;
- Impact of reducing Medicare benefits; and
- Health sector employment effects

## A. The CAP Act

The CAP Act limits total federal spending to a predetermined percentage of GDP. The Act requires the Office of Management and Budget (OMB) to inform Congress of maximum allowable spending levels in the next fiscal year – called the "target year" – at the beginning of the prior fiscal year. This gives Congress an opportunity to adopt legislation that keeps projected spending for the target year within the spending constraint. If Congress fails to limit budgeted spending to the allowable levels, spending is automatically sequestered at the start of the target fiscal year so that the spending limit for that year is not exceeded.

### 1. Determining the Spending Limit

The Act prescribes a specific algorithm for determining the allowable spending level based upon GDP growth in prior years. Beginning in 2012, the Act sets a "nominal spending cap" for 2013 equal to 25 percent of average GDP over the prior three years, called the "look-back period." Thus the look-back period used to determine allowable spending for 2013 would include average GDP over the three-year period from 2009 to 2011, which is projected to be about \$14.6 trillion.

The allowable spending level for 2013 is equal to 25 percent of the look-back GDP for that year (\$14.6 trillion), which is equal to \$3.65 trillion. That amount exceeds the amount that CBO projects the federal government will spend under current law in 2013 (\$3.79 trillion) by about \$150 billion. Over the course of fiscal year 2012, the Congress would have the opportunity to trim \$150 billion from the federal budget for 2013. As shown in *Figure 1*, this effectively limits spending in 2013 to about 22.2 percent of total GDP for 2013, which CBO predicts will be about \$16.4 trillion.

This process would be repeated annually. However, in each year following 2013, the nominal cap (as a percent of GDP) would be reduced by 0.1711 percentage points. Thus, for example, the nominal cap of 25 percent in 2013 is reduced to about 24.8 percent of GDP in 2014. Based upon CBO projections, the effective cap on spending will fall to 20.8 percent of GDP by 2021. The nominal cap would continue to be reduced by 0.1711 percentage points per year indefinitely, resulting in proportionately larger spending cuts each year.

If Congress does not act to reduce spending to the levels permitted, the law would set in motion a sequester procedure that limits target-year spending to the allowable amount. Congress may override the cap to permit greater spending. However, under the Act, this would require a two-thirds majority in both the House of Representatives and the Senate.



	Projected GDP (billions)	Nominal Cap	Look-back GDP (billions)	Effective Cap	Permissible Spending (billions)	Projected Outlays (billions)	Breach of Cap (billions)
2009	\$14,237						
2010	\$14,513	0.0%	\$0	0.0%	\$0	\$3,456	\$0
2011	\$15,034	0.0%	\$0	0.0%	\$0	\$3,708	\$0
2012	\$15,693	0.0%	\$0	0.0%	\$0	\$3,655	\$0
2013	\$16,400	25.0%	\$14,595	22.2%	\$3,649	\$3,794	\$145
2014	\$17,258	24.8%	\$15,080	21.7%	\$3,744	\$3,975	\$231
2015	\$18,195	24.7%	\$15,709	21.3%	\$3,873	\$4,202	\$329
2016	\$19,141	24.5%	\$16,450	21.0%	\$4,028	\$4,491	\$463
2017	\$20,033	24.3%	\$17,284	21.0%	\$4,203	\$4,691	\$488
2018	\$20,935	24.1%	\$18,198	21.0%	\$4,394	\$4,885	\$491
2019	\$21,856	24.0%	\$19,123	21.0%	\$4,584	\$5,185	\$601
2020	\$22,817	23.8%	\$20,036	20.9%	\$4,769	\$5,451	\$682
2021	\$23,810	23.6%	\$20,941	20.8%	\$4,949	\$5,726	\$777
2013-2021							\$4,207

Figure 1. Spending Cap and Projected Federal Outlays: 2009-2021

Source: Lewin Group Calculations using CBO projections.

#### 2. Automatic Sequestration

The Act implements the sequestration separately for each of three groups of spending that together include all spending for on-budget and off-budget programs except interest payments on the national debt. These three groups include:

- Mandatory programs, including:
  - Social Security benefits;
  - Medicare;
  - Federal Medicaid;
  - Federal Premium Subsidies under the Accountable Care Act;
  - Federal Supplemental Security income (SSI) for low-income seniors and disabled;
  - Family Support for low-income families;
  - Veterans benefits;
  - Federal unemployment compensation;
  - Child nutrition;
  - Federal retirement;
  - Deposit insurance;
  - Fannie Mae and Freddie Mac; and
  - Other mandatory programs.
- Discretionary security spending, which we assume includes:
  - Defense; and
  - Homeland Security.
- Non-security discretionary spending.

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The amounts to be sequestered are distributed across these three groups in proportion to the total growth in prior year spending for all of the programs within each group. Thus, there would be one percentage reduction for mandatory programs that would apply uniformly to spending for each of the programs included in the mandatory spending group. Similarly, there would be a separate percentage reduction for security discretionary spending that is applied uniformly to each program in that spending category.

As discussed above, the sequester amounts are allocated to the three groups of federal spending in proportion to their respective growth in spending in the prior fiscal year. This tends to result in greater percentage reductions for mandatory programs, which are growing over twice as fast as discretionary spending. For example, while mandatory programs will comprise about 56.7 percent of federal spending over the 2013 through 2021 period, mandatory programs would see 83.8 percent of spending reductions under the CAP Act over that same period (*Figure 2*).



Figure 2. Distribution of Outlays and Potential Sequestration Amounts by Category of Spending (billions) <sup>a/</sup>

a/ These cuts will reduce interest payments on the federal debt by about \$119 billion, which brings total savings to the \$4.20 trillion spending reduction calculated above in *Figure 1*. Source: Lewin Group estimates based upon CBO federal spending projections.

As discussed above, the total reduction in spending required would be \$4.20 trillion over this period. However, because spending reductions reduce interest payments on the national debt in subsequent years this would require reducing outlays for federal programs of only \$4.09 trillion. Savings on interest payments on the federal debt over this period would be \$119 billion.

Federal spending under mandatory programs would be reduced by 14.3 percent over the 2013 through 2021 period. By comparison, discretionary security spending would fall by 6.6 percent while non-security discretionary spending would be reduced by 2.8 percent over the same period (*Figure 3*).



Figure 3. Average Percentage Reduction in Federal Spending by Spending Group under the CAP Act: 2013-2021



Source: Lewin Group estimates based upon CBO spending projections.

### 3. Implementing Sequestration

The CAP Act itself says little about how the sequester would be implemented. Instead it references the sequestration procedures specified in the *Budget and Emergency Deficit Control Act* (BEDCA) of 1985, known as the Graham-Rudman Act. That legislation specifies detailed procedures for reducing spending for specific programs such as Medicare, deposit insurance, and federal administrative expenses. However, it does not provide explicit procedures for Social Security and Medicaid, because these programs were exempt from budget cuts in the 1985 legislation. The BEDCA also limited combined Medicare cuts to 4 percent of program spending, which would be superseded by the CAP Act.

It is likely that the procedures described in the BEDCA would be adapted for other programs subject to sequestration such as Social Security and Medicaid. The Act requires that funding reductions are generally applied through a percentage reduction in all program payments from the first day of the fiscal year to the last day of the fiscal year. Thus, federal payments, though reduced, continue throughout the year rather than simply stopping when funding runs out in the latter months of the year. The 1985 legislation also states that budgetary resources sequestered shall be permanently cancelled, so that the federal government does not carry this over to the next year as an obligation.

## 4. The Role of New Government Revenues

It is noteworthy that in the absence of additional Congressional guidance, the CAP Act effectively commits the nation to address unfunded liabilities under Medicare and Social Security through reductions in net spending rather than through new government revenues. This is because the Act limits spending: not the size of the deficit. Increases in government revenues from a payroll tax increase, for example, would not avert sequestration under the Act because increases in government revenues do little to reduce spending. Because a super-



majority is required in both the House and the Senate to override a sequester based upon spending, the Act could virtually lock-in cuts in benefits as the sole approach to solving the Medicare and Social Security portions of the spending crisis.

However, it appears that increased "receipts" such as beneficiary premium payments would be counted as an offset to Medicare outlays.<sup>1</sup> Throughout this analysis, we assume that Medicare beneficiary premiums under Parts B and D adjust to changes in program costs as required under current law.

## B. Impacts of a CAP Act Sequester

As discussed above, the CAP Act provides a procedure for implementing a spending sequester for all federal programs. This process is a "blunt instrument" that simply applies proportional reductions to federal payments under all programs without explicit consideration of the hardship this would create for vulnerable populations such as the elderly, the disabled and the poor.

While Congress can always act to avert these impacts, the sequestration procedure represents what would occur if Congress becomes deadlocked and unable to negotiate an alternative solution. Moreover, Social Security and Medicare beneficiaries would face the same kind of uncertainty that physicians now experience each year as Congress struggles to avert the huge reduction in physician payments scheduled to occur under the Medicare "Sustainable Growth Rate (SGR)" system.

In our first scenario, we assume that the spending reductions called for in the Act are fully implemented through the sequestration procedure described above. We estimated the impact this would have on beneficiaries who depend on these programs and the health care providers who serve them. Our analysis is presented in the following sections:

- Sequestration for major mandatory programs;
- Impact on incomes for vulnerable populations;
- Changes in revenues by type of health care provider;
- Impact of provider payment reductions on access;
- Impact on the Medicare Advantage program;
- Cost shifting;
- Changes in insurance coverage; and
- Impact on state and local governments.

<sup>&</sup>lt;sup>1</sup> This is by reference to section 275 of the Balanced Budget and Deficit Control Act of 1985.



#### 1. Sequestration for Major Mandatory Programs

As discussed above, spending for mandatory programs would be reduced by 14.3 percent over the 2013 through 2021 time period. Substantial spending reductions would be required in 2013, the first year of implementation, and would continue to grow thereafter. Cuts for these programs would be 5.6 percent in 2013, rising to 19 percent by 2021 (*Figure 4*).





Source: Lewin Group estimates based upon CBO federal spending projections.

The percentage cut in benefits would continue to increase indefinitely beyond 2021 reflecting the growth in enrollment as the Baby Boom population retires. However, it also reflects that the CAP Act requires an annual reduction in federal spending as a percentage of the GDP each year.

Programs within the mandatory category of federal spending would be reduced by \$3.43 trillion between 2013 and 2021 (*Figure 5*). As discussed above, all of the programs within the mandatory category would receive the same percentage reductions in spending. Social Security benefits would be reduced by \$1.30 trillion over that period. This would come in the form of a percentage reduction in benefit payments averaging 14.3 percent over this time period, and 19.0 percent by 2021.

Medicare spending would be reduced by \$859 billion. This would be in the form of percentage reductions in the amounts paid to providers and health plans for health services. Federal Medicaid payments to states also would be reduced by \$575 billion. Spending for other mandatory programs would be reduced by \$693 billion, which accounts for about 20 percent of all spending cuts for mandatory programs.





Figure 5. Sequestered Mandatory Spending by Program: 2013-2021 (billions)



Source: Lewin Group estimates based upon CBO spending projections.

#### 2. Impact on Incomes for Vulnerable Populations

The cuts to mandatory programs under the Act would have a dramatic impact on incomes for a number of vulnerable populations. The reductions in Social Security income are the largest. However, payments under other mandatory programs also would be reduced by the same percentage, including programs that provide assistance to poor and otherwise vulnerable populations. These include:

- Supplemental Security Income (SSI) program;
- Family support to low-income families;
- Federal unemployment insurance;
- Earned income tax credits; and
- Veterans income security.

The reductions in benefits from these programs would increase the number of seniors living below the federal poverty level (FPL) by 1.1 million people in 2014. By 2021, the number of seniors living below the FPL would increase by 2.1 million people– reflecting the deepening cuts that will develop over time under the Act (*Figure 6*). This is a 44 percent increase in the number of seniors in poverty, reflecting both the cuts in Social Security benefits and the reduction in SSI payments, which are targeted to the very lowest-income seniors and disabled people.



	Curren	t Law	Under (		Increase in	Percent
	Number (thousands)	Percent	Number (thousands)	Percent	Number Below Poverty (thousands)	Increase in Number Below Poverty
2014						
Age 65 and Older	3,933	9.0%	5,055	11.6%	1,122	29%
Married Couples	774	3.9%	1,046	5.2%	272	35%
Single Living Alone	2,342	16.7%	3,045	21.8%	703	30%
Other Single	818	8.6%	965	10.2%	147	18%
Adults Age 18-64	24,800	12.8%	25,735	13.2%	936	4%
Children	16,066	20.9%	16,303	21.2%	238	1%
Total	44,799	14.2%	47,094	15.0%	2,295	5%
2021						
Age 65 and Older	4,796	8.9%	6,928	12.8%	2,132	44%
Married Couples	953	3.8%	1,470	5.9%	517	54%
Single Living Alone	2,881	16.7%	4,234	24.6%	1,353	47%
Other Single	962	8.2%	1,223	10.4%	262	27%
Adults Age 18-64	24,196	12.2%	25,520	12.9%	1,324	5%
Children	15,847	19.7%	16,195	20.2%	348	2%
Total	44,838	13.5%	48,642	14.6%	3,804	8%

Figure 6. Percent of Americans Living Below the Federal Poverty Level (FPL) in 2014 and 2021 With and Without the CAP Act <sup>a/</sup>

a/ Includes reductions in benefits for Social Security, Supplemental Security Income (SSI), Family Support, and Veterans.

Source: Lewin Group analysis of the March 2009 Current Populations Survey (CPS) data.

The increase in poverty would be particularly large for singleelderly living alone. The percentage of elderly living alone in poverty would increase from 16.7 percent under current law to 21.8 percent in 2014 under the Act. The poverty rate for elderly living alone would climb to 24.6 percent by 2021.

We also estimate a significant increase in the number of people under age 65 in poverty. The number of people under age 65 living below the FPL would increase by 1.1 million people in 2014 and by 2.1 million people in We used the March 2010 Current Population Survey (CPS) conducted by the Bureau of the Census to estimate these poverty effects. The CPS provides detailed information on the amounts of income received by individuals from various public and private sources including SSI, Family Support, unemployment compensation and Veterans benefits. These data enable us to estimate the number of people who are living below the Federal Poverty Level (FPL). We "aged" these data to 2014 and then again to 2021 using the Lewin Group Health Benefits Simulation Model (HBSM) based upon Bureau of the Census population projections and historical trends in the distribution of people across income levels in recent years.

Based upon Bureau of the Census data, we estimate that there will be about 44.8 million people living below the FPL in 2014, rising to 48.6 million people in 2021. We estimate that under current law, about 3.9 million people age 65 and older would be living below poverty, and the number of poor elderly would increase to 4.8 million people by 2021.



2021. This reflects the reductions in family assistance, unemployment compensation and veterans benefits, which are intended for some of the most vulnerable populations in society.

#### 3. Changes in Revenues by Type of Health Care Provider

If the CAP Act sequester is implemented, federal spending for health care also would be reduced by 14.3 percent over the 2013 through 2021 period. This would result in a reduction in federal spending for health of \$1.59 trillion (*Figure 7*), of which \$1.02 trillion would be in Medicare and \$575 billion would be in Medicaid. We assume that all of these federal spending reductions ultimately would result in reductions in revenues for health care providers.

## Figure 7. Changes in Medicare and Federal Medicaid Spending by Type of Health Care Provider: 2013-2021 (billions)



a/ Includes dental, other professional, prescription drugs and durable medical equipment. b/ Includes primarily home and community-based services provided under Medicaid. Source: Lewin Group estimates based upon National Health Expenditures Projections from the Office of the Actuary of the Centers for Medicare and Medicaid Services (CMS).

The total reduction in provider payments required under the CAP Act for Medicare would be \$1.02 trillion, even though the total federal spending cut required of Medicare is only \$859 billion (presented in *Figure 5* above). This is because reductions in outlays for services under Parts B and D of Medicare result in automatic reductions in beneficiary premiums, which offset savings from reduced payment rates for providers. Thus, to reduce federal Medicare spending by \$1.00 under a CAP Act sequestration, we must reduce average payments to providers by roughly \$1.15.

As shown in *Figure 7*, about 44 percent of these payment reductions would be for hospitals. Sixteen percent would be for physician care. About 24 percent would be reductions in payments for long-term care services, including nursing homes, home health and other personal care, which includes spending for home and community-based services.



**Provider Payment Assumptions:** Medicare provider payments must be reduced by \$1.02 trillion to achieve the net reduction in Medicare spending of \$859 billion. This is because cuts in provider payments automatically trigger reductions in Part B premiums that would offset the savings from payment reductions. Based upon the BEDCA, we assume that these cuts would be implemented as reductions in reimbursement for health care providers. There would be no change in the calculation of Medicare premiums and beneficiary co-payments.

Federal spending under Medicaid also would be reduced by \$575 billion. We assume that this would take the form of reductions in payments to states for the federal share of program costs. The states would then determine how they would respond to the reduction in funding. Because the Medicaid maintenance of effort provisions of the *Accountable Care Act* (ACA) are not changed, we assume no changes in eligibility beyond what would occur under the ACA (i.e., health reform). We assume that states respond to these funding reductions by reducing payments to providers for health services by the amount of the reduction in federal funds. (States may reduce provider payments, but are not permitted to reduce eligibility due to the maintenance of effort requirements under the ACA.)

Total provider revenues from both public and private sources would be reduced by about 5.3 percent over the 2013 through 2021 time period (*Figure 8*). However, the impact on the various types of providers would vary depending upon each provider's own unique payer-mix. For example, providers serving a disproportionate share of people with public coverage would tend to see the greatest reductions in revenues. Total provider revenues are reduced by 6.2 percent for hospitals and 3.7 percent for physicians. These estimates do not include the impact of further reductions in payment rates from TRICARE and private payers that tie their rates to Medicare.





a/ Includes changes in funding for Medicare and Medicaid before any cost shifting. Excludes effects on other federal health programs such as TRICARE and federally funded clinics.
b/ Includes primarily home and community-based Services provided under Medicaid.
c/ Includes dental, other professional, prescription drugs and medical durable equipment.
Source: Lewin Group estimates based upon National Health Expenditures Projections from the Office of the Actuary of the Centers for Medicare and Medicaid Services (CMS).



As shown in *Figure 9*, significant payment reductions would occur even in the earliest years of the program. The reduction in provider revenues would increase from 2.0 percent in 2013 to 5.6 percent by 2016, and 7.1 percent by 2021.

Year	Total Payments	Hospital	Physicians	Home Health	Nursing Home	Other Personal	Other Health <sup>c/</sup>
2013	2.0%	2.4%	1.4%	3.5%	2.5%	2.5%	1.4%
2014	3.1%	3.6%	2.2%	5.2%	3.8%	3.9%	2.2%
2015	4.2%	5.0%	2.9%	7.1%	5.3%	5.5%	3.0%
2016	5.6%	6.6%	3.8%	9.3%	6.9%	7.3%	4.1%
2017	5.5%	6.5%	3.7%	9.1%	6.8%	7.2%	4.0%
2018	5.1%	6.0%	3.4%	8.5%	6.3%	6.7%	3.7%
2019	6.0%	7.1%	4.1%	9.9%	7.4%	7.9%	4.5%
2020	6.6%	7.8%	4.6%	10.8%	8.1%	8.7%	4.9%
2021	7.1%	8.4%	4.9%	11.6%	8.6%	9.3%	5.4%
2013-2021	5.3%	6.2%	3.7%	5.5%	6.5%	7.1%	5.8%

Figure 9. Percent Reduction in Total Revenues by Type of Provider and Year: 2013-2021 a/

a/ Includes changes in funding for Medicare and Medicaid before any cost shift. Excludes effects on other federal health programs such as TRICARE and federally funded clinics.
b/ Includes primarily home and community-based Services provided under Medicaid.
c/ Includes dental, other professionals, prescription drugs and medical durable equipment.
Source: The Lewin Group estimates based upon National Health Expenditures Projections from the office of the Actuary of the Centers for Medicare and Medicaid Services (CMS).

**Hospital Impacts:** Hospital revenues would decline by \$747 billion over the 2013 through 2021 time period, which is a revenue reduction of about 6.2 percent. As discussed above, hospitals would account for 44 percent of all reimbursement reductions under a sequestration amounting to \$704 billion, including \$199 billion in Medicaid payment reductions and \$505 billion in Medicare reimbursement (*Figure 10*).

Hospital revenues also would be affected by a loss of health insurance coverage for 5.1 million people due to reductions in premium subsides under the sequester (discussed below). Premium subsidies for individuals and small employers created under the ACA would be reduced by the same proportion that other mandatory program benefits would be reduced, which would average about 14.3 percent over this period. This loss of coverage would have three effects on hospital revenues:

- Utilization of hospital services would fall by \$13 billion due to the loss of coverage;
- Uncompensated care would increase by of \$26 billion due to reduced coverage; and
- Revenues would decline by \$4 billion due to reductions in employer coverage leading to an increase in Medicaid enrollment. This reduces revenues because Medicaid payment levels are typically lower than for private health plans.



After adjusting for the cost savings resulting from reduced service use, we estimate a total reduction in net income for hospitals over that period of \$736 billion. This would reduce hospital net income by 111 percent over that period, implying that the hospital margin (i.e., profit) would be eliminated for most hospitals.





a/ Includes changes in funding for Medicare and Medicaid before cost shifting. Excludes effects on other federal health programs such as TRICARE and federally funded clinics. Net income is defined as total revenues less total expenses.

b/ The cuts in reimbursement under Medicaid (\$199 billion) and Medicare (\$505 billion) sum to \$704 billion as shown in Figure 7 above for hospitals.

Source: Lewin Group estimates.

**Physician Impacts:** Physician revenues would decline by about \$277 billion (3.7 percent) under a sequestration over the 2013 through 2021 time period. This includes a \$65 billion reduction in Medicaid payments and a reduction in Medicare payments of \$195 billion (*Figure 11*). In addition, physicians would see a reduction in service use and an increase in uncompensated care due to an increase in the number of uninsured. We also show a reduction in revenues of \$2.0 billion due to a small shift of people from employer coverage to Medicaid, where provider payment levels are substantially lower. After adjusting for reduced costs due to the loss of utilization, employer net income falls by \$270 billion (5.7 percent).

Physician revenue reductions are even greater when taken together with scheduled payment reductions under the SGR process. The SGR formula is a methodology for updating annual physician payment levels under Medicare that replaced the volume performance standard in 1997. The SGR is a formula designed to keep spending on physician services consistent with a target based on economic growth. The SGR ties payment updates to a number of factors including: changes in input costs, changes in Medicare fee-for-service (FFS) enrollment, and



changes in the volume of physician services relative to the growth in the national economy.<sup>2</sup> Based on these factors, the formula would reduce physician payments by 29.5 percent in 2012.<sup>3</sup> MedPAC reports that "although the SGR formula has yielded negative updates in recent years, the Congress has overridden the formula and taken a series of legislative actions to prevent payment reductions since 2003."<sup>4</sup> The CAP Act does not include a permanent change to the SGR formula.





a/ Includes changes in funding for Medicare and Medicaid before cost shifting. Excludes effects on other federal health programs such as TRICARE and federally funded clinics. Net income is defined to be equal to total revenues less total expenses.

b/ The cuts in reimbursement under Medicaid (\$65 billion) and Medicare (\$195 billion) sum to \$260 billion as shown in Figure 7 above for physicians.

Source: Lewin Group estimates.

If we include the loss of revenues resulting from the SGR, the total loss of revenues to physicians would be \$490 billion over the 2013 through 2021 time period (*Figure 12*). This would represent a revenue loss of 6.4 percent for physicians. There would be a small reduction in physician expenses due to the reduced utilization, resulting in a reduction in physician net income (i.e., revenues less expenses) of \$482 billion (9.7 percent).

<sup>&</sup>lt;sup>4</sup> "Report to Congress: Medicare Payment Policy," March 2011, Medicare Payment Advisory Commission MedPAC, page 82



<sup>&</sup>lt;sup>2</sup> "Physician Services Payment System: Payment Basics," Medicare Payment Advisory Commission (MedPAC), October 2009.

<sup>&</sup>lt;sup>3</sup> "Payment Preview" letter to the Medicare Payment Advisory Commission (MedPAC) from the Centers for Medicare & Medicaid Services (CMS).





a/ Includes changes in funding for Medicare and Medicaid before any cost shifting. Excludes effects on other federal health programs such as TRICARE and federally funded clinics. Net income is defined to be equal to total revenues less total expenses. Source: Lewin Group estimates.

#### 4. Impact on Cost-Shifting

Reductions in payments to providers and increases in uncompensated care can lead to increases in provider charges to privately insured people to cover these losses. Thus, reductions in payment under the CAP Act could contribute to the cost-shift. Based upon a review of the studies on the effects of cost shifting, we assume that about 40 percent of increases in uncompensated care and reductions in payments for public programs will be passed on to privately insured people in the form of increased payment rates.

Our analysis reflects that not all of these changes in uncompensated and undercompensated care are actually passed on as changes in private-sector payment rates. There are two separate studies indicating that about one-half of hospital payment shortfalls are passed on to private payers in the form of higher payment rates.<sup>5</sup> However, two other studies showed considerably less evidence of hospital cost-shifting, although they did not rule out a partial cost-shift.<sup>6</sup> One study of physician pricing by Thomas Rice et al., showed that for each one percent reduction in

<sup>&</sup>lt;sup>6</sup> Zuckerman, Stephen, "Commercial Insurers and All-Payer Regulation," *Journal of Health Economics*, Vol. 6. No. 2 (September 1987); and Hadley, Jack and Feder, Judy, "Hospital Cost Shifting and Care for the Uninsured," *Health Affairs*, Vol. 4 No. 3 (Fall 1985)



<sup>&</sup>lt;sup>5</sup> Dranove, David, "Pricing by Non-Profit Institutions: The Case of Hospital Cost Shifting," *Journal of Health Economics*. Vol. 7, No. 1 (March 1998); and Sloan, Frank and Becker, Edward, "Cross-Subsidies and Payment for Hospital Care," *Journal of Health Politics, Policy and Law*, vol. 8, No. 4 (Winter 1984)

physician payments under public programs, private-sector prices increased by 0.4 percent.<sup>7</sup> Our own analysis of hospital data indicates that about 40 percent of the increase in hospital payment shortfalls (i.e., revenues minus costs) in public programs were passed on to private payers in the form of the cost-shift during the years studied.8

In Figure 13, we present our estimates of the reduction in total revenues for hospitals and physicians with and without the cost-shift. As discussed above, before accounting for the costshift, hospital revenues would fall under the CAP Act by \$747 billion over the 2013 through 2021 period. After accounting for the cost-shift, the net reduction in revenues for hospitals would be \$446 billion. The effect of cost-shifting is similar for hospitals and physicians.





a/ Includes changes in funding for Medicare and Medicaid before and after cost-shifting. Excludes effects on other federal health programs such as TRICARE and federally funded clinics. b/ Physicians and hospitals are assumed to pass-on 40 percent of public program revenue reductions in the form of higher payment rates.

Source: Lewin Group estimates.

We estimate that premiums for employer sponsored coverage would be about \$9,127 per worker in 2011 (Figure 14). Using health care expenditure projections provided by the Office of the Actuary of the CMS, we estimate that premiums for employer-sponsored insurance will increase to \$15,194 by 2021 under current law. Using the cost-shift assumptions described

Sheils, J., Claxton, G., "Potential Cost Shifting Under Proposed Funding Reductions for Medicare and Medicaid: The Budget Reconciliation Act of 1995," (Report to the National Coalition on Health Care), The Lewin Group, December 6, 1995



Rice, Thomas, et al., "Physician Response to Medicare Payment Reductions: Impacts on public and Private Sectors," Robert Wood Johnson Grant No. 20038, September 1994.

above, we estimate that premiums would increase by about \$721 per worker (4.7 percent) by 2021 due to increased cost-shifting. The premium increase would range from \$586 per worker for small firms to \$796 per worker for large firms.

	1			
	Average Premium Per Worker in 2011	Average Premium Per Worker in 2021 under Current Law	Average Increase due to Cost-shift in 2021	Average Premium Per Worker in 2021 under CAP Act
Under 10	\$7,424	\$12,359	\$586	\$12,945
10-24	\$7,904	\$13,158	\$624	\$13,782
25-99	\$8,958	\$14,913	\$708	\$15,621
100-499	\$8,657	\$14,412	\$683	\$15,095
500-999	\$8,755	\$14,575	\$691	\$15,266
1000-4999	\$8,106	\$13,494	\$639	\$14,133
5000+	\$10,090	\$16,797	\$796	\$17,593
Government	\$10,112	\$16,834	\$797	\$17,631
Total	\$9,127	\$15,194	\$721	\$15,915

## Figure 14. Increase in Premiums for Private Employer-Sponsored Insurance Due to Cost-shifting under the CAP Act

Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

#### 5. Impact of Provider Payment Reductions on Access

Reductions in payment under public programs can have a significant impact on the willingness of providers to treat patients covered under these programs. Physician payment levels under Medicare are estimated to be about 20 percent less than payments for people with private health insurance.<sup>9</sup> Studies also have shown that physician payment levels for people covered under Medicaid are about 40 percent less than Medicare payments for the same services.<sup>10</sup> Thus, there is a strong financial incentive for physicians to treat private patients rather than people covered under public programs.

In fact, the low payment rates under Medicaid are widely thought to contribute to the low levels of physician participation in the Medicaid program, which can have serious effects on beneficiary access to care. There are also reports of reductions in the number of physicians willing to treat Medicare patients.<sup>11</sup> While there are many issues that impact on a provider's willingness to serve Medicare and Medicaid patients, it is likely that substantial reductions in provider payment under public programs would further diminish access to care for people covered by these programs.

While much of the research on the relationship between payment rates and access has focused on physician services (discussed below), access to other services would be affected as well. For

<sup>&</sup>lt;sup>11</sup> Julie Connelly, "Doctors are Opting out of Medicare," New York Times, April 1, 2009.



<sup>&</sup>lt;sup>9</sup> "Report to Congress: Medicare Payment Policy," Medicare Payment Advisory Commission (MedPAC), March 2008.

<sup>&</sup>lt;sup>10</sup> S. Zuckerman et al., "Trends in Medicaid Physician Fees, 2003-2008," *Health Affairs* (28 April,2009)

example, because Medicaid pays for about half of all long-term care spending nationally, the cuts in Medicaid could have a significant impact on access to long-term care services. By 2021, total long-term care provider revenues would be reduced by 8.3 percent for nursing home care, 11.6 percent for home health care, and 9.3 percent for home and community-based care programs.

**Provider Access:** The Center for Studying Health System Change collected data on provider willingness to accept patients with various sources of health insurance as part of their Health Tracking Physician Survey.<sup>12</sup> These data show striking differences in physician willingness to accept new patients depending upon their source of coverage. Only 4.4 percent of physicians surveyed indicated that they were not accepting any new privately insured patients (*Figure 15*). However, about 14 percent said they were not accepting new Medicare patients and about 28 percent were not accepting new Medicaid patients.

	Source of Payment for New Patient				
	Private	Medicare	Medicaid		
Accepts all New Patients	57.3%	58.0%	40.2%		
Accepts Most New Patients	30.3%	16.1%	12.4%		
Accepts Some New Patients	9.0%	12.2%	19.2%		
Accepts No New Patients	4.4%	13.7%	28.2%		

#### Figure 15. Acceptance of New Patients by Physicians by Payer Source, 2008

Source: Boukus, E. et al. "A Snapshot of US. Physicians: Key Findings from the 2008 Health Tracking Physician Survey," Center for Studying Health System Change, September, 2009.

The percentage of physicians accepting no new patients is higher for public plans than for privately insured patients across all of the specialty groups reported. For example, about 35 percent of physicians in Family/General practice were not accepting new Medicaid patients, while only 5.2 percent were not accepting new private patients and only 13.6 percent were not accepting new Medicare patients (*Figure 16*). Forty-six percent of psychiatrists surveyed indicated that they were not accepting new Medicaid patients and 35 percent were not accepting new Medicare patients, but only 17 percent said they were not taking new private patients.

<sup>&</sup>lt;sup>12</sup> Boukus, E. et al. "A Snapshot of US. Physicians: Key Findings from the 2008 Health Tracking Physician Survey," Center for Studying Health System Change, September, 2009.



	Source of Payment for New Patient				
Physician Specialty	Private	Medicare	Medicaid		
Internal Medicine	4.7%	9.5%	40.0%		
Family/General Practice	5.2%	13.6%	35.4%		
Pediatrics	2.7%	n/a	17.9%		
Medical Specialties	2.3%	5.3%	20.0%		
Psychiatry	17.0%	35.4%	46.0%		
Surgical Specialties	2.7%	4.8%	22.9%		
Obstetrics and Gynecology	3.7%	12.5%	27.9%		
Total	4.4%	13.7%	28.2%		

Figure 16. Percent of Physicians Accepting No New Patients by Specialty and Payer Source, 2008

Source: Boukus, E. et al. "A Snapshot of US. Physicians: Key Findings from the 2008 Health Tracking Physician Survey," Center for Studying Health System Change, September, 2009.

These results raise questions about how providers will respond to substantial cuts in payments under Medicare, and still lower rates under Medicaid. Studies of Medicaid physician participation indicate that participation has been greater in areas with relatively higher payment levels.<sup>13</sup> Other studies have shown that utilization of physicians' services was higher in states with relatively higher payment levels.<sup>14</sup> However, one study showed that much of the care that would have been provided in a physician's office was provided to the patient in other settings, such as hospital emergency departments and clinics.<sup>15</sup>

**Impact on Relative Payment Levels:** The sequestration under the CAP Act would reduce payment levels for both Medicaid and Medicare which is likely to result in further loss of access for beneficiaries of both programs. To illustrate, we show the impact of reducing selected Medicaid physician payment amounts per visit by the percentage reduction in rates that would be required under a sequestration. For example, average Medicaid physician payment levels for 2008 are reported to have been about \$38 per 15 minute visit with an established patient and \$44 for an emergency department visit (*Figure 17*). Under the CAP Act, these rates would be reduced by an average of 8.1 percent over the next decade, which reduces these rates to \$35 per 15 minute office visit and \$40 for emergency department visit.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> The amount of the reduction in federal Medicaid spending under the sequester as a proportion of total Medicaid spending (including state and federal shares) would average 8.1 percent over the 2013 through 2021 time period.



<sup>&</sup>lt;sup>13</sup> Hassan, M., et al., "Office practice Volume Differential among Medicaid Participants" Journal of Economics and Finance, 1997, 20; and Perloff, J., et al., "Recent trends in Pediatrition Participation in Medicaid", *Medical Care*, 1986, 24.

 <sup>&</sup>lt;sup>14</sup> Cohen, J., et al., "Medicaid Physician Fee Levels and Children's Access to care," *Health Affairs*, 1995 14; and Rosenbach, M. et al., "The impact of Medicaid on Physician Use by Low-income Children," *American Journal of Public Health*, 1989, 79.

<sup>&</sup>lt;sup>15</sup> Coburn, A., et al., "Effects of Changing Medicaid Fees on Physician Participation and Enrollees Access," Inquiry 36:, 1999

	Medicaid		Medicare		
	Before	With CAP	Before SGR	With CAP	With CAP and
	CAP Act <sup>a/</sup>	Act	Cut <sup>a/</sup>	Act	SGR Cut
15 minute Office Visit; Established Patient	\$38	\$35	\$60	\$51	\$36
Emergency Department Visits	\$44	\$40	\$50	\$43	\$30
45 minute Hospital Visit, New Patient	\$39	\$36	\$63	\$54	\$38

Figure 17. Illustration of Physician Fees Assuming Percentage Reductions under the CAP Act are Applied to Selected Payments for 2008.

a/ Payment rates presented by: Peter Cunningham, "Reimbursement and Participation in Medicaid", Center for Studying Health System Change.

b/ Assumes an average reduction in payment rates over the 2013-2021 time period of 8.1 percent. This is equal to the amount of the reduction in federal Medicaid spending under the sequester as a proportion of total Medicaid spending (including state and federal shares) over the 2013 through 2021 time period.

c/ Assumes an average reduction in payment rates over the 2013-2021 period of 14.3 percent, which is the average percentage reduction in payments under Medicare required under the sequester over the 2013 through 2021 time period.

d/ Assumes the scheduled SGR rate reduction of 29.5 percent beginning in 2012 is implemented. Source: Lewin Group estimates.

We then reduce the Medicare rates to reflect the average 14.3 percent cut in payments required under the CAP Act over the 2013 through 2021 time period. We further adjusted Medicare payment rates to reflect the 29.5 percent reduction that would occur if the SGR cuts are permitted to go into effect in 2012.<sup>17</sup> These calculations yield combined cuts in Medicare physician payment rates of 40 percent.

These estimates show that payment levels under the Medicare program would be at or below payment levels under the Medicaid program. For example, the payment rates for a 15 minute office visit with an established patient would fall to \$36 under Medicare, compared with \$35 under Medicaid. Medicare physician payments for services in hospital emergency departments would be \$30 compared with \$40 under Medicaid.

**Impact on Access to Services:** A reduction in Medicare payment rates of this magnitude suggests that the shortage of physicians willing to see Medicaid patients could extend to Medicare beneficiaries as well. In this section we estimate the effect of these rate reductions on the number of services supplied by physicians, rather than estimating the effect on the number of physicians "participating" in the Medicare program. This is because while a physician may be participating, they may also be declining to see new Medicare patients or otherwise reducing the number of Medicare patients they see. Thus, measuring the effect on the number of services actually supplied is a much better indicator of physician access than program participation rates.

We estimated the impact of these payment reductions on access based upon studies of the impact that changes in payment levels have had on the number of services supplied by physicians to

<sup>&</sup>lt;sup>17</sup> "Payment Preview" letter to the Medicare Payment Advisory Commission (MedPAC) from the Centers for Medicare & Medicaid Services (CMS). The President's budget proposal delays the cut until 2014.



Medicare and Medicaid patients. Hadley and Reschovsky showed that reductions in Medicare payment levels have been associated with reductions in the number of physician services supplied under Medicare. Using two different methodologies they found that a 10 percent reduction in payment levels resulted in a reduction in services provided ranging between 1.2 percent and 6.1 percent (these are physician supply elasticity estimates of 0.12 and 0.61).<sup>18</sup> An older study also reported that a 10 percent reduction in Medicaid payment levels is associated with a reduction in physician services of between 2.0 percent and 3.0 percent (a supply elasticity of 0.2 and 0.3).<sup>19</sup>

Based upon this research, we estimate a decline of between 5 percent and 24 percent in services supplied by physicians for Medicare beneficiaries if the CAP Act is implemented together with the SGR cuts (*Figure 18*). Physician services supplied to Medicaid patients would decline by between 2 percent and 4 percent under the CAP Act. These estimates may overstate the impact because research has shown that the supply of services is also affected by the prices paid by alternative payers. Thus, the reduction in services supplied by physicians may be smaller than we have estimated because Medicaid payments also are falling at the same time.





a/ Assumes a Medicaid physician supply elasticity ranging from 0.2 to 0.3. See: Hadley, J. "Physician Participation in Medicaid, Evidence from California, " *Health Services Research*", 4, 266-280; and Mitchell, J., Medicaid Participation by Medical and Surgical Specialists, *Medical Care 9*, 1983 929-938. b/ Assumes a Medicare physician supply elasticity ranging from 0.12 to 0.61. See: Hadley, J., and Reschovsky, J., "Medicare Fees and Physicians Medicare Service Volume: Beneficiaries Treated and Services per Beneficiary", *Int J Health Care Finance Econ*, 2006. Source: Lewin Group estimates.

These estimates may seem in conflict with the fact that cuts in Medicare reimbursement historically have been partly offset by an increase in utilization and service intensity. However,

<sup>&</sup>lt;sup>19</sup> Hadley, J., "Physician Participation in Medicaid; Evidence from California, "*Health Services Research*", 1980, 4, 266-280; and Mitchell, J. Medicaid Participation by Medical and Surgical Specialists, *Medical Care* 9, 1983, 929-938.



<sup>&</sup>lt;sup>18</sup> Hadley, J., and Reschovsky, J., "Medicare Fees and Physicians Medicare Service Volume: Beneficiaries Treated and Services per Beneficiary", *Int J Health Care Finance Econ*, 2006.

the research by Hadley and Reschovsky suggests that this response is due primarily to increases in service intensity and that physicians do reduce supply as prices fall.

**Medicare Physician Participation:** Another indicator of access for Medicare beneficiaries is the percentage of physicians "participating" in the program. There are three Medicare contracting options for physicians, including:

- 1. Physicians may sign a participation (PAR) agreement and accept Medicare's allowed charges as payment in full for all of their Medicare patients;
- 2. They may elect to be non-participating (non-Par) physicians, which reduces the Medicare allowed fee by 5 percent but permits them to bill patients 15 percent more than that amount; or
- 3. Become a private contracting physician, agreeing to bill patients directly and forgo any payments from Medicare to their patients or themselves.

The Medicare Payment Advisory Commission (MedPAC) reports that in 2009, "95 percent of physicians, limited license practitioners and other practitioners who billed Medicare had participation agreements with Medicare."<sup>20</sup> This is because there are several advantages to being a PAR physician. For example, as noted, the Medicare-approved amount for a PAR physician is 5 percent higher than the Medicare-approved amount for non-PAR physicians. PAR physicians are also included in directories that are available for beneficiaries who are looking for a provider. In addition, carriers provide a toll-free claims processing line and process PAR physician claims more quickly.

The chief advantage of being a non-PAR physician is that non-PAR physicians may charge patients more in total than if they are a PAR physician. Due to the 5 percent reduction in Medicare rates, they are effectively prevented from collecting more than 9.25 percent more than they would if they were a participating physician. Becoming a non-PAR physician could become more attractive if rates are reduced as much as they would be under the CAP Act. Also, some physicians with affluent patients may find it feasible to become a private contracting physician who operates completely outside Medicare.

The Surgical Coalition published results from a 2010 survey of physicians, in which they were asked how they would respond to the 21 percent cut in physicians payments then scheduled to occur under the SGR formula in 2010 when the survey was conducted (*Figure 19*). (The SGR cut is projected to increase to 29.5 percent if implemented in 2012). About 37 percent said they would change their status to non-participating. Twenty-nine percent said they would opt-out of Medicare and privately contract with Medicare patients. The latter is a particularly significant change, because it means that both the physicians and their patients would be unable to receive any payment from Medicare for services provided by these physicians, thus necessitating that the patients pay the full cost out-of-pocket.

<sup>&</sup>lt;sup>20</sup> "Report to Congress: Medicare Payment Policy," March 2011, Medicare Payment Advisory Commission MedPAC, page 82.



#### Figure 19. Potential Changes in Medicare Participation by Surgeons if an SGR Cut of 21 Percent is Implemented



Source: "Survey on Medicare Participation among Surgeons: Report on the Future of Medicare Physician Payment and the Effect on Surgeons and Their Patients," presentation slides, Surgical Coalition, March 2010.

#### 6. Impact on the Medicare Advantage Program

The Medicare Advantage (MA) program gives beneficiaries the option of taking their Medicare coverage through an approved private health plan rather than the traditional fee-for-service (FFS) Medicare program. Health plans receive a payment from Medicare for the Medicare beneficiaries they cover that reflects the demographic characteristics of the individual and other risk characteristics that affect the beneficiary's expected health care costs under the program.

Prior to the ACA, payments to MA plans were about 10 percent higher than expected costs as measured by the difference between the benchmark payment amount (i.e., average area cost under FFS) and the amount bid by the health plans. The plans were required to use this amount to offer supplemental benefits. Under the ACA, this overpayment was reduced by roughly half, which reduces the plans' ability to attract enrollment with added benefits. However, as a result of this change, the CBO estimates that MA enrollment will decline from about 11.7 million beneficiaries in 2011 to about 7.5 million beneficiaries by 2018 (*Figure 20*).







a/ Assumes an enrollment elasticity of 0.96. See: Morrisey, M., et al, "Favorable Selection, Risk Adjustment and the Medicare Advantage Programs," presented to the International Health Economics Association.

Source: Lewin Group estimates.

The CAP Act would reduce payments to health plans by the same percentage that it would reduce payments to providers, which as discussed above, we estimate to average about 14.3 percent over the 2013 through 2021 time period. This would reduce enrollment by reducing the plan's ability to offer additional benefits. However, plans may be able to negotiate deeper discounts with providers because payments under the FFS Medicare also will have been reduced by the same percentage.

Morrisey has developed estimates of the effect of changes in MA payment rates on enrollment using the 5 percent Medicare claims data for 1999 through 2008. The study showed that a 10 percent increase in plan payments increased enrollment and reduced disenrollment, resulting in a 9.6 percent increase in enrollees. Using this result, we estimate that the payment caps under the CAP Act would reduce enrollment by an additional 1.1 million people by 2017 with the enrollment loss growing to 1.6 million people by 2021.

#### 7. Changes in Health Insurance Coverage

The CAP Act would affect insurance coverage in two ways. First, the sequestration would apply to the new premium tax credit created under the ACA to help people purchase health insurance. The premium tax credit is a mandatory program that provides premium subsidies to people with incomes below 400 percent of the FPL purchasing non-group coverage who are otherwise ineligible for Medicaid. Like other mandatory programs, these payments would be reduced by an average of 14.3 percent over the 2013 to 2021 time period under the CAP Act. Payments for each eligible person would be reduced, thus, increasing the share of the premium they would have to pay out-of-pocket, resulting in fewer people taking coverage.



Second, a sequestration under the CAP Act would increase the cost of private insurance due to increased cost-shifting. As discussed above, roughly 40 percent of the reductions in payments to providers under Medicare and Medicaid would be passed on to privately insured patients in the form of higher payment rates. This cost-shift will increase the cost of private insurance for both employers that offer coverage and those purchasing private coverage as individuals in the non-group market. This increase in premiums would result in a reduction in the number of people with insurance.

In *Figure 21* we present estimates of the number of people with various forms of insurance coverage in 2021 with and without the CAP Act. Under current law, we estimate that 146.4 million people would have employer coverage and 36.7 million people would have non-group insurance, of which 26.4 million would receive premium subsidies. About 59.8 million people would be covered under Medicaid, which is expanded under the ACA to provide coverage for all adults living below 133 percent of the FPL. About 20.8 million people would be uninsured, compared with about 50 million uninsured before the ACA.

	Current Law (with ACA)	CAP Act	Change
Employer- Workers and Dependents	146,362	141,212	-5,150
Non-Group			
Subsidized in Exchange	26,390	23,195	-3,195
Unsubsidized	10,351	13,379	3,028
Employer Retiree	2,960	2,960	0
TRICARE	5,344	5,385	41
Medicare-Including Dual Eligible	55,947	55,947	0
Medicaid-Excluding Dual Eligible	59,848	60,044	175
Uninsured	20,776	25,856	5,080
Total	327,978	327,978	

# Figure 21. Changes in Sources of Health Insurance Coverage under the CAP Act for 2021 (thousands)

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

The number of people without health insurance would increase from 20.8 million under the ACA to about 25.9 million if the CAP Act sequestration were implemented. This is an increase in the number of uninsured of 5.1 million people. The number of people with employer coverage would drop from 146.4 million to 141.2 million, reflecting the increase in premiums resulting from cost-shifting. As discussed above, we estimate the cost-shift to average about \$721 per worker per year in 2021.

We estimated the impact of a sequestration under the CAP Act using the Health Benefits Simulation Model (HBSM). The model simulates the effect of cost shifting on premiums for private insurance as discussed above. It then simulates the number of employers discontinuing coverage based upon multivariate models of how changes in premiums affect the likelihood of purchasing insurance. The model also simulates the number of people taking non-group coverage based upon the premium charged, net of any subsidies the individual is eligible to receive. The increases in cost shifting and the reduction in subsidy amounts are modeled as an increase in the net cost of insurance to the individual using multivariate models of how individual decisions to take coverage are affected by changes in premiums.



The number of people with non-group coverage who are receiving premium subsidies would decline by 3.2 million people reflecting the reduction in subsidies under the sequester. These losses of coverage would be partially offset by increases in the number of people purchasing unsubsidized non-group coverage (3.0 million people), and a small increase in Medicaid enrollment (175,000 people). These increases in coverage primarily include people who lost employer coverage due to the premium increase.

#### 8. Impact on State and Local Governments

The Bureau of the Census reports that in 2008, federal support to states was equal to about 18 percent of total state and local government revenues.<sup>21</sup> Total state and local government revenues were \$2.66 trillion, of which \$481 billion was from federal sources. These include federal grants and matching funds for a wide range of subjects including education, law enforcement, Medicaid, Family Support, highways, mental health and other programs. This federal aid increased temporarily under the American Recovery and Reinvestment Act (ARRA) of 2009, which was passed to provide economic stimulus during the recent recession. These funds expire in 2012.

A detailed analysis of the impacts of the CAP Act on state and local governments is beyond the scope of this study. However, we know that about half of it is federal matching payments for Medicaid. As shown in *Figure 22*, federal payments to states for Medicaid and the family support program under the CAP Act will be reduced by about \$520 billion over the 2013 through 2021 time period. The total reduction in federal revenues would average between 10 percent and 14 percent, depending upon the mix of federal payments to states under discretionary vs. mandatory programs. (Mandatory spending cuts will average 14.3 percent while non-security discretionary funding will be reduced by an average of about 2.8 percent as shown above in *Figure 3*).

	Medicaid	TANF	Total
2013	\$15.1	\$1.4	\$16.5
2014	\$28.3	\$2.2	\$30.4
2015	\$42.4	\$2.9	\$45.3
2016	\$59.7	\$3.6	\$63.3
2017	\$57.4	\$3.2	\$60.6
2018	\$55.3	\$2.9	\$58.2
2019	\$69.3	\$3.4	\$72.7
2020	\$76.9	\$3.5	\$80.5
2021	\$89.2	\$3.8	\$93.0
2013-2021	\$493.6	\$26.8	\$520.4

#### Figure 22. Reductions in Federal Funding to States for Two Programs: 2013-2021 (billions)

Source: Lewin Group calculations.

<sup>&</sup>lt;sup>21</sup> "State and Local Government Finances Summary: 2008," U.S. Bureau of the Census, 2008 annual Surveys of State and Local Government Finances, April 2011.



We assume that the CAP Act reduces payments to states without changing the federal matching rates. (The federal government matches state spending at rates varying from 50 percent to about 75 percent depending upon the state.) Under the CAP Act, we assume that the federal share is computed exactly as under current law, but that the amounts actually distributed to states would be reduced to reflect the spending cap. This seems most consistent with the processes described in the BEDCA, which is referenced in the CAP Act. We also assume that the total amount of state funding for Medicaid would be unchanged, so that provider payment levels are reduced by the amount of the reduction in federal spending only.

## C. Alternative Policy Scenarios

Even if the CAP were passed by Congress, it is unlikely that the sequestration process described above would be implemented as written. Proponents of the Act intend that the threat of a sequestration will be sufficient to cause Congress to cut spending in a less arbitrary way that minimizes unintended consequences. In particular, it is unlikely that Congress would cut Social Security benefits to seniors and disabled people, many of whom live close to the federal poverty line. However, it is impossible to predict the specific steps Congress would take to reduce spending.

Consequently, we examine two alternative policy scenarios. In both, we assume that Social Security is exempt from a sequestration of spending. This means that to meet the CAP Act spending limits, even greater percentage reductions in spending would be required of other non-Social Security programs, including both other mandatory programs and discretionary spending. In particular, it would increase the reductions in provider payments under Medicare, Medicaid and other mandatory programs.

We present a comparison of the effects of the CAP Act under these policy options in the following sections:

- Alternative policy scenarios;
- Impact on provider revenues;
- People living below the federal poverty line; and
- Changes in health insurance coverage.

## 1. Alternative Policy Scenarios

In the first policy scenario, we assume that the spending cuts for health programs would be in the form of proportional reductions in payments to health care providers under Medicare and state governments for Medicaid. This is the same approach that would be used under the CAP Act as written, except to the extent that the percentage reductions in payments are increased to reflect the exemption of Social Security benefits from the sequestration.

Under the second policy scenario the amount of the reductions taken from each program are the same as under the first policy scenario (i.e., Social Security is exempt). However, we assume that Medicare beneficiaries are required to pay for about 25 percent of the spending reductions under Medicare in the form of higher beneficiary cost-sharing and Medicare Part B premiums. For illustrative purposes, we assume the following changes for beneficiaries:



- Adopt a 10 percent copayment requirement for home health services, which requires no copays under current law;
- Adopt a 20 percent copayment requirement for laboratory services, which also are free of beneficiary copayments under current law; and
- The remainder of beneficiary cuts would come in the form of a percentage increase in Part B premiums for all Medicare beneficiaries covered under Part B (these premiums are paid under Medicaid for people with incomes below 135 percent of the FPL.).

The total amount of the increase in beneficiary cost-sharing under the second policy scenario would be \$346 billion over the 2013 though 2021 time period. The CBO estimates that federal savings for the increase in home health copayments will be about \$40.1 billion over that period and that the copay on laboratory services would save about \$25 billion. This leaves about \$281 billion to be raised through increased Part B premiums. This represents an increase in total Medicare premium payments over this period of about 25 percent.

All three scenarios reduce federal spending to the same maximum spending levels in each year as required under the CAP Act.

As discussed above, the CAP Act in its current form would reduce spending under mandatory programs by 14.3 percent over the 2013 through 2021 time period. If Social Security is exempt from sequestration (policy scenario #1), spending for all mandatory programs other than Social Security would be reduced by 23 percent (*Figure 23*). This reflects that by exempting Social Security, a larger reduction in other program spending is required to keep spending within the allowable limits specified under the Act. If beneficiaries are required to take 25 percent of the Medicare cuts, as under the second policy scenario, the reduction in federal payments for Medicare providers would drop from 23.0 percent to 18.0 percent, while other mandatory programs would continue to be reduced by 23.0 percent as under policy scenario # 2.



Figure 23. Average Percent Reduction in Funding for Mandatory Health Programs under the CAP Act and Alternative Policy Scenarios: 2013-2021

Source: Lewin Group estimates



#### 2. Impact on Provider Revenues

As discussed above, total health care provider revenues would fall by 5.3 percent under the CAP Act as currently written. If Social Security is exempt as under policy scenario # 1, provider revenues would fall by 7.6 percent (*Figure 24*). Requiring beneficiaries to pay for 25 percent of Medicare spending cuts reduces the required reduction in payments to providers to 6.5 percent (policy scenario #2). The percentage reductions in total provider revenues vary depending upon payer mix. For example, providers with a large share of Medicare or Medicaid patients are affected more than providers with a smaller share of patients in these programs.

	CAP Act as	Exempt Social Security		
	Written	No Beneficiary Cuts	Beneficiaries Take 25% of Medicare Cuts	
Total	5.3%	7.6%	6.5%	
Hospitals	6.2%	9.1%	7.6%	
Physicians	3.7%	5.0%	4.5%	
Home Health	5.5%	7.4%	5.6%	
Nursing Home	6.5%	9.8%	8.9%	
Other Personal b/	7.1%	11.4%	11.4%	
Other Health Care <sup>c/</sup>	5.8%	8.3%	7.1%	

Figure 24. Percentage Reduction in Total Provider Revenues by Type of Provider under Alternative
Policy Scenarios: 2013-2021 a/

a/ Includes changes in funding for Medicare and Medicaid. Excludes effects on other federal health programs such as TRICARE and federally funded clinics.

b/ Includes primarily home and community-based Services provided under Medicaid. c/ Includes dental, other professionals, prescription drugs and medical durable equipment. Source: Lewin Group estimates.

For hospitals, exempting Social Security would increase the reduction in total revenues from 6.2 percent under the CAP Act to 9.1 percent (policy Scenario #1). Sharing 25 percent of the Medicare cuts with beneficiaries (policy scenario #2) would reduce the overall hospital revenue loss to 7.6 percent. Net income to hospitals (i.e., revenues less expenses) would decline by between 111 percent and 162 percent, depending upon the scenario (*Figure 25*).





Figure 25. Percent Changes in Total Hospital Revenues and Net Income under Variations on the CAP Act  $^{\rm a\prime}$ 

a/ Includes changes in funding for Medicare and Medicaid. Excludes effects on other federal health programs such as TRICARE and federally funded clinics. Net income is defined as total revenues less total expenses.

Source: Lewin Group estimates.

The total loss of physician revenues from all sources would increase from 3.7 percent under the Cap Act to 5.0 percent if Social Security is exempt (policy scenario #1). Revenue losses fall back to about 4.5 percent if 25 percent of the Medicare cuts are taken by beneficiaries as in the second policy scenario (*Figure 26*). Detailed graphics on provider revenue changes under these scenarios are presented in Appendix A.





## Figure 26. Percent Change in Total Physician Revenues and Net Income under Variations on the CAP Act: Excluding Impact of SGR Cuts<sup>a/</sup>

a/ Includes changes in funding for Medicare and Medicaid. Excludes effects on other federal health programs such as TRICARE and federally funded clinics. Net income is defined as total revenues less total expenses.

Source: Lewin Group estimates.

#### 3. People Living Below the Federal Poverty Line

As discussed above, we estimate that the CAP Act in its current form would increase the number of people living below the FPL by 3.8 million people by 2021. This reflects the cuts in Social Security benefits and other federal government income subsidies including Supplemental Security Income (SSI), federal unemployment insurance, family assistance and veterans benefits. Of the 3.8 million people who fall below the poverty level, 2.1 million would be people over the age of 65 (*Figure 27*).


		ty Under nt Law	Increase in Number in Poverty (thousands)				
	Number (thousands)	Percent	CAP Act as Written	CAP Act with Social Security Exempt	CAP Act with SS Exempt & Beneficiaries Take 25% of Medicare Cuts		
Age 65 & Older	4,796	8.9%	2,137	269	269		
Married Couples	953	3.8%	517	25	25		
Single Living Alone	2,881	16.7%	1,353	204	204		
Other	967	8.2%	262	40	40		
Adults 18-64	24,196	12.2%	1,324	1,253	1,253		
Children	15,844	19.7%	348	344	344		
Total	44,838	13.5%	3,804	1,866	1,866		

# Figure 27. Changes in the Number of People Living Below the Poverty Line under the CAP Act in 2021

Source: Lewin Group Estimates using the Health benefits Simulation model (HBSM)

Exempting Social Security would avoid much of the increase in poverty under the Act for older Americans. However, reductions in payments under other federal income assistance programs would actually increase. This is because exempting Social Security increases the percentage reduction in spending for other mandatory programs over the 2013 through 2021 period from 14.3 percent to 23 percent.

Thus, we estimate that in 2021 the number of people who are moved below the poverty would drop from 3.8 million people under the CAP act as written to 1.9 million people. The number of seniors added to poverty would drop from 2.1 million people to 269,000. The change in the poverty population under the first and second policy scenarios is the same because the adjustments to income assistance programs under the Act are identical in both scenarios. Changes in health care expenses do not affect an individual's poverty status, which is based solely on income.

#### 4. Changes in Health Insurance Coverage

As discussed above, the CAP Act would increase the number of Americans without health insurance by 5.1 million people. This would occur primarily due to the average 14.3 percent reduction in premium subsidies required of mandatory programs under the Act over the 2013 through 2021 time period. It also reflects an increase in private health insurance premiums due to increased cost-shifting averaging \$721 per worker in 2021, which reduces both employer and non-group health insurance premiums (*Figure 28*).



Firm Size	Average	Change under	Social Security Exempt			
	Premium per Worker	CAP Act as Written	No Beneficiary Cuts	Beneficiaries take 25% of Medicare Cuts		
Under 10	\$12,359	\$586	\$831	\$707		
10-24	\$13,158	\$624	\$885	\$753		
25-99	\$14,913	\$708	\$1,003	\$853		
100-499	\$14,412	\$683	\$967	\$823		
500-999	\$14,575	\$691	\$979	\$833		
1000-4999	\$13,494	\$639	\$906	\$771		
5000+	\$16,797	\$796	\$1,128	\$960		
Government	\$16,834	\$797	\$1,130	\$962		
Total	\$15,194	\$721	\$1,022	\$869		

Figure 28. Average Increase in Cost-shifting Per Worker under the CAP Act: 2021

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

Exempting Social Security from sequestration would tend to increase the loss of coverage under the Act. The primary reason for this is that exempting Social Security increases the percentage reduction in mandatory benefits programs from 14.3 percent under the CAP Act in its current form, to 23 percent over the 2013 through 2021 time period. This reduces the premium subsidies even further resulting in fewer people taking coverage. Exempting Social Security also increases the cuts in provider payments to public programs, which would increase the cost-shift by an average of \$1,022 per worker (*Figure 28*). As a result, the number of people losing coverage would increase from 5.1 million people under the Act in its current form to 8.8 million people (*Figure 29*).

Coverage loss is reduced under the second policy scenario, which requires 25 percent of the Medicare cuts to be taken by beneficiaries in the form of increased Part B premiums and copayments for home health and laboratory services. This reduces the cost-shift resulting from the sequestration, which reduces the number of employers discontinuing coverage. This reduces coverage loss under the second policy scenario to 8.0 million people.



		Change	Social Security Exempt			
	Current Law (with ACA)	under CAP Act As Written	All in Provider Cuts	Beneficiaries Take 25% of Medicare Cuts		
Employer- Workers and Dependents	146,362	-5,150	-8,920	-6,676		
Non-Group						
Subsidized in Exchange	26,390	-3,195	-4,657	-4,916		
Unsubsidized	10,351	3,028	4,520	3,314		
Employer Retiree	2,960	0	0	0		
TRICARE	5,344	41	41	40		
Medicare-Including Dual Eligible	55,947	0	0	0		
Medicaid-Excluding Dual Eligible	59,848	175	234	209		
Uninsured	20,776	5,080	8,755	8,031		
Total	327,978					

Figure 29. Changes in Sources of Health Insurance Coverage under the CAP Act in 2021 (thousands)

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

#### D. Impact of Reducing Medicare Benefits

The sequestration process indicated in the CAP Act implements reductions in spending for Medicare entirely through provider payment reductions. There are no changes to benefits, costsharing or premiums under the Act in its current form. However, the Act recognizes changes in premiums for Medicare as an offset to spending, should this occur. Thus, increases in premiums are counted as a reduction in spending for purposes of compliance with the maximum spending levels.

#### 1. Impact on Beneficiaries

In the second policy alternative modeled above, we assume that Medicare beneficiaries are required to pay for about 25 percent of the spending reductions under Medicare in the form of higher beneficiary cost-sharing and Medicare Part B premiums. We assume that this is achieved by adding copayments for home health services (10 percent) and adopting the standard Part B copayment of 20 percent for laboratory services. The remainder of beneficiary cuts would come in the form of a percentage increase in Part B premiums for all Medicare beneficiaries covered under Part B.

The impact that these changes would have on beneficiaries would differ depending upon their use of home health and lab services, as well as their sources of insurance coverage. For Medicare beneficiaries without supplemental insurance, the entire amount of the added copayments would be paid out-of-pocket for those with such services.

Beneficiaries who have purchased supplemental coverage would generally find that the supplemental plan will cover these amounts. However, the cost of these copayments ultimately



would be spread across all beneficiaries purchasing supplemental coverage in the form of higher premiums, depending upon the type of policy they have.

For people with employer-sponsored retiree coverage, the employer plan would generally cover the copayments. However, this will increase employer plan costs, which will generally result in an increase in the premium contribution retirees make to the employer plan in cases where employee contributions are required.

The premium increases for Part B would affect the majority of beneficiaries. We assume that the premium is proportionately increased so that beneficiaries who now pay a higher incomerelated premium would also make a similarly higher payment than lower-income people. Also, these premiums would be paid by Medicaid for beneficiaries with incomes below 135 percent of the FPL, which would protect most low-income beneficiaries from premium increases.

We estimate that average beneficiary out-of-pocket spending would increase by \$391 per beneficiary in 2021 under this policy scenario (i.e., scenario#2; *Figure 30*). Costs would generally increase with age, reflecting the increase in home health utilization as people grow older. Out-of-pocket spending would tend to be lowest for people in the lowest income groups, reflecting the Medicaid subsidy for low-income beneficiaries. The increase in out-of-pocket spending would also increase as income increases, partly because of the higher payments for people at higher income levels.

	Medicare		Total						
	Enrollees (millions)	Lab Copays	HHA Copays	Part B Premiums	Retiree Premiums	Medi-gap Premiums	Increase to Enrollees		
Total	58.2	\$22	\$55	\$262	\$18	\$34	\$391		
Age									
Under 65	7.6	\$14	\$83	\$137	\$6	\$6	\$247		
65-74	27.3	\$20	\$28	\$285	\$22	\$31	\$387		
75-84	18.1	\$29	\$80	\$275	\$18	\$50	\$452		
85+	5.2	\$17	\$141	\$250	\$15	\$59	\$481		
Living Arrangement									
Living Alone	18.7	\$19	\$51	\$245	\$13	\$38	\$365		
Couples	25.5	\$26	\$54	\$301	\$24	\$36	\$441		
Other Arrangements	14.0	\$15	\$63	\$166	\$9	\$22	\$275		
Income as a Percent of	Income as a Percent of FPL								
Below Poverty	6.3	\$8	\$17	\$54	\$7	\$10	\$97		
100-199% FPL	15.0	\$28	\$92	\$237	\$8	\$38	\$403		
200-299% FPL	11.9	\$31	\$81	\$313	\$20	\$47	\$493		
300-399% FPL	7.5	\$12	\$35	\$328	\$26	\$37	\$437		
400% FPL & above	17.4	\$21	\$23	\$374	\$34	\$37	\$488		

Figure 30. Changes in Out-of-pocket Spending per Medicare Beneficiary under the CAP Act in 2021

Source: Lewin Group estimates using the Health benefits Simulation Model (HBSM)

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#### 2. Combined Impact of Changes in Benefits and Income Support Programs

Our second policy scenario would include both the changes to Medicare benefits presented in *Figure 31* together with cuts to other mandatory programs. While Social Security benefits are exempt under this scenario, other income support programs would continue to be subject to sequestration, such as Supplemental Security Income (SSI) for low-income seniors and disabled and veterans benefits. As discussed above, cuts in these programs would average about 23 percent over the 2013 through 2021 period. However, by 2021 mandatory benefits programs including SSI would be reduced by 30.6 percent.

We developed these estimates using the Medical Expenditures Panel Survey (MEPS) data for 2009. These data provide information on health expenditures by source of payment and type of service for the US population including those enrolled in Medicare. Using the data, we were able to calculate the increase in copayments for beneficiaries using home health and laboratory services. We then adjusted these data to 2021 levels based upon projections of home health services utilization developed by the Office of the Actuary of the CMS. Spending for laboratory services was assumed to increase in proportion to their projections of the increase in physician spending. Changes in SSI income were estimated using the CPS data used for the poverty analysis presented above for these population groups.

The reduction in cash benefits for Medicare eligible people would average about \$269 per Medicare beneficiary in 2021 (*Figure 31*). The average loss of cash assistance will be highest for Medicare disabled beneficiaries under the age of 65 (\$743 per year) due to a loss of benefits from several sources including SSI, veterans benefits and other government assistance.

	Medicare Enrollees (millions)	Benefits Reductions for Enrollees	Reduction in SSI, Veterans and Other Federal Assistance	Total Reduction in Benefits
Total	58.2	\$391	\$269	\$660
		Age		
Under 65 (disabled)	7.6	\$247	\$743	\$989
65-74	27.3	\$387	\$189	\$576
75-84	18.1	\$452	\$206	\$658
85+	5.2	\$481	\$212	\$693
	Livin	g Arrangement		
Living Alone	18.7	\$365	\$308	\$673
Couples	25.5	\$441	\$203	\$644
Other Arrangements	14.0	\$275	\$337	\$612
Income as	s a Percent of	the Federal Po	verty Level (FPL	.)
Below Poverty	6.3	\$97	\$363	\$460
100-199% FPL	15.0	\$403	\$200	\$603
200-299% FPL	11.9	\$493	\$189	\$682
300-399% FPL	7.5	\$437	\$274	\$711
400% FPL & above	17.4	\$488	\$347	\$835

## Figure 31. Changes in Cash Assistance and Out-of-pocket Spending per Medicare Beneficiary under the CAP Act in 2021

Source: Lewin Group estimates using the Health benefits Simulation Model (HBSM)



The average total reduction in benefits for Medicare Beneficiaries would be \$660 in 2021, including \$391 in reduced Medicare benefits and \$269 in reduced cash assistance. Among people age 65 and older, the average combined impact on benefits would be greatest for people age 85 and older, where the total loss of benefits would average \$693 per beneficiary. Disabled beneficiaries would see a combined loss of benefits of \$989 per beneficiary in 2021.

### E. Health Sector Employment Effects

The reductions in federal health spending are likely to have an effect on wages and employment in the health care sector. We estimated these losses of employment and wages in two steps. The first step is to forecast future employment growth assuming no cap. The second is to estimate how much the cap would impact health care spending, and how much the spending reduction would, in turn, impact health sector employment.

How the CAP Act affects federal health spending depends on how it is implemented. Automatic sequestration will require a 19.0 percent reduction in federal health spending by 2021 (7.1 percent reduction in total provider revenues); if Social Security is exempted, the required health spending reduction by 2021 is 30.6 percent (10.2 percent reduction in total provider revenues). The implications of reductions of such magnitude for health care sector employment and wages depends on how sensitive health care sector supply and labor demand are to wages.

Since these sensitivities are likely to vary by type of health sector worker, we break down total health sector employment into three occupation groups – Health Care Practitioners and Technical Occupations, Health Care Support Occupations, and Health Care Workers in Other Occupations – and derive separate estimates for each group.<sup>22</sup> We then derive estimates for the health sector as a whole by aggregating the occupation level estimates. Our calculations suggest that the 2021 aggregate employment reduction due to automatic sequestration will be about 6.7 percent (1.3 million health care workers) and the estimated reduction under Social Security exemption will be about 9.6 percent (1.8 million workers). This compares with overall employment without caps on federal health spending of 18.9 million workers.

The starting point for these calculations are historical data on medical care spending and health sector employment, supplemented with future projections of health care spending to the future in the absence of the CAP Act. Projections of future health care spending have been made by the CMS, which maintains the National Health Expenditure (NHE) Accounts. *Figure 32* shows historical data for 2001 and 2009 and projected nominal GDP to 2021. In that year, real NHE in 2009 dollars equaled \$1,941 billion. Also in that year, 11.1 million workers were employed in the health care sector (10.6 percent of total non-farm employment in 2001). Between 2001 and 2009, NHE grew from 14.5 percent of GDP to 17.6 percent while health sector employment grew

<sup>&</sup>lt;sup>22</sup> Health Care Practitioners and Technical Occupations form Occupational Employment Statistics (OES) category 29, which includes various categories of medical doctors, nurses, physicians assistants, and other groups of skilled health care workers. The Health Care Support Occupations is OES occupation group 31; it contains home health aides, psychiatric aids, occupational therapy aids, and other categories of aids. It is a relatively unskilled category in comparison with the first group. The remaining health care workers are scattered among various other occupations not included in OES categories 29 and 31 and may range from highly skilled (e.g., managers and accountants) to unskilled.



by about 2.4 million workers, to 13.5 million.<sup>23</sup> The implied annual growth rate in real NHE over this period was 3.1 percent; the implied annual growth rate in employment was 2.4 percent.

The 2001 and 2009 health care employment counts were obtained from the Bureau of Labor Statistics (BLS).<sup>24</sup>

*Figure 32* shows NHE per health care worker (real NHE divided by number of health care workers). NHE per worker averaged \$173,489 in 2001; by 2009, this number had grown to \$183,604. The average annual growth rate in real NHE per health care worker over this time period was 0.7 percent.

	Nominal GDP (billions)	Nominal NHE (billions)	NHE as % of GDP	Real NHE (billions; 2009 \$)	Health Care Emp (1000s)	NHE Per HC Worker
2001	\$10,286	\$1,495	14.5	\$1,941	11,187	\$173,489
2009	\$14,119	\$2,486	17.6	\$2,486	13,542	\$183,604
2021	\$23,810	\$4,762	20.0	\$3,779	18,930	\$199,635

Figure 32. GDP, National Health Expenditures (NHE) and Health Care Employment in the U. S.

Sources: GDP and NHE for 2001 and 2009 are available a pdf file containing historical data that is available from CMS, Office of the Actuary. See (<u>https://www.cms.gov/NationalHealthExpendData/</u><u>02\_NationalHealthAccountsHistorical.asp#TopOfPage</u>)</u>. Projections of future GDP and NHE are available in another pdf file found at the same website.

According to *Figure 32*, NHE would equal 20 percent of GDP in the absence of the CAP Act, which in 2009 dollars equals \$3.78 trillion. Assuming that productivity growth of 0.7 percent continues in the future, the health sector workforce required to produce 2021 real NHE equals 18.9 million, implying an annual growth rate of 4 percent over the 2009 through 2021 time period.

How the CAP Act would affect federal health spending depends on how it is implemented. Automatic sequestration will require a 19 percent reduction in federal health spending by 2021; if Social Security is exempted, the required health spending reduction is 27.3 percent by 2021. The implications of reductions of such magnitude for health care sector employment and wages depends on how sensitive (elastic) labor supply and labor demand are to wages. We assign sensitivities (elasticities) of employment and wages to each of the three groups of health care workers (identified above) based on plausible assumptions about the group, past research, and the past history of the group.

<sup>&</sup>lt;sup>24</sup> (http://data.bls.gov/pdq/querytool.jsp?survey=ce). The counts are for series identification code CES6562000101.



<sup>&</sup>lt;sup>23</sup> The 17.6 percent figure is based on actual GDP and NHE in 2009. Projections to 2019 made by CMS were made prior to 2009 and show NHE equaling 17.3 percent of 2009 GDP. The actual NHE share of GDP for 2009 (17.6 percent) was higher both because forecasted GDP (\$14,286 billion) was higher and because forecasted NHE was lower (\$2,472 billion).

We assume that the demand for Healthcare Practitioners is the least sensitive to wages. This assumption is in accord with much past research, which shows that the sensitivity of labor demand to wages declines as skill level rises. The economy-wide elasticity is around -0.3; we assign this group a labor demand elasticity of -0.1.<sup>25</sup> We assign the remaining groups a labor demand elasticity of -0.3, the median estimate for the economy as a whole. As it turns out, predictions about the effects of either variant of the CAP Act are insensitive to the assumed sensitivity of labor demand to wages.

The important sensitivity is the one relating to labor supply. If the supply of health care workers is highly responsive to wages, shifts in labor demand will not have a large effect on wages and most of their effect will be on employment. Such will be the case when (1) health sector employment is a small share of total employment, (2) health care jobs are similar in skill requirements and working conditions to other jobs, and (3) workers have time to adjust their education and training decisions in response to changes in health sector wages relative to wages elsewhere. The supply of Healthcare Support (OES 31) workers is apparently very elastic. According to OES data on this category, Health Care Support workers had no real wage growth over the period 2001-2010 despite a 30 percent growth in employment.<sup>26</sup>

The supply of Healthcare Practitioners is likely to have a significant responsiveness to wages, but their supply is not likely to be as responsive to wages as the supply of Health Care Support workers. We assign them wage responsiveness (elasticity) of 1.5, implying that a 10 percent increase in wages leads to a 15 percent increase in quantity supplied. Physicians may not be as responsive as the supply of other groups of health care workers (e.g., nursing home attendants), but economists believe that the most plausible base case assumption is that, in the long run, labor supply is essentially perfectly responsive to wages. In this case, employment changes without wages changing. If labor supply is perfectly responsive to wages then the responsiveness of labor demand to wages has no effect on employment. Finally, the supply of other health care workers is likely to be more responsive to wages than the supply of Health Care Practitioners, but less responsive than the supply of Heath Care Support workers. We assign the Other Health Care workers a supply elasticity of 3.0.

Without either variant of the CAP Act, health sector employment is predicted to increase from 14.6 million in 2010 to 18.9 million in 2021. With the CAP Act as written, health sector employment is predicted to decline by 6.6 percent relative to projected employment without the CAP Act in 2021 (*Figure 33*). The largest percentage decline is predicted to occur among Healthcare Support workers (6.9 percent), the group whose supply is most sensitive to wages. The group with the largest predicted percentage wage decline is Healthcare Practitioners and Technical workers. Their larger wage decline results from the assumption that their labor supply is less elastic than the labor supply of the other two groups of healthcare workers. If a larger labor supply elasticity is assumed for this group, the predicted employment reduction would be larger and the predicted wage decline would be smaller.

<sup>&</sup>lt;sup>26</sup> In 2001, the average nominal wage of this group was \$10.53 per hour. In 2010 dollars, this amounted to \$12.97. Their 2010 average hourly wage was \$12.94.



<sup>&</sup>lt;sup>25</sup> The median estimate for the economy is that a 10 percent wage decline would increase the quantity of labor demanded by about 3 percent (Table 8.2 of Daniel Hamermesh, "The Demand for Labor in the Long-Run," *Handbook of Labor Economics* (Volume I), edited by O. Ashenfelter and R. Layard, New York: North Holland, 429-471).

	Total Health Sector	Healthcare Practitioners and Tech Workers	Healthcare Support Workers	Other Healthcare Workers			
2010 Data							
Employment (thous.)	14,684	5,684	3,316	5,684			
Employment Share	100	38.7	22.6	38.7			
Hourly Wage	\$23.68	\$35.42	\$12.99	\$14.96			
Predicted	2021 Employn	nent with No Ca	aps				
	18,930	7,327	4,275	7,328			
CAP Act as Written: 7	.1% Cut in Tot	al Provider Rev	enues by 2021	,			
Employment Change							
Number (thous.)	-1,255	-488	-295	-473			
Percentage	-6.6%	-6.7%	-6.9%	-6.5%			
Wage Reduction (Percent)	-2.7%	-4.4%	-0.7%	-2.2%			
CAP Act with Social Security E	xempt:10.3% C	Cut in Total Pro	vider Revenues	s by 2021			
Employment Change							
Number (thous.)	-1,804	-701	-423	-679			
Percentage	-9.5%	-9.6%	-9.9%	-9.3%			
Wage Reduction (percent)	-3.9%	-6.4%	-1.0%	-3.1%			
Note:							
Assumed Elasticities:							
Labor Demand		-0.1	-0.3	-0.3			
Labor Supply		1.5	10.0	3.0			

#### Figure 33. Estimated Effects of the CAP Act Spending Cuts on Employment and Wages

Sources: The Total Health Care Sector consists of workers employed in North American Industrial Classification System (NAICS) industry codes 621 (Ambulatory Care Services), 622 (Hospitals), and 623 (Nursing Homes and Residential Care). Data were obtained from Occupational Employment Statistics (OES) (<u>http://www.bls.gov/oes/</u>). Information for all workers in NAICS codes 621, 622, and 623, as well as workers in OES codes 29 and 31, were available directly. The Other Healthcare Workers' employment count and average hourly wages were constructed from the other information in the table. Data in this Figure are for May 2010.

The last panel of *Figure 33* predicts that if Social Security is exempt from CAP Act reductions to federal health care spending, the overall health care employment and wage reductions will be larger, 9.5 percent and 3.9 percent respectively. The pattern of response is the same as before – the Healthcare Support workers would experience the largest percentage employment decline (9.9 percent), while the Healthcare Practitioners and Technical workers would experience the largest percentage wage decline (6.4 percent).



#### Appendix A: Estimated Changes in Total Provider Revenues under Alternative Policy Scenarios



Figure A-1. Percentage Reduction in Provider Revenues by Type of Provider: 2013-2021 - Social Security Exempt

Source: Lewin Group estimates.









Figure A-3. Changes in Total Physician Revenues and Net Income Excluding Impact of SGR Cuts: 2013-2021 (billions) - Social Security Exempt

Source: Lewin Group estimates.











Source: Lewin Group estimates.











Source: Lewin Group estimates.

Figure A-8. Physician Total Revenues and Net Income With SGR Cuts: 2013-2021 - Assumes Social Security is Exempt with Beneficiaries Taking 25 percent of Medicare Cuts (billions)



