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The Impact of Health Reform on Health System Spending

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ABSTRACT: The health reform legislation passed in March 2010 will introduce a range of payment and delivery system changes designed to achieve a significant slowing of health care cost growth. Most assessments of the new reform law have focused only on the federal budgetary impact. This updated analysis projects the effect of national reform on total national health expenditures and the insurance premiums that American families would likely pay. We estimate that, on net, the combination of provisions in the new law will reduce health care spending by $590 billion over 2010–2019 and lower premiums by nearly $2,000 per family. Moreover, the annual growth rate in national health expenditures could be slowed from 6.3 percent to 5.7 percent.

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OVERVIEW

To judge the merit of the comprehensive health reform legislation recently signed into law by President Obama, it is essential to understand its impact on the affordability of insurance coverage and overall health care spending. Most assessments of the new law consider the federal budget only. For example, the Congressional Budget Office (CBO) "scored" the federal budget impact of the Patient Protection and Affordable Care Act, as modified by the Reconciliation Act (Affordable Care Act), finding a modest deficit reduction in the first 10 years of implementation.[1]

But the federal budget impact is not the same as the health system impact. A portion of the federal funds would be used to reduce costs for people who already have health insurance coverage but struggle to afford it, while very small businesses would receive help in paying insurance premiums. To estimate health spending accurately, we need to separate out the costs into *new* health care spending and transfers of *existing* spending from the private sector to the government. Furthermore, CBO assigned very little savings to system reform efforts, rendering its overall analysis incomplete.

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The Office of the Actuary within the Centers for Medicare and Medicaid Services (CMS), meanwhile, estimated the health system impacts of the Affordable Care Act[2] and determined there would be a small increase in medical spending as a result of the reform. But, again, this analysis is limited, since it gives almost no weight to proposals for improving the information available to providers and modifying the financial incentives in the current system.

This study considers the new law, as enacted in March 2010, to project the impact of major health reform on national health expenditures and the insurance premiums that families will likely pay, accounting for the full range of impacts the legislation is likely to induce. As part of our analysis, we provide estimates of the effect of key provisions on health spending by government, employers, and households. We build on our earlier analysis of the draft legislation, taking account of the provisions in the final law.[3]

IMPACT OF REFORM ON NATIONAL HEALTH EXPENDITURES

Health care reform will affect national health expenditures through five major channels.

Impact of New Coverage

Extending health insurance coverage to essentially all Americans will increase medical spending, at least in the short run. (Some argue that increased coverage will lower spending over time by making it possible to pursue more-aggressive cost-containment policies without risking access to care for the uninsured, but in this analysis we do not consider such effects.[4]) From previous studies, data are available to estimate the magnitude of the increase in spending. Hadley and colleagues, for example, estimated that each uninsured individual who gains coverage will incur annually an additional $1,600 of medical care expenses—an increase of 70 percent.[5] The Congressional Budget Office estimated that spending for uninsured individuals, if they become insured, will increase by 25 percent to 60 percent.[6] The actual increase will depend in part on the rates that are paid to health care providers for treating currently uninsured patients.

For our estimates, we increase the $1,600 figure over time with expected increases in medical costs. We then multiply the revised amounts by the number of newly insured resulting from health reform to produce a total estimate. Fully phased in, incremental coverage costs about $75 billion per year to cover 60 percent of the uninsured, or 2 percent of total health care spending. This is comparable to Davis and Schoen's projection that covering all of the uninsured would add 3 percent to medical spending,[7] and Schoen, Davis, and Collins's finding that covering all of the uninsured would add 2 percent to medical spending.[8] This methodology suggests that the new law will lead to a 10-year cumulative medical spending increase of $415 billion over the period 2010–2019. This estimate is shown in the first row of Exhibit 1.

Savings in Public Programs

The new health reform law contains a number of changes to Medicare and Medicaid payments. Many of these are traditional payment changes—for example, reductions in the amount paid to Medicare Advantage managed care plans to a level comparable with the cost of covering beneficiaries under traditional Medicare, or smaller increases in Medicare inpatient payments to account for a likely increase in productivity and to reduce bad debts. Our estimates of the medical spending impact of these changes come from CBO. While this is a good place to begin, it should be noted that CBO has often misestimated, or failed to estimate, the behavioral consequences of such changes in the past.[9]

We consider all such changes, with a few exceptions: 1) we exempt the net savings associated with health care modernization (Section 1104 and Title III, subtitle A, of the reform bill), which is treated separately; 2) we omit the sections associated with coverage expansions, which are accounted for above; and 3) we omit savings from the Community Living Assistance Services and Supports (CLASS) Act, which are a collection of premiums in anticipation of future spending. CBO estimates that the net impact of the remaining proposals in the reform law is to reduce Medicare and Medicaid spending by $416 billion over

Exhibit 1. Major Sources of Savings Compared with Projected Spending, Net Cumulative Reduction of National Health Expenditures, 2010–2019

	Affordable Care Act of 2010
Affordable Coverage for All: Coverage Expansion and National Health Insurance Exchange	
New coverage utilization	$415 billion
Payment and System Reforms	
Traditional savings[a]	–$416 billion
Reduced administrative costs[b]	–$184 billion
Health system modernization[c]	–$406 billion
Total Net Impact on National Health Expenditures, 2010–2019[d]	–$590 billion

Notes:
[a] CBO estimate of the effect on direct spending for non-coverage provisions net of modernization and CLASS.
[b] Authors' estimate of reduced administrative costs in addition to CBO estimate of $27 billion in administrative savings.
[c] Authors' estimate of savings due to health system modernization.
[d] Rows do not sum to total because of rounding.
Data: Authors' estimates; The Congressional Budget Office, Analysis of H.R. 4872, Reconciliation Act of 2010, March 20, 2010, http://www.cbo.gov/doc.cfm?index=11379&type=1.

the 2010–2019 period. This estimate is depicted in the second row of Exhibit 1.

The reduction in Medicare and Medicaid spending is approximately on par with the increase in medical costs associated with covering the uninsured. The net impact of covering the uninsured and reducing traditional program payments (and other taxes from outside the health care system) is a decrease in spending of $1 billion over 2010–2019. This roughly parallels the analysis from the Office of the Actuary, which estimated that national medical expenditures under the new law will increase by $311 billion over 2010–2019.[10] The difference of about $30 billion per year is very small on the scale of health expenditures (less than 1 percent per year), and it indicates that our analysis matches that of the actuary when no other cost changes are considered.

Our analysis assumes that a reduction in Medicare and Medicaid payments will not be offset by higher prices to private payers and, equivalently, that fewer uninsured patients will not yield savings to existing payers because of the reduced need of payers to shift costs onto covered patients. This assumption is common to other estimators and is consistent with empirical research.[11]

Insurance Exchanges

Currently, nearly 13 percent of insurance premiums are accounted for by administrative costs.[12] These costs range from about 5 percent in large firms and firms that are self-insured to 30 percent for individuals. Higher costs for marketing, underwriting, churning, benefit complexity, and brokers' fees explain the bulk of the difference.

The new reform law establishes insurance exchanges that will group individuals and small firms into larger entities and thus drive down those administrative costs. The exchanges also will minimize marketing costs through more transparent posting of premiums, facilitated enrollment (assistance with the application process and screening for eligibility), and stronger oversight of industry practices.

If all individuals and small firms were to receive the same premiums as large firms or self-insured firms do, the costs of insurance administration would decline to less than 10 percent. In analyzing the experience of other countries, The Commonwealth Fund

estimated that administrative costs could fall to 8 percent or lower under a robust exchange system.[13] We assume more modest savings, such that administrative costs fall to 10 percent of total premiums—a rate also assumed to remain constant over time, even though this implies administrative costs increase along with national health spending. We assume such savings begin in 2014, the year the exchanges will become operational, and are phased in over three years. The reduction in health spending associated with reduced insurer administration is $211 billion over 2010–2019.

CBO estimates $27 billion in administrative savings owing to insurance exchanges over 10 years. CBO assumes premium reductions of between 1 percent and 4 percent for small groups in the exchanges, and no savings for large groups, for an average of about 0.4 percent.[14] We assume additional savings above this amount, totaling $184 billion over 2010–2019 (see third line of Exhibit 1).

Health System Modernization

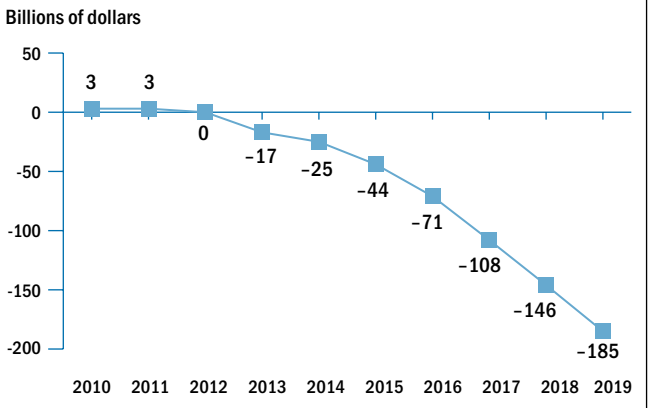
The reform law includes numerous provisions intended to improve the information available to patients and providers and the incentives facing medical care providers, and thus make medical care more efficient. The Commonwealth Fund has summarized these provisions.[15] Within the Medicare and Medicaid programs, these include:

- payment innovations, including higher reimbursement for preventive care services and patient-centered primary care, bundled payment for hospital, physician, and other services provided for a single episode of care, shared savings or capitation payments for accountable provider groups that assume responsibility for the continuum of a patient's care, and pay-for-performance incentives for Medicare providers;
- an Independent Payment Advisory Board, with the authority to make recommendations that reduce cost growth and improve quality in both the Medicare program and the health system as a whole;
- a new Innovation Center within the Center for Medicare and Medicaid Services, charged with streamlining the testing of demonstration and pilot projects in Medicare and rapidly expanding successful models across the program;
- profiling medical care providers on the basis of cost and quality, making that data available to consumers and insurance plans, and providing relatively low-quality, high-cost providers with financial incentives to improve their care;
- increased funding for comparative effectiveness research; and
- increased emphasis on wellness and prevention.

The exact amount that will be saved from these provisions collectively is uncertain. Partly as a result of this uncertainty, CBO and the Office of the Actuary assume only minor savings. For example, CBO estimated that the major parts of the law including these provisions will cost $10 billion over the 2010–2019 period, while the Office of the Actuary determined savings of only $2 billion.

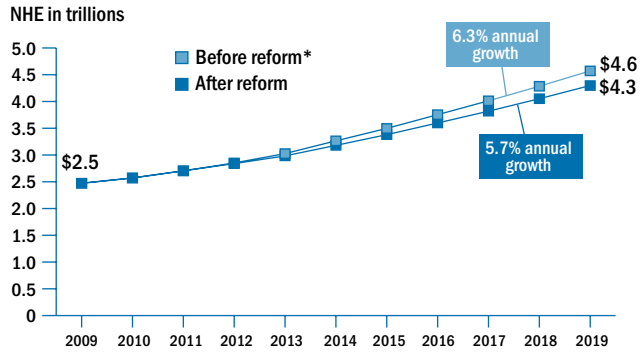
Other estimates, however, suggest that an aggressive approach to health care modernization could result in significantly greater cost reductions. Beeuwkes-Buntin and Cutler estimated a 1.5-percentage-point reduction in cost increases annually from significant health care reform, or more than $700 billion in the 10-year window.[16] These savings would come from two primary sources. First, administrative expenses incurred by provider groups would decline as electronic medical records, and incentives to use them appropriately, are widely disseminated. The potential for administrative savings has been stressed by both provider groups and insurers,[17] and they are distinct from the reduction in insurance administration noted above. Second, reform would lead to fewer and less-costly acute care episodes. Potentially substantial savings could be had by preventing certain illnesses from recurring through better coordination of care and by rationalizing what is done when a person becomes sick by bundling payments, paying more for quality

Exhibit 2. Net National Health Care Spending Associated with Health Reform



Data: Authors' estimates.

Exhibit 3. Total National Health Expenditures (NHE), 2009–2019 Before and After Reform



* Estimate of pre-reform national health spending when corrected to reflect underutilization of services by previously uninsured.
Data: Authors' estimates.

care, and sharing savings with accountable provider organizations.

Similarly, Hussey, Eibner, Ridgely et al. estimate that savings of more than 10 percent are possible, largely from payment reforms like bundled-payment systems.[18] Realizing these savings over a decade implies cost reductions of nearly 1.5 percentage points annually. A more conservative mid-range set of assumptions suggests that such reforms could reduce growth in national health expenditures by about one percentage point per year.

The combination of provisions in the new law will achieve substantial savings in total health spending. A Commonwealth Fund report indicates that similar provisions will slow annual growth in national health expenditures from 6.5 percent to 5.6 percent over the period 2010–2020.[19] Thus, cost reductions on the order of 1.0 percentage points are realistic. We assume such savings are first realized in 2014, to allow time for payment changes to be designed and implemented and exchanges to become operational.[20]

The public and private savings from health system modernization are $406 billion over the 10 years (see fourth line of Exhibit 1). These savings are smaller in the early years but increase over time.

Taking account of these different factors, on net the new law will reduce health care spending by $590 billion over 2010–2019. Exhibit 2 shows the changes by year, highlighting significant savings potential as payment and system reforms are fully phased in.

We find that the annual rate of growth in national health expenditures falls from 6.1 percent before reform to 5.7 percent after reform. When the current projection is corrected to reflect underutilization of services by the uninsured, the reform package lowers the annual rate of growth from 6.3 percent to 5.7 percent, a reduction of 0.6 percentage points per year (Exhibit 3).

The savings we estimate are comparable to the reports by CBO and the Office of the Actuary, with the exception that we also include reasonable impacts of system modernization incentives and efforts to streamline sales of insurance.

IMPACT ON THE FEDERAL BUDGET

The Congressional Budget Office estimates that the reform law will reduce the federal deficit by $143 billion over the 10 years, 2010–2019. Our estimates of the federal deficit impact differ from CBO's in two ways. First, we include savings to Medicare and Medicaid resulting from health system modernization. In addition, reductions in employer spending for health insurance lead to increases in wage and salary payments, which are taxed by the federal government. While CBO accounted for some of this effect in recent estimates, further reductions in employer spending for

Exhibit 4. Net Impact of Reform on Federal Budget, 2010–2019 (in billions)

	Affordable Care Act of 2010	
	CBO	Cutler/Davis
Federal Cost of Coverage Expansion	$788 billion	$788 billion
Federal Savings from Payment and System Reforms[a]	–$511 billion	–$682 billion
Federal Tax Revenue	–$420 billion	–$420 billion
Additional Tax Revenue from Private Sector Savings[b]		–$86 billion
Federal Budget Cost, 2010–2019	–$143 billion	–$400 billion

Notes:
[a] Difference between CBO and Cutler/Davis reflect alternative estimate of modernization provisions.
[b] Increased tax revenue due to increased wages not already accounted for by CBO.
Data: Authors' estimates; The Congressional Budget Office, Analysis of H.R. 4872, Reconciliation Act of 2010, March 20, 2010, http://www.cbo.gov/doc.cfm?index=11379&type=1.

health insurance can be expected from modernization and lower administrative costs. We assume that 90 percent of private health insurance savings are passed on to employees through increased wages, which are taxed at an average marginal rate of 28 percent.

The net effect is a federal deficit reduction of $400 billion over 2010–2019 (Exhibit 4). This reduction results from several factors. As estimated by CBO, the federal cost of insurance coverage expansion is $788 billion. Savings from payment and system reform provisions are projected to generate $682 billion—more than is estimated by CBO, owing to the reasonable estimates of health system modernization provisions. Our federal tax revenue projection mirrors that of CBO's, though we also add in the additional revenue from employer savings and increased wages from modernization and lower administrative costs—projected to raise $86 billion over the 10-year, 2010–2019 period.

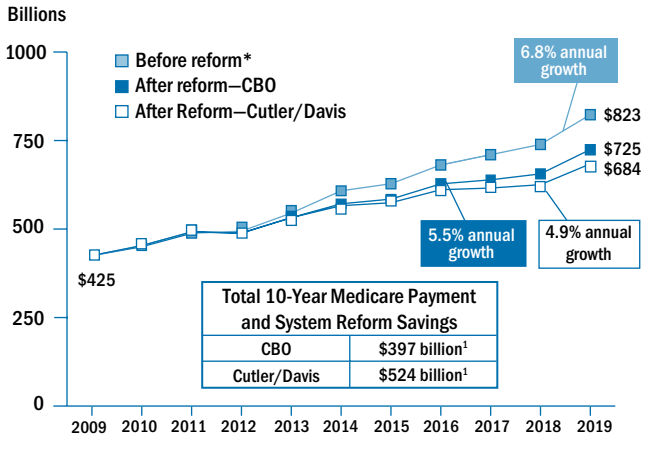
IMPACT ON MEDICARE

Prior to reform, Medicare expenditures were projected to grow by 6.8 percent annually from 2010 to 2019 (Exhibit 5). The payment and system reform savings estimated by CBO total $397 billion when CLASS and non-Medicare provisions are removed. Applying these net Medicare savings bends the Medicare spending curve and reduces the projected annual growth rate to 5.5 percent. When additional savings from health system modernization are accounted for, the annual growth rate is reduced to 4.9 percent and total 10-year savings reach $524 billion.

IMPACT ON PREMIUMS FOR PRIVATE COVERAGE

Reducing insurer administration and modernizing the delivery of health care services will each result in reductions in private insurance premiums. Private premiums might be affected by other provisions as well. For example, an excise tax on high-premium health insurance plans, set to take effect in 2018, will introduce a strong financial incentive for insurers to trim benefits and reduce costs below a tax-free threshold of $10,200 for individual coverage and $27,500 for family coverage. Indexing this cap to the overall rate of inflation in the economy plus one percentage point will encourage insurers to seek out value and efficiency continually, thus placing downward pressure on premiums over time.

Exhibit 5. Medicare Spending with System Savings, 2010–2019: Before and After Reform



Total 10-Year Medicare Payment and System Reform Savings	
CBO	$397 billion[1]
Cutler/Davis	$524 billion[1]

[1] Payment and system reform savings net of CLASS and non-Medicare spending and savings provisions; difference between CBO and Cutler/Davis reflects alternative estimate of modernization.
Data: Authors' estimates; The Congressional Budget Office, Analysis of H.R. 4872, Reconciliation Act of 2010, March 20, 2010, http://www.cbo.gov/doc.cfm?index=11379&type=1.

Health reform might also alter the generosity of the average insurance benefits offered, which may raise premiums for certain groups. In the current market, many people have coverage that is extremely limited, with deductibles totaling many thousands of dollars and entire classes of services that are excluded. Such people will face premium increases under reform, although the quality of the coverage will be significantly improved and out-of-pocket expenses reduced.

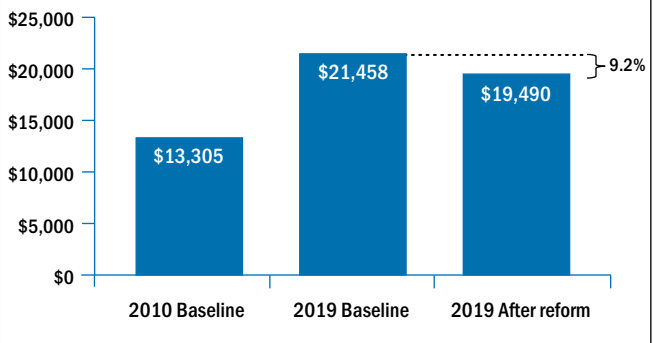
The Congressional Budget Office estimates that such changes will increase nongroup premiums. For purposes of this analysis, we exclude changes in premiums associated with better coverage, since one would need to consider the impacts of the enhanced coverage and correspondingly lower out-of-pocket spending to be able to gauge the impact of the changes accurately.

In addition, health reform might change the risk pool and thus affect the average cost of enrollees. Limiting age-based underwriting without providing offsetting subsidies to young adults would drive many within this population out of the insurance market. Close-to-universal coverage, in contrast, might bring more young people into the market, thus lowering premiums. Because of the issues associated with changes in out-of-pocket spending when people move in and out of coverage, this effect is, again, omitted.

We estimate the impact of insurance exchanges and system reform on average premiums using a method analogous to the one proposed above. In particular, we consider how reductions in administrative loads and more-efficient care delivery will affect average market premiums. The basis for the premium estimates is the average employer premium in 2006, as determined by the Medical Expenditure Panel Survey.[21] This premium is then trended forward using the projected growth of premiums under the different scenarios.

Exhibit 6 shows the premium estimates. Without reform, premiums are expected to increase from $13,305 in 2010 to $21,458 in 2019. Relative to this increase, premiums under reform increase only three-quarters as much. By 2019, family premiums are nearly $2,000 lower. Adding reductions in out-of-pocket costs and lower taxes for Medicare and Medicaid will result in estimated savings for the typical family of over $2,500 that year. Again, these are conservative estimates: a recent analysis by the Business Roundtable prepared by Hewitt, for example, found that such legislative reforms could potentially reduce the trend line in employment-based health care spending by about $3,000 per employee by 2019.[22]

Exhibit 6. Estimated Annual Premiums Before and After Reform, 2019



Data: Authors' estimates.

Explaining the Differences with Other Estimates

The estimated health system savings we present are larger than those forecast by the Congressional Budget Office (CBO) and the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary, which are similar to each other. The common assessments of CBO and the CMS actuary are not surprising, since most of the evidence upon which they are based comprises peer-reviewed studies that utilize carefully controlled comparison groups (either randomized trials or the natural equivalent). Within that genre, the dominant published themes are the inexorable nature of technology-led medical care cost increases, and the resulting need for unalterable demand- or supply-side constraints to confront that trend.

Although there is significant evidence in the literature that medical care providers are responsive to financial incentives,[23] there is not much evidence in the published literature on policy reforms short of severe constraints that save large amounts of money. And for every study that shows savings from baseline, there is another study that does not. Thus, the common assessment is that there is little efficacious that can be done.

There is, however, a less formal, but no less important, literature that sees the world very differently. Business scholars, including Michael Porter and Elizabeth Teisberg, and Clay Christenson, Jerome Grossman, and Jason Hwang, all note the enormous inefficiency in health care relative to other industries: excessive administrative spending, wasted time and money, and resources spent not reducing costs but simply passing them along to others.[24] These scholars highlight the enormous potential for productivity improvement that reform can drive if it makes health care operate more like other industries.

Through their experiences, health care practitioners reach a similar conclusion. Physicians on the frontlines of medicine, including Guy Clifton, Arthur Garson, Atul Gawande, and Arnold Relman, see the waste that exists and hold a common view on why it exists—principally, misaligned incentives.[25] They show how health care would be better and cheaper were it not for a health care system that discourages such improvements. Echoing the story of misaligned incentives are journalistic accounts showing how the health system fails patients, physicians, and society as a payer. Each case cries out for reforms that would change the underlying perverse incentives.[26]

A number of case studies lend support for the potential of reform. The experiences of Geisinger Health System, HealthPartners, Denver Health, and other health care delivery organizations demonstrate that health can be improved and costs lowered.[27] They also point to the components that are most critical for system improvement. While these studies are often published in the professional literature, their authors do not employ the careful comparison groups that would make the results compelling to the most skeptical reviewers. Thus, case study findings are not given as much emphasis as they otherwise might.

While views differ as to appropriate evidence standards, the situation we analyze is one where there are essentially no clinical trials and where effects of multiple large policy changes may differ substantially from the effects of small trials of single interventions. In such a situation, it is imperative to cast a wider net than traditional evidence standards do. Our decision to be more inclusive in the use of evidence is the primary reason why our results diverge from those of CBO and the CMS Office of the Actuary.

CONCLUSION

The new health reform law introduces a range of payment and delivery system changes likely to result in a significant slowing of health care cost growth. First, the law calls for the creation of health insurance exchanges that offer a choice of plans and the ability, for the first time, to truly compare plan premiums. The exchanges will have authority to reject plans with excessive premium increases and to set caps on insurance profits and overhead of no more than 15 percent of premiums for large firms and 20 percent of the premiums for small firms and individuals, producing savings to employers and workers that might reach 15 percent to 20 percent by 2019.

The law also begins to change how providers are paid and care is delivered, so that they are rewarded not for the volume of services they provide but for the value they offer. It accelerates the testing, adoption, and spread of innovative payment methods to control growth in volume of services. The law also includes extensive provisions to report data on quality and cost and to enhance choice. Finally, the law directs investments in primary and preventive care, among other changes, that have the potential to yield substantial savings.

In addition to significant payment and delivery system reform, the Affordable Care Act will extend coverage to an estimated 32 million previously uninsured Americans by 2019. Improving access to care should return substantial improvement in overall population health, increase workforce productivity, and reduce the significant financial risk uninsured and underinsured individuals and families now face in the unreformed market.

Even with these improvements in coverage, we estimate that the combination of provisions in the new law will save $590 billion or more in national health spending over 2010–2019 and lower premiums by nearly $2,000 per family. The annual growth rate in national health expenditures will be slowed from 6.3 percent to 5.7 percent.

Congress and the President have enacted a historic health care reform law that will help ensure that all families are able to get the care they need, as well as financial security and relief from rising premiums. The legislation is a significant first step toward bending the health care cost curve for the federal government and families, and it will yield real economic benefits.

NOTES

[1] Congressional Budget Office, Letter to the Honorable Nancy Pelosi, March 20, 2010 (Washington, D.C.: CBO, 2010), http://www.cbo.gov/doc.cfm?index=11379&type=1.

[2] Office of the Actuary, Centers for Medicare and Medicaid Services, "Estimated Financial Effects of the 'Patient Protection and Affordable Care Act,' as Amended," April 22, 2010 (Washington, D.C: CMS, 2010).

[3] D. Cutler, K. Davis, and K. Stremikis, *Why Health Reform Will Bend the Cost Curve* (New York and Washington, D.C.: The Commonwealth Fund and the Center for American Progress, Dec. 2009).

[4] The Commonwealth Fund Commission on a High Performance Health System, "Keeping Both Eyes on the Prize: Expanding Coverage and Changing the Way We Pay for Care Are Essential to Make Health Reform Work for Families and Businesses" (statement) (New York: The Commonwealth Fund, Nov. 20, 2009).

[5] J. Hadley, J. Holahan, T. Coughlin et al., "Covering the Uninsured in 2008: Current Costs, Sources of Payment, and Incremental Costs," *Health Affairs*, Sept./Oct. 2008 27(5):w399–w415.

[6] Congressional Budget Office, *Key Issues in Analyzing Major Health Insurance Proposals,* (Washington, D.C.: CBO, Dec. 2008).

[7] K. Davis and C. Schoen, "Creating Consensus on Coverage Choices", *Health Affairs* Web Exclusive, April 23, 2003, w199–w211.

[8] C. Schoen, K. Davis, and S. R. Collins, "Building Blocks for Reform: Achieving Universal Coverage with Private and Public Group Health Insurance," *Health Affairs,* May/June 2008 27(3):646–57.

[9] J. R. Gabel, "Congress's Health Care Numbers Don't Add Up," *New York Times*, Aug. 25, 2009.

[10] Office of the Actuary, "Estimated Financial Effects," 2010.

[11] CBO, *Key Issues,* 2008.

[12] S. R. Collins, R. Nuzum, S. Rustgi, S. Mika, C. Schoen, and K. Davis, *How Health Care Reform Can Lower the Costs of Insurance Administration* (New York: The Commonwealth Fund, July 2009).

[13] K. Davis, C. Schoen, S. Guterman, T. Shih, S. C. Schoenbaum, and I. Weinbaum, *Slowing the Growth of U.S. Health Care Expenditures: What Are the Options?* (New York: The Commonwealth Fund, Jan. 2007).

[14] Congressional Budget Office, Letter to the Honorable Evan Bayh, Nov. 30, 2009 (Washington, D.C.: CBO, 2009), http://www.cbo.gov/ftpdocs/107xx/doc10781/11-30-Premiums.pdf.

[15] K. Davis, S. Guterman, S. R. Collins, K. Stremikis, S. Rustgi, and R. Nuzum, *Starting on the Path to a High Performance Health System: Analysis of Health System Reform Provisions of Reform Bills in the House of Representatives and Senate* (New York: The Commonwealth Fund, Dec. 2009).

[16] M. Beeuwkes Buntin and D. Cutler, *The Two Trillion Dollar Solution: Saving Money by Modernizing the Health Care System* (Washington, D.C.: Center for American Progress, June 2009).

[17] Advanced Medical Technology Association, America's Health Insurance Plans, American Hospital Association, American Medical Association, Pharmaceutical Research and Manufacturers of America, and the Service Employees International Union, Letter to President Obama, May 11, 2009, http://www.whitehouse.gov/assets/documents/05-11-09_Health_Costs_Letter_to_the_President.pdf.

[18] P. S. Hussey, C. Eibner, M. S. Ridgely et al., "Controlling U.S. Health Care Spending—Separating Promising from Unpromising Approaches," *New England Journal of Medicine*, Nov. 26, 2009 361(22):2109–11.

[19] C. Schoen, K. Davis, S. Guterman, and K. Stremikis, *Fork in the Road: Alternative Paths to a High Performance U.S. Health System* (New York: The Commonwealth Fund, June 2009).

[20] Our earlier analysis assumed modernization savings began in 2012. Since many of the changes are coincident with insurance exchanges and underwriting reforms, we now project savings to begin in 2014. In addition, given that the final legislation is stronger on delivery system reform than previous draft legislation had been, we have increased our estimate of the cost reduction from 0.75 percentage points annually to 1.0 percentage points annually. The net effect is that modernization savings that were $508 billion and national health expenditure reductions that were $692 billion or more in the first decade under our prior assumptions are now $406 billion and $590 billion, respectively.

[21] Henry J. Kaiser Family Foundation, http://www.statehealthfacts.org.

[22] Hewitt Associates, *Health Care Reform: Creating a Sustainable Health Care Marketplace* (Washington, D.C.: Business Roundtable, Nov. 2009).

[23] D. M. Cutler, *Follow the Money: Payment Reform as the Key to Health Reform*, AARP Public Policy Institute Paper #2006-24 (Washington, D.C.: AARP, Oct. 2006).

[24] M. Porter and E. Teisberg, *Redefining Health Care: Creating Value-Based Competition on Results* (Boston: Harvard Business Press, 2006); and C. M. Christensen, J. H. Grossman, and J. Hwang, *The Innovator's Prescription: A Disruptive Solution for Health Care* (New York: McGraw Hill, 2008).

[25] G. L. Clifton, *Flatlined: Resuscitating American Medicine* (Piscataway, N.J.: Rutgers University Press, 2009); A. Garson, Jr., and C. L. Engelhard, *Healthcare's Wasted Billions: Why We Lose $700 Billion—and How to Get It Back* (New York: Roman and Littlefield, 2007); A. Gawande, *Complications: A Surgeon's Notes on an Imperfect Science* (New York: Picador, 2003); and A. Relman, *A Second Opinion: Rescuing America's Health Care* (New York: Public Affairs, 2007).

[26] S. Brownlee, *Overtreated: Why Too Much Medicine Is Making Us Sicker and Poorer* (New York: Bloomsbury, 2007); J. Cohn, *Sick: The Untold Story of America's Healthcare Crisis—and the People Who Pay for It* (New York: Harper Perennial, 2008); M. Mahar, *Money-Driven Medicine: The Real Reason Health Care Costs So Much* (New York: Harper Business, 2006); T. R. Reid, *The Healing of America: A Global Quest for Better, Cheaper, and Fairer Health Care* (New York: Penguin, 2009).

[27] A. S. Casale, R. A. Paulus, M. J. Selna et al., "'ProvenCareSM': A Provider-Driven Pay-for-Performance Program for Acute Episodic Cardiac Surgical Care," *Annals of Surgery,* Oct. 2007 246(4):613–23; R. A. Paulus, K. Davis, and G. D. Steele, "Continuous Innovation in Health Care: Implications of the Geisinger Experience," *Health Affairs,* Sept./Oct. 2008 27(5):1235–45; N. Beaulieu, D. M. Cutler, K. Ho et al., "The Business Case for Diabetes Disease Management for Managed Care Organizations," *Forum for Health Economics and Policy*, 2006 9(1); D. McCarthy, K. Mueller, and I. Tillmann, *HealthPartners: Consumer-Focused Mission and Collaborative Approach Support Ambitious Performance Improvement Agenda* (New York: The Commonwealth Fund, June 2009); and R. Nuzum, D. McCarthy, A. Gauthier, and C. Beck, *Denver Health: A High-Performance Public Health Care System* (New York: The Commonwealth Fund, July 2007).

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