The true measure of health care reform’s success is whether it drives down medical costs over the long term. The Patient Protection and Affordable Care Act has several features designed to modernize the delivery of services and thus ensure a more efficient, more effective, and less expensive health care system. These features include bundling medical services into larger payment groups, using value-based purchasing, and improving care coordination. These changes could spark a productivity revolution in health care that would make it much more affordable and simultaneously increase the quality of care. The success of these efforts at controlling long-run cost growth will require activism from the government and the private sector.
others think that it’s lower—but there is little disagreement that health care is characterized by enormous waste. Experience in other industries suggests that costs can be reduced and gives some indication of how rapidly. It is likely that, on average, we could achieve 1.5 percentage points lower cost growth per year relative to the current trend. That amount is roughly equivalent to the annual increase in productivity in the U.S. economy in the past fifteen years. Further, industries that use information technology extensively have seen annual productivity grow 1.5 percentage points faster than in other industries. Experience in health care leads to a similar conclusion. In the 1990s—the heyday of managed care—medical care costs rose about 1.8–2.0 percentage points more slowly than in earlier trends, with cumulative savings of about 15 percent. Thus, a 1.5-percentage-point reduction in health care cost growth is a reasonable target.

The implications of productivity growth at this rate are shown in Exhibit 1. By 2035, spending would be about 25–30 percent below current forecasts, so this is roughly the equivalent of reducing medical costs by 30 percent. Estimated federal savings are $580 billion in the first decade (2010–19), $3.5 trillion in the second decade (2020–29), and $4.9 trillion in the third decade. These savings are sizable, and far larger than the much-discussed fee reductions.

Areas Of Potential Savings
The central question is how such savings might be realized, and whether the Patient Protection and Affordable Care Act provides the tools for realizing the savings. I believe that it does. Several areas of health care offer the potential for significant savings.

The first is administrative expenses. Estimates of unnecessary administrative expenses are as high as 15 percent of medical spending. These expenses include time spent filling out paperwork for multiple insurers and costs associated with a lack of computerized records. Insurers and providers jointly agree that these costs can be reduced and have proposed strategies for doing so.

Even more money is wasted on care that provides little or no value. A number of studies show very low and diminishing returns on additional spending—meaning very little health gain in return for more spending. Furthermore, studies of particular conditions show patients receiving expensive care that is no better than cheaper alternatives. Evidence from a number of studies that have taken up related questions has led to an estimate that 30 percent of spending is wasted.

Finally, there is a good deal of unnecessary spending associated with medical errors. Estimates are that $30 billion annually is spent treating hospital-associated infections alone. Many such infections could be prevented with low-cost interventions, including regular attention to hygiene, implementing process measures such as checklists, and greater use of information technology.

Strategies To Realize Savings
Analysts from the left and right sides of the political spectrum agree that health care costs could be greatly reduced. There is, however, less agreement about the best strategy for reducing them. Three broad strategies have been proposed for achieving savings, all of which were raised in the recent public debate over reform (Exhibit 2).

The first proposal, most popular among liberals, stresses hard budget constraints for providers, often in the context of a single-payer insurance system, in which the federal government would limit spending and technology acquisition. Internationally, single-payer insurance combined with technology constraints is the most common method of cost containment.

A single-payer system was never seriously considered in the recent debate, but a public option (a plan sponsored by the government that individuals could enroll in at their choice) was considered. Supporters of the public option argued that it would save money in part by providing the

---

**EXHIBIT 1**

**Forecast Savings From Health Care Modernization, 2010–2035**

---

**SOURCE** Author’s calculations. **NOTES** This simulation assumes that acute care spending decreases by 1.5 percentage points below the current trend starting in 2013. In 2011 and 2012, cost savings are 0.5 percentage points below the trend in Medicare and private insurance, reflecting the time required to implement system changes. Savings include Medicare and Medicaid spending reductions and increased tax revenue from higher wages that will result from lower costs for employer-provided health insurance.
framework for tight revenue controls down the road, if needed. Nonetheless, a public insurance plan was dropped from the reform package.

The second proposal, most popular among conservatives, is to turn health care into a market more like others and make consumers more financially responsible for their medical spending. One version of this proposal involves a direct approach. It takes even more aggressive steps to encourage the use of high-deductible insurance plans through the tax code or making enrollment in them mandatory. A second version uses a policy of greater insurance choice, coupled with the repeal of or a cap on the tax exclusion for more generous insurance plans. Evidence shows that consumer choice is sensitive to prices, for both medical services and insurance.\textsuperscript{13,14}

But the ability of greater consumer choice to reduce waste, as opposed to reducing the consumption of both valuable and wasteful services, is still the subject of debate.\textsuperscript{15} The health care reform law travels only a little way along this path. Through a 40 percent excise tax on health insurance plans above a certain level, it in effect limits the tax exclusion for employer-provided health insurance in and after 2018, but only for high-cost insurance plans.

The third strategy, which best reflects the philosophy of the new health reform law, is to use the leverage of Medicare payments to change provider incentives throughout the medical system and thus encourage more efficient care. Providers who are paid for value, not volume, will have incentives to limit unnecessary care and will also ensure that people receive appropriate chronic and preventive care.

The idea of using payments as a lever for delivery system reform comes from the study of productive firms throughout the economy. Such firms generally share three attributes. First, they use a great deal of information technology (IT), which allows them to learn what they are doing well and poorly, and how they can get more output for their inputs. Second, productive firms have compensation systems that reward the creation of value, not excessive production or underproduction. Third, productive firms have committed leaders and workers who are empowered to make changes. They also involve consumers in improving productivity.

The Obama administration quickly recognized the need for investments in health IT. The president proposed major IT spending during the 2008 campaign, and financial incentives to providers to adopt the necessary infrastructure were part of the American Recovery and Reinvestment Act of 2009. Thus, the major issue on the table in the recent reform was compensation changes. The federal government directly controls Medicare payments, so they were the obvious focus of the legislative effort. The assumption is that what happens in Medicare will spread to the private sector, which is what happened with prospective payment (a fixed payment per admission) in the 1980s and the resource-based relative value scale (the schedule of physician fees in Medicare) in the 1990s.

Compensation Reforms

Although the reform bill contains many compensation changes, the major ones fall into four categories (Exhibit 3).

**Bundling** Bundling, or paying a single fee for an entire episode of treatment, is the first category. The health reform law calls for bundling hospital readmissions into the initial admission and bundling all care for chronic conditions for each patient.

A variety of evidence suggests that greater bundling will reduce spending. For example, Medicare’s Heart Bypass Center Demonstration Project in the 1990s paid a single rate for physician and inpatient services for coronary artery bypass graft (CABG) surgeries. It achieved savings of more than 15 percent per episode.\textsuperscript{16} Similarly, Geisinger Health System has a bundled system in place for cardiac care. It includes preoperative care, the surgery and inpatient stay,
and ninety days of follow-up care. Because of bundling and the introduction of medical homes in a number of its sites, Geisinger has among the country’s lowest rates of readmissions of Medicare patients within thirty days after an initial hospitalization.17

ACCOUNTABLE CARE ORGANIZATIONS The next category involves authorizing and supporting accountable care organizations (ACOs)—entities that could, for example, accept a single capitation payment and would be responsible for providing all services to their enrollees.18 Organizations such as the Department of Veterans Affairs (VA) and Kaiser Permanente are models here. The health care reform law calls for the Centers for Medicare and Medicaid Services (CMS) to establish rules for ACOs by January 2012.

PAY-FOR-PERFORMANCE The third category of cost-cutting measures in the law is value-based purchasing, or pay-for-performance. The law calls for linking existing measures of inpatient quality to payment, and expanding performance-based measurement and payment systems from inpatient care to outpatient care, physician services, home health care, and skilled nursing facilities. Many of the quality measures being considered are associated with lower costs—for example, improvements in patient safety. Evidence on the cost impact of value-based purchasing is limited, although it shows reasonably clearly that quality can be enhanced through performance-based payment reform.

COORDINATED CARE The final category is investment in care coordination and transitions. This includes programs for Medicaid enrollees with chronic conditions, a community-based care transition model in Medicare, and the Independence at Home demonstration. All of these programs are also supported by a $10 billion Center for Medicare and Medicaid Innovation within the CMS, which will be responsible for developing and testing new models of chronic care management. Models that improve quality and lower costs can then be expanded throughout the Medicare program.

Conclusion

Many of the program innovations in the Patient Protection and Affordable Care Act are demonstration or pilot programs. This has been taken by some critics as a sign of a wavering commitment to cost savings, but this assessment is not correct. Rather, the focus on experimentation along so many dimensions suggests a general desire to move forward rapidly on all possible fronts instead of predicting which direction will be the most promising. Indeed, the most surprising aspect of reform is the willingness of Congress to go along with major changes in Medicare even when the official scorers at the CBO estimated that such experimentation would not save money.

For reform to be successful, two things must happen. First, the administration must move forward rapidly with the design and operation of the pilot programs and demonstration projects, and with needed internal reforms. Medicare has a demonstration process, but it is slow and cumbersome. It takes five to ten years from concept to results; this cycle must be cut to a year or less. Such streamlining is feasible, but it will require an enormous change in agency culture. Much of that culture change must happen within the CMS, but changes also will be required elsewhere in the Department of Health and Human Services (coordinating payment reform and health IT, for example) and in other parts of the administration (for example, the Office of Management and Budget).

Even more important than the administration of programs within the government is getting

<table>
<thead>
<tr>
<th>Area</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundling</td>
<td>Medicaid demonstrations</td>
</tr>
<tr>
<td></td>
<td>National pilot program on payment bundling</td>
</tr>
<tr>
<td>Accountable care organizations (ACOs)</td>
<td>Medicare Shared Savings Program</td>
</tr>
<tr>
<td></td>
<td>Pediatric ACO program</td>
</tr>
<tr>
<td>Pay-for-performance</td>
<td>Reduced payments for health care–acquired conditions</td>
</tr>
<tr>
<td></td>
<td>Hospital-based value purchasing</td>
</tr>
<tr>
<td></td>
<td>Payment systems for physicians, home health care, and skilled nursing facilities</td>
</tr>
<tr>
<td>Care coordination/transitions</td>
<td>State option for medical homes for Medicaid enrollees with chronic conditions</td>
</tr>
<tr>
<td></td>
<td>Community-based care transitions program</td>
</tr>
<tr>
<td></td>
<td>Independence at Home demonstration project</td>
</tr>
</tbody>
</table>

SOURCE Author’s analysis.
providers to respond to the new system. Health reform will make many existing models of practice unprofitable but will create enormous profit opportunities in other areas. Private-sector providers and large private payers must actively participate in the change to new models of care delivery. For example, we already have much evidence that medical homes, bundled payments, and other reforms can save enormous amounts of money while simultaneously improving the quality of care. Providers need to move into these areas rapidly, and a fair amount of industry integration and consolidation may occur as a result. Payers, including insurers and businesses, need to consider piggybacking other changes onto payment reforms to help speed the creation of new care models and delivery systems.

Change can also be spurred by outside parties. Venture capital has invested heavily in drugs and devices, but relatively lightly in organization innovation and technology to manage patients’ care. Smart venture capitalists could spark a revolution in care management and organization that takes advantage of the payment changes allowed by the new law. So far, the provider community seems comfortable with the proposed changes, and the Obama administration is beginning to implement the reform law. If the next steps match the promise of the beginning, the coming decade could witness a transformation of health care unrivaled in history. In that case, the revolution we are beginning would truly vindicate the century of struggle for health care reform.

David Cutler was an adviser to the Obama administration during the development of the legislation discussed in this paper.

NOTES

6 Some of these savings were later reduced, as providers raised the prices charged to less aggressively managed plans, but costs are still below pre-1990s forecasts.