

Analysis of Factors Leading to Changes in Projected 2019 National Health Expenditure Estimates: A Comparison of April 2010 Projections and September 2013 Projections

Researchers, policymakers, and the public have expressed great interest in the impact of the Affordable Care Act (ACA) on health spending in the three years since it was passed. Since April 2010, when the Office of the Actuary released its original estimates of the financial, enrollment, and national health expenditure (NHE) impacts of the ACA,¹ the historical estimates and projections have been updated in four installments. Each installment has projected progressively lower health spending levels and slower growth by 2019. As of September 2013, our projection of national health spending for 2019, inclusive of the impacts of the ACA, is \$574 billion (or 12 percent) lower than the April 2010 projections.

We have prepared this paper to identify the major factors underlying not only the lower historical health spending levels, but also the lower projected health spending levels and growth rates expected by 2019.

I. Major Findings

As shown in Table 1, changes to *baseline* historical and projected NHE—that is, our estimates of health spending excluding the impacts of the ACA—explain the lower levels of health spending and growth by 2019 as published through September 2013. Our estimated impacts of the ACA on health spending are relatively close to the April 2010 estimates. The following are the major factors influencing the \$574-billion difference in projected spending in 2019 (with each discussed in greater detail in Section II):

- In September 2013, the level of health spending in 2011 is lower than had been expected in April 2010, largely reflecting the impact of a more severe recession than had been projected. Isolating this effect accounts for \$125 billion of the \$574-billion difference.
- In September 2013, macroeconomic assumptions call for lower income and price growth over the 2011-2019 period than was expected in April 2010. This changed outlook is reflected in our models as slower growth in health spending through 2019. Isolating this effect accounts for \$35 billion of the \$574-billion difference.
- In September 2013, growth assumptions for Medicaid, Medicare, and other government payers and programs are lower than were expected in April 2010. These assumptions are unrelated to the ACA, and largely reflect a changing economic and policy environment that affects Medicaid per enrollee trends and enrollment, as well as lower expected growth in Medicare spending for hospital and prescription drugs. Isolating these effects accounts for \$291 billion of the \$574-billion difference.
- There are several other non-ACA related factors that influence the projections, which are difficult to estimate separately. These include factors such as changes in non-personal health care spending paid for by other private revenues and the net cost of private health insurance, model changes, and re-estimated equations based on updated data, research, and assumptions. Cumulatively, these factors—calculated as a residual—account for \$150 billion of the \$574-billion difference between 2011 estimates and those made in September 2013.
- Combined, the lower historical levels for Medicaid as well as the lower growth assumptions for Medicaid make up \$269 billion of the \$574-billion difference, accounting for almost 47 percent of the lower 2019 spending level.

¹Foster, R.S. “Estimated Financial Effects of the ‘Patient Protection and Affordable Care Act,’ as Amended,” Centers for Medicare & Medicaid Services, 2010 April 22. Available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf (accessed 3 September 2013).

Table 1 – Summary of Projected 2019 NHE Level Differences: September 2013 versus April 2010
(In billions)

	April 2010	September 2013	Difference
NHE	\$4,717	\$4,142	-\$574
Section A: Impact of historical spending levels through 2011			-\$125
Section B: Impact of macroeconomic assumptions			-\$35
Section C: Impact of growth in Medicaid, Medicare, & other government payers and programs, unrelated to the ACA			-\$291
Section D: Impact of the ACA			+\$27
Section E: Other Factors, unrelated to the ACA (residual that would include model changes, non-measured health sector changes, etc.)			-\$150

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary

On the other hand, our estimate of the impact of the ACA on NHE in 2019 is higher in our September 2013 projection, an increase relative to our expectations in April 2010 of \$27 billion. There are a few major contributors to this increase, including updates and refinements to our estimates of the uninsured population; estimates of the costs of administering the ACA, which were not included in our initial estimate; and lower savings projected from Medicare provider payment and Medicare Advantage provisions. These increases are slightly offset by the impact of states now having the option to expand their Medicaid program and changes to the definition of modified adjusted gross income (MAGI) applied in the ACA, which affects the number of persons eligible for coverage under the ACA's Medicaid expansion in our estimates.² On net, these factors drive increased spending and more than offset the lower cost of the coverage expansions due to lower baseline projected spending influenced by the factors described above.

II. Major Factors Contributing to Lower Projected Level of Health Spending in 2019

To estimate the impact of the major factors contributing to the lower level of health spending in 2019, we conducted an analysis in which we held constant all factors except the one being analyzed in order to isolate the impact of that one factor.³ For instance, to understand the impact of the lower level of historical spending in 2011 on the projected level of 2019, we used the 2011 spending levels included in our September 2013 release but applied the pre-ACA growth rates for 2012-2019 that were used in our April 2010 release. In this way, we can show how the 2019 level of spending would have been different in our April 2010 projections if we had accurately predicted the experience for 2008-2011, which included a more severe recession, holding all other factors constant. We were able to take this approach for the major factors described below, and thus we can attribute proportions of the \$574-billion difference to each factor. The residual that remains after isolating each factor represents other projection changes that are difficult to decompose separately such as model changes and non-measured health sector changes.

² The definition of MAGI as applicable in the ACA was modified through P.L. 112-56 in November 2011 to include Social Security income.

³ This mechanical method does not take into account any interactions between factors or reflect any direct measure of each factor. As such, the results, though indicative of the magnitude and direction of the impacts, should not be interpreted as official estimates and when cited should include a reference to this uncertainty.

A. Impact of Historical Spending Levels through 2011

The depth and severity of the 2007-2009 recession, and its impact on health spending, has proven to be more substantial than expected in our April 2010 projections.⁴ Actual health spending for most payers has been lower than projected for 2007-2011, most notably for Medicaid, as the actual acceleration in spending growth associated with increased recession-related enrollment was slower than anticipated. There were smaller impacts for private health insurance, out-of-pocket spending, and other private revenues—all payers that are most likely to be sensitive to changes in economic conditions. Medicaid spending was lower than projected.

Because our 2011 spending levels are now lower than when the April 2010 projections were released, the level of NHE spending in 2019 would have been \$125 billion lower even if we had not changed our pre-ACA expectations for 2012-2019. Of this difference, \$101 billion is accounted for by lower spending in Medicaid alone. Thus, roughly 22 percent of the \$574-billion difference in the level of spending now projected for 2019 is due to the lower NHE growth experienced between 2007 and 2011.

B. Macroeconomic Assumptions

The baseline NHE projections model (which generates estimates of health spending excluding the impacts of the ACA, as stated above) takes macroeconomic assumptions exogenously from the latest available OASDI Trustees Report for each year,⁵ as well as from the latest available Blue Chip Economic Indicators.^{6,7} Over the last three years, the assumptions for growth in disposable personal income and the Gross Domestic Product deflator—the key macroeconomic assumptions in our baseline NHE projections model—reflect slower growth for 2012-2019 than was expected in April 2010. For this decomposition, we adjusted our April 2010 projections to account for the different macroeconomic expectations, and this adjustment lowered NHE spending by \$35 billion in 2019. Accordingly, roughly 6 percent of the \$574-billion difference in the level of spending now projected for 2019 is due to changing macroeconomic expectations.

⁴ The baseline NHE projections underlying the April 2010 estimates were based on the Updated and Extended NHE Projections for 2010-2019, which reflected exogenous macroeconomic assumptions available as of January 2009. See R. Foster and S. Heffler, “Updated and Extended National Health Expenditure Projections, 2010-2019.” Memorandum dated June 29, 2009. Available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/NHE_Extended_Projections.pdf.

⁵ Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Trust Funds, *The 2013 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, 31 May 2013, at <http://www.ssa.gov/OACT/TR/2013/tr2013.pdf> (accessed 3 September 2013).

⁶ Blue Chip Publications. Available at <http://www.aspenpublishers.com/blue-chip-publications.htm>.

⁷ For more information, please see “Projections of National Health Expenditures: Methodology and Model Specification,” at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/projections-methodology.pdf> (accessed 3 September 2013).

C. Lower Growth Assumptions for Medicare, Medicaid, and Other Public Payers 2010-2019

The baseline Medicare and Medicaid projections are from the Office of the Actuary's actuarial projections, and are consistent with the assumptions and estimates in the latest Medicare Trustees Report and Medicaid Actuarial report, respectively.⁸

The environment within which the Medicaid program is now operating is significantly different from that in April 2010. Several factors unrelated to the ACA, such as State budget pressures, enrollment experiences from the recession, and recent utilization and per enrollee expenditure trends have all led to changing expectations for Medicaid spending growth for 2012-2019. These lower growth assumptions for Medicaid spending per enrollee and Medicaid enrollment account for the largest share of the \$574-billion difference in 2019 (\$168 billion, or 29 percent).

For Medicare, growth assumptions for 2012-2019 are lower than projected in April 2010. The difference is particularly marked in assumptions for growth in per enrollee hospital and prescription drug spending—unrelated to the ACA. Moreover, additional legislation has since passed and regulatory changes have affected the expectations. These lower Medicare growth assumptions for 2012-2019 account for \$77 billion, or roughly 13 percent, of the \$574-billion difference in 2019.

Finally, slower growth rate assumptions for spending by other government payers and programs over the 2012-2019 period contribute to the lower level of NHE spending in 2019. Slower growth is most evident in our projection for spending on non-personal health care services such as government public health; we have incorporated additional data and model refinements for our projections of health spending by the Department of Veterans Affairs and the Department of Defense for personal health care services. Taken together, lower growth in spending by other government payers and programs accounts for \$46 billion of the \$574-billion difference in 2019, or roughly 8 percent.

D. Impact of ACA on National Health Expenditures

The percentage impact on health spending from the ACA was higher in our September 2013 projections than was estimated in April 2010. Had we used the same percentage impact when we did our April 2010 projections, we estimate that the ACA impact on NHE would have been \$27 billion higher in 2019 than was estimated in April 2010. Four principal reasons led to this higher estimated impact.

- First, the savings associated with Medicare provider payment provisions have been reduced as the projected payment update reductions due to economy-wide multifactor productivity is now projected to be less than we anticipated in April 2010.
- Second, the savings projected from lower Medicare Advantage rates have been reduced as a result of several regulations put in place after April 2010.
- Third, our method for estimating the number of uninsured was refined and updated. These statistical modeling and data refinements resulted in a slightly higher number of projected

⁸ Board of Trustees, *2013 Annual Report of the Boards of Trustees of the Federal Hospital Insurance Trust and Federal Supplementary Medical Insurance Trust Funds*, 31 May 2013, at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/downloads/tr2013.pdf> (accessed 3 September 2013); and C. Truffer, J. Klemm, C. Wolfe, K. Rennie, and J. Shuff, *2012 Actuarial Report on the Financial Outlook for Medicaid*, Centers for Medicare & Medicaid Services, 1 March 2013. Available at <http://medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Financing-and-Reimbursement/Downloads/medicaid-actuarial-report-2012.pdf> (accessed 3 September 2013).

uninsured in 2014, which would increase the magnitude of the estimated impact on spending associated with coverage-related provisions.

- The final reason for the higher impact is that in April 2010 we did not include the costs of administering the ACA, both at the Federal and State and local levels; we have included those costs in our September 2013 projections.

The increase associated with these factors was slightly offset as a result of the legislative change to the definition of income (MAGI) as applied in the ACA, which resulted in fewer persons becoming eligible for Medicaid. In addition, the optional Medicaid expansion has significantly lowered the expectation of Medicaid enrollment, especially from 2014 to 2016.

Relative to our original expectations, the factors described above added to the cost of the ACA and more than offset the downward influence on the costs for the ACA coverage expansions brought about by our lower projected NHE baseline spending. That is, we estimate the marginal increase/decrease in health spending associated with someone who changes or gains coverage because of the ACA. This marginal change is dependent on the projection of per person health spending by coverage type in 2014 (without the effects of the ACA), and that level of baseline spending is lower in our June 2012 projections than in our April 2010 projections, as we explained earlier. For instance, for someone with Employer Sponsored Insurance (ESI), our April 2010 projected baseline per enrollee spending projection was \$6,167 for 2014, but is \$5,506 in our June 2012 projections. For someone who moves from ESI to a different type of coverage in our June 2012 projections, the marginal impact of that change is applied to a level of spending that is roughly 12 percent lower than we had previously assumed.

E. Other Factors (Residual)

We have identified the major factors for which we can estimate an impact; however, an additional \$150 billion (roughly 26 percent) of the \$574-billion difference in the 2019 level remains.

This residual reflects factors that cannot be quantitatively disentangled. One factor is lower expected growth in the net cost of private health insurance and other private revenues associated with spending on non-commercial research, structures, and equipment. Other major factors include updated assumptions given historical experience—most notably, the effect of increased cost sharing under private health insurance as more people are subjected to greater costs at the point of purchase and appear to be using fewer health care services as a result—and the effect of changing relationships between economic growth and spending. This residual would also capture methodological improvements to our baseline NHE projections model.

Other, less tangible phenomena occurring in the health sector that appear affect the amount of health insurance coverage but cannot be specifically quantified are behavioral changes by consumers in choosing the generosity of health coverage they want and the effects of structural changes to health insurance offerings and selection (such as more offering and selection of high-deductible plans). Additionally, process improvement initiatives on the part of health care providers and facilities may be impacting health care utilization.⁹ We do not have an impact for these types of factors and others that we have not identified, though each would likely have a small effect compared to those discussed previously.

⁹ For example, see K. Davis, “Health Spending Continues to Moderate, Cost of Reform Overestimated,” at <http://www.commonwealthfund.org/Blog/2011/Jul/Health-Spending-Continues-to-Moderate.aspx> (accessed 1 June 2012).

III. Conclusion

As discussed in our past accuracy analysis documentation,¹⁰ numerous factors can lead to changes in the short-range outlook for national health spending from release to release. In this paper, we have quantified the effects of the major factors that have resulted in spending levels for 2019 that are lower in our latest projections (September 2013) than in those published immediately following the passage of the ACA (April 2010).

The lower spending levels can be mostly attributed to changes in baseline NHE levels, changes in macroeconomic assumptions, and changes in expectations for growth in spending for Medicaid, Medicare, and other government payers and programs. Other factors that are difficult to quantify also contributed to the difference. The effect of the recent recession is evident not only in our updated historical estimates but also in our projections due to macroeconomic assumptions that suggest slower health spending growth through 2019. We also anticipate slower growth in our baseline Medicare and Medicaid projections for reasons unrelated to the ACA. Our estimate of the total impact of the ACA on NHE, on the other hand, would have been higher than our April 2010 release and slightly offsets these other factors.

¹⁰ “Accuracy Analysis of the Short-Term (11-year) National Health Expenditure Projections, Centers for Medicare & Medicaid Services.” Available at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/ProjectionAccuracy.pdf> (accessed 3 September 2013).