



The Performance Improvement Imperative

Utilizing a Coordinated,
Community-Based Approach
to Enhance Care and Lower Costs
for Chronically Ill Patients



The Commonwealth Fund Commission
on a High Performance Health System

April 2012

THE COMMONWEALTH FUND COMMISSION ON A HIGH PERFORMANCE HEALTH SYSTEM

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ABSTRACT: The Commonwealth Fund Commission on a High Performance Health System believes the federal government needs a comprehensive implementation plan to take full advantage of the opportunities in recent health reform legislation. Such a plan requires a vision and clear goals for performance improvement, collaboratively determined priorities, simplified administrative requirements, and rapid data-driven feedback. By 2016, the nation should seek to double annual improvement in quality-of-care metrics and to hold the per capita increase in health expenditures to the annual growth in per capita GDP, plus 0.5 percentage points—reducing national expenditures by \$893 billion over 10 years. To help achieve these goals, the Commission proposes the U.S. create 50 to 100 voluntary “Health Improvement Communities” focused on patients with multiple, high-cost chronic conditions. Through payment reform, enhanced primary care, and health information technology, this effort could yield \$184 billion in savings, or 21 percent of the overall target.

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CONTENTS

Executive Summary	6
Introduction	9
Principles for Federal Leadership in Performance Improvement	11
Getting Started: Performance Improvement for High-Cost Patients	12
The Performance Improvement Imperative	21
Notes	23

LIST OF EXHIBITS

Exhibit ES-1	Community-Based Strategy for Improving Care of High-Cost Patients
Exhibit 1	New Federal Health Authorities Under the Affordable Care Act, American Recovery and Reinvestment Act, and HITECH Act
Exhibit 2	Total National Health Expenditures (NHE), 2011–2021: Current Projection and Goals
Exhibit 3	Illustrative Performance Improvement Targets
Exhibit 4	Health Care Costs Concentrated in Sick Few—Sickest 10 Percent Account for 65 Percent of Expenses
Exhibit 5	Patients with Multiple Chronic Conditions Are More Likely to Undergo an Adverse Drug Event or Medical Error
Exhibit 6	Community-Based Strategy for Improving Care of High-Cost Patients
Exhibit 7	Net National Health Care Savings Associated with Improved Chronic Care Management

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EXECUTIVE SUMMARY

As the second decade of the 21st century unfolds, the federal government finds itself with significantly expanded capacity to catalyze improvement in the delivery of health care services. At the same time, rising federal budget deficits, coupled with the need for coordinated action across public and private payers and governmental authorities, present significant logistical, fiscal, and political challenges. How can the nation seize this unique moment to improve health system performance in the face of such complexity and uncertainty?

The Commonwealth Fund Commission on a High Performance Health System believes the federal government needs a comprehensive, disciplined implementation plan that takes full advantage of the new opportunities provided by the Affordable Care Act, the American Recovery and Reinvestment Act, and the Health Information Technology for Economic and Clinical Health (HITECH) Act. We identify the following general principles to help guide this strategic plan:

- Develop a strong vision for performance improvement that includes clear performance improvement goals.
- Set priorities for implementation consistent with those goals through a collaborative process involving public and private sector stakeholders.
- Simplify payment methods, delivery models, and performance improvement targets to reduce errors, minimize the burden on health care providers, and decrease systemwide costs, while also enabling and encouraging a wide variety of health system actors to participate.
- Build into the implementation plan the capacity for rapid data-driven feedback, to capture early results and inform midcourse corrections.

- Act fast, by creating new processes for policy development and regulatory review.

To begin, the nation must create a vision for improving the overall health of the population, enhancing patient experiences with care, and lowering the growth in health care costs. To that end, the federal government, in partnership with other public and private participants in the health care sector, should seek by 2016 to double the current annual rate of improvement in quality-of-care metrics tracked by the Agency for Healthcare Research and Quality, from 2.3 percent to 4.6 percent. The focus, at least at first, should be on areas where the potential is greatest to facilitate prevention, make health care safer for patients, and reduce preventable complications of care.

The nation should also aspire to reduce the growth in health care costs. By 2016, the annual increase in national health care expenditures per capita should be held to the annual growth in per capita gross domestic product plus 0.5 percentage points (4.4%, given current projections), a rate that should be maintained thereafter. Bringing the increase in health spending more in line with economic growth would reduce total national health expenditures by \$893 billion over 10 years, compared with current trends.

One possible way to achieve these goals is to prioritize improvement in chronic disease care, in particular for patients with multiple, high-cost conditions. Under our proposal, local communities would seek to involve all chronically ill residents, regardless of health insurance status or source of coverage, in care improvement initiatives utilizing three evidence-based tools: payment reform, to encourage accountability; primary care, to improve care coordination; and health information technology, to promote information use and sharing (Exhibit ES-1). It

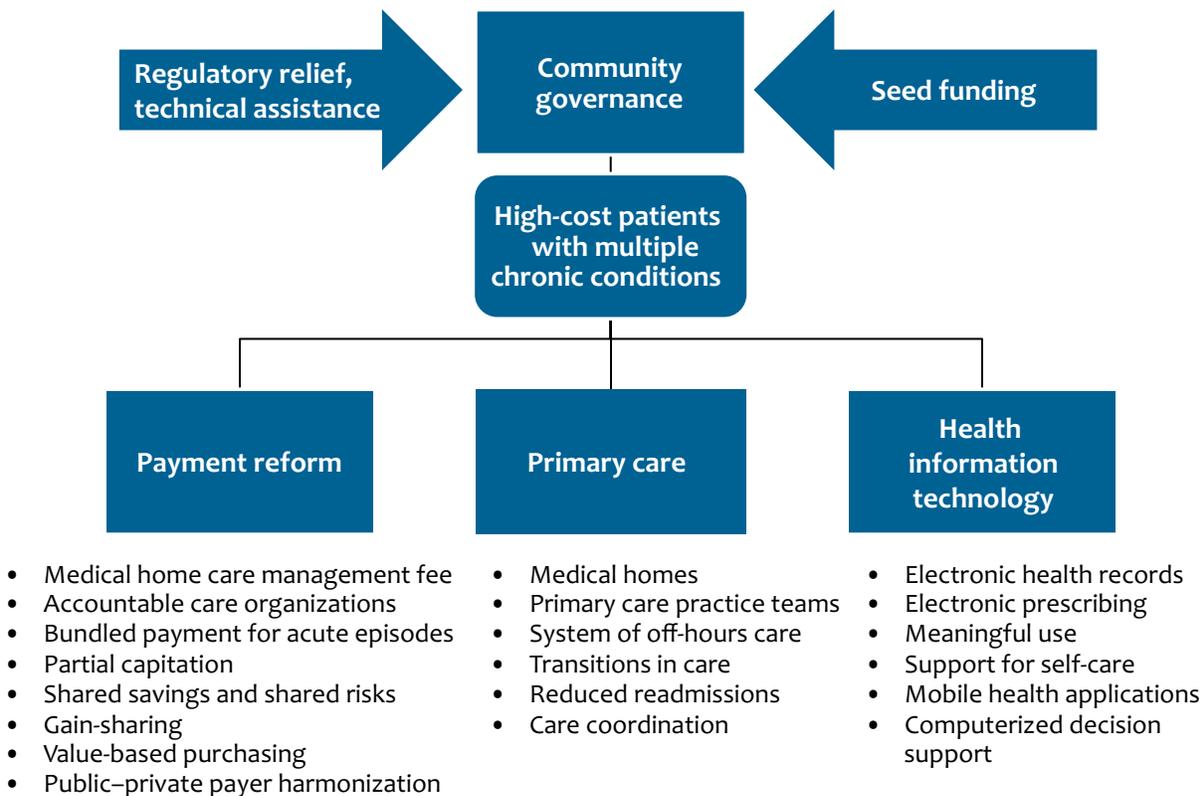
is important to note that “communities” is defined broadly as any area where providers, payers, residents, and others work together to achieve common goals related to improving care and reducing costs for the high-cost chronically ill. Armed with these tools and with sufficient flexibility in approach, such community-based initiatives would achieve synergies to fuel rapid progress in care for a population that bears a high burden of illness and accounts for a disproportionate share of health system costs.

We propose that over the next 12 months, the U.S. Department of Health and Human Services and the Centers for Medicare and Medicaid Services use the extraordinary new resources made available by recent legislation to create 50 to 100 voluntary “Health Improvement Communities” that utilize these and other tools to mobilize public and private resources for the improvement of care provided to complex, high-cost patients. The selected

communities should receive both seed funding and regulatory relief in support of program goals. This should include waivers enabling close coordination between Medicare and Medicaid, so as to optimize care for dually eligible patients, and encouraging the participation of private payers to help align incentives and support local action. Additional financial resources and technical support should be made available to communities that express an interest in participating but are not initially selected.

The potential savings from improving care for high-cost chronically ill patients are significant. Recent research undertaken by the Urban Institute for The Commonwealth Fund found that building on the reforms contained in the Affordable Care Act to improve care for the chronically ill has the potential to save \$306 billion over the 10-year period from 2013 to 2022. If 50 to 100 Health Improvement Communities are established, it is

Exhibit ES-1. Community-Based Strategy for Improving Care of High-Cost Patients



possible to achieve \$184 billion in national health expenditure savings from the recommended combination of new payment strategies to advance the patient-centered medical home model of primary care and to encourage providers to be more accountable for the cost and quality of the care they deliver. These savings would account for 21 percent of the \$893 billion in reduced national health spending proposed above as a systemwide target.

Improving care for the chronically ill is just one of many steps required to lower national health spending and bring about the dramatic change needed in the way health care is organized and provided. Clearly there are additional compelling priorities for performance improvement—among them,

care for vulnerable populations, pregnant women, and newborn children. But the nation cannot prioritize everything at once; it must choose a strategy that promises significant gains in quality and efficiency within a short period. We simply cannot afford to wait.

To foster “game-changing” innovation in the U.S. health care system, federal, state, and local leaders must partner with private sector stakeholders in using the new authorities available under the Affordable Care Act and other federal statutes. Doing so will not only realize much-needed savings in federal and state budgets, but it will also improve the health, well-being, and financial security of millions of patients and their families.

INTRODUCTION

As the second decade of the 21st century unfolds, this nation has an unprecedented opportunity to create a high performance health care system. An array of recent statutes, including the Affordable Care Act, the economic stimulus legislation (American Recovery and Reinvestment Act), and the Health Information Technology for Economic and Clinical Health (HITECH) Act, provides the federal government significantly expanded capacity to catalyze improvement in the delivery of health care services.¹ The new authorities created by this legislation touch all the critical levers for advancing health system performance: payment policy, the organization of care, public health programs, and information needed for health care decision-making. The national performance improvement toolbox is now well stocked.

But using that toolbox effectively constitutes an enormous challenge. Federal budget deficits and rising governmental health care expenditures create enormous pressures to quickly adopt simple expedients, like cuts in benefits and provider payments.² At the same time, the very number and diversity of new legislative authorities, each with its own legal quirks and restrictions, creates huge conceptual and logistical complexity (Exhibit 1). It does not help that responsibility for implementing critical programs is spread across a stunning array of large agencies within and beyond the Department of Health and Human Services (DHHS): the Centers for Medicare and Medicaid Services (CMS), the Health Resources and Services Administration (HRSA), the Centers for Disease Control and Prevention (CDC), the Agency for Healthcare Research and Quality (AHRQ), the Office of the National Coordinator for Health Information Technology (ONC), the Office of the Assistant Secretary for Health (OASH), the Department of the Treasury, the Internal Revenue

Service, the Department of Agriculture, the Department of Commerce, the Department of Justice, and the Federal Trade Commission, among others. Success will depend critically on these agencies partnering with state governments to ensure that Medicare and Medicaid work together to facilitate change at the local level.

Even if the federal government functioned like a well-oiled performance improvement machine, other challenges still loom. Little can be accomplished without close collaboration with the private sector as well as the states, so that finding ways to align public and private programs is vital. Much uncertainty remains about the effectiveness of some newly enacted initiatives, such as the highly visible accountable care organization (ACO) program, which is one reason the initiatives themselves are so numerous; Congress seems to have stuffed the performance improvement toolbox knowing that some potential fixes would break down. Finally, as we enter the 2012 election cycle, the political risks associated with bold new initiatives of any kind increase dramatically. Caution becomes the governmental watchword.

The question, therefore, is how the federal government can seize this unique moment to improve health system performance in the face of such complexity and uncertainty. Answering this question is urgent for several reasons. First, governmental business as usual is unlikely to succeed. Without close coordination driven by an overriding vision, the dutiful, line-by-line implementation of each individual Affordable Care Act, ARRA, and HITECH program will not suffice to take full advantage of this unique moment or to create the breakthroughs in performance needed to make our health system sustainable. Second, if we fail to take advantage of the toolbox Congress has granted the

**Exhibit 1. New Federal Health Authorities Under the Affordable Care Act,
American Recovery and Reinvestment Act, and HITECH Act**

Law	Federal Health Authority	
Affordable Care Act	Innovation Center	Patient Safety Research Center
	Shared Savings Program (Accountable Care Organizations)	Program to Facilitate Shared Decision-Making
	Independent Payment Advisory Board	Quality Improvement and Patient Safety Training
	Quality Measure Development	Payment Adjustment for Health Care-Acquired Conditions
	Interagency Working Group on Health Care Quality	Medicaid Global Payment System Demonstration Project
	Patient-Centered Outcomes Research Institute	National Prevention, Health Promotion, and Public Health Council
	Health Innovation Zones	Community Transformation Grants
	Payment Bundling Pilot	Project Concerning Individualized Wellness Plan
	Hospital Value-Based Purchasing Program	Technical Assistance for Employer-Based Wellness Programs
	Value-Based Payment Modifier	Childhood Obesity Demonstration Project
	National Strategy for Quality Improvement in Health Care	National Health Care Workforce Commission
	Quality Measure Development	Primary Care Extension Program
	Hospital Readmissions Reduction Program	Nursing Home Compare Web Site
	Community-Based Care Transitions Program	Projects on Culture Change and Use of Information Technology in Nursing Homes
American Recovery and Reinvestment Act	FMAP Increases	Comparative Effectiveness Research
	COBRA Subsidies	Public Health Research
HITECH Act	Electronic Health Record Incentive Program	HIPAA Privacy Requirements

Source: Patient Protection and Affordable Care Act (P.L. 111-148) as modified by the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152); American Recovery and Reinvestment Act of 2009 (P.L. 111-5); Health Information Technology for Economic and Clinical Health Act (Title XIII, P.L. 111-5).

executive branch, many promising ideas may lose credibility, setting back performance improvement initiatives for years or decades to come.

The Commonwealth Fund Commission on a High Performance Health System believes the federal government needs a comprehensive, disciplined implementation plan for health system improvement that takes full, thoughtful advantage of its new authorities and opportunities. The executive branch

needs to devote as much attention to this task as it has, with great success, to the more visible effort to implement Affordable Care Act provisions that extend coverage to uninsured populations and improve the fairness and functioning of private insurance markets. The initial focus on these provisions was understandable, given the early deadlines assigned them in the legislation. However, government must now apply the same intensity to the

performance improvement authorities under the reform law and its companion statutes.

In the sections that follow, we outline some general principles that should guide this implementation strategy for health system performance, and then apply those principles to one possible approach to focusing performance improvement programs: using community-based initiatives to improve the care of high-cost patients with multiple chronic conditions.

PRINCIPLES FOR FEDERAL LEADERSHIP IN PERFORMANCE IMPROVEMENT

Develop a Vision

The federal government must have clear goals for performance improvement, including, at a minimum, concrete cost containment and quality improvement targets. The former are essential for efforts to restrain federal health care budgets; moreover, budgetary imperatives provide motivation and focus for performance improvement activities. If budget agreements call for reductions of certain amounts in Medicare and Medicaid spending over the next decade, then performance improvement efforts should support those goals, so that they are not pursued exclusively through simplistic, heavy-handed means—such as reductions in benefits or provider payments—that threaten access to care for publicly insured populations and shift costs onto private payers. For their part, quality improvement targets not only have intrinsic value, but they serve to ensure that cost restraints do not harm patients.

The federal leadership vision should include one additional vital element: a theory of change. Public leaders need to understand how meaningful change occurs in the health care system, so that government may assist in facilitating performance improvement.

Set Priorities

The more complicated the leadership challenge, the more important it is to set priorities. If the federal government were to pursue all available performance improvement options with equal vigor, the signals sent to other private and public actors would be confusing and overwhelming, and it would likely squander its energy and resources. The Department of Health and Human Services and its sister agencies must therefore develop priorities for health system improvement collaboratively with states, private sector entities, and other stakeholders. To build momentum and manage public expectations, the first set of activities should aim for demonstrable near-term successes. However, priorities can and should change over time, in recognition of the multidimensional nature of the performance improvement task. Having such flexibility also allows federal officials to learn from experience, while reassuring stakeholders whose programs are not “first out of the box” that they will receive appropriate attention later on.

The federal government must choose a program or programs to focus on during each phase of its performance improvement plan. The selection process requires at least two underlying decisions. The first concerns the levels or targets to which the federal government will apply its performance improvement toolbox. These levels are by no means mutually exclusive—indeed, many are overlapping—but they cannot all be addressed simultaneously and effectively. Possible options include:

- *Geographic unit:* the national or state level, or the local community level (which can be defined flexibly as an area where local participants can work together to achieve program goals).

- *Type of provider:* integrated health systems, hospitals, health professionals, long-term care facilities.
- *Type of service:* episode of illness, hospitalization, health professional visit, home care/long-term care service, preventive and public health service.
- *Population:* infants, children, adolescents, child-bearing adults, the elderly, patients at the end of life, the underserved, the poor, and high-cost patients.
- *Disease or condition:* heart disease, cancer, mental illness, multiple chronic conditions.

The second critical decision involves selecting the tools that will be used for the intervention and recognizing the synergies that are possible as they are deployed in combination. We think these tools come in three major buckets:

1. *Payment approaches*, including the sharing of risk or gain associated with providers' clinical decisions.
2. *Organizational and infrastructure choices*, including the facilitation of changes in how providers organize themselves and the composition of the health care workforce and care teams.
3. *Information availability and use*, including methods, such as health information technology (HIT), for making data available to providers and consumers/patients to inform their choices at critical points in the health care process.

Simplify

A critical goal of any performance improvement plan should be making it easy for health system actors to increase the efficiency and quality of care. When those decision-makers face complex, contradictory,

extremely costly, and nonintuitive demands from outside parties, even the motivated and willing are stymied. As the federal government organizes its performance improvement program, it must constantly endeavor to coordinate and simplify the requirements it places on payers, providers, state and local governments, and consumers. Administrative simplification should be a goal not just for billing and payment, but for government programs generally.

Build in Feedback

Government will get some things wrong and some right. It needs to know quickly what is not working so that improvements can be made. Federal performance improvement projects should have a built-in evaluation component, and evaluation should be a priority for senior federal managers.

Act Fast

As noted above, the federal government made rapid progress implementing the coverage and insurance provisions of the Affordable Care Act. It did so by creating new processes for policy development and regulatory review supported by strong White House, Office of Management and Budget (OMB), and DHHS leadership. Performance improvement should receive the same treatment. Business-as-usual will not produce the decisive action that the current opportunity enables and requires.

GETTING STARTED: PERFORMANCE IMPROVEMENT FOR HIGH-COST PATIENTS

The remainder of this paper illustrates the application of these principles to the design of a potential first phase of a governmental performance improvement initiative. The particular approach outlined here is one of many that federal leaders could

choose, and it represents just one of many steps required to lower national health spending and bring about the dramatic change needed in the U.S. health system.

The Vision

The federal government should aspire to reduce the “excess” growth in health care costs by at least one-half, lowering the national rate of increase in health care expenditures per capita to the annual growth of gross domestic product (GDP) per capita, plus 0.5 percentage points (4.4%, given current projections) by 2016, and to maintain that rate through 2021. This target is consistent with President Obama’s recent proposal to strengthen the Independent Payment Advisory Board in an effort to lower federal health costs and reduce the federal budget deficit.³

Total national health spending in 2021 is projected to reach more than \$4.9 trillion, representing 20.1 percent of the nation’s entire economic output (Exhibit 2). Compared with current trends, bringing the increase in health spending per capita to growth in GDP per capita plus 0.5 percent would reduce national health expenditures by \$893 billion over 10

years. This would lower health spending as a share of GDP to 19.0 percent in 2021, but still leave \$37 trillion in the health system over this period that could be reallocated to address the needs of the American people.

With regard to quality of health care, the Commonwealth Fund Commission on a High Performance Health System has found substantial improvement in only half of the 29 quality indicators tracked in its most recent *National Scorecard on U.S. Health System Performance*.⁴ Using a broader set of measures, the Agency for Healthcare Research and Quality (AHRQ) reported improvement in two-thirds of the 179 indicators included in the *National Healthcare Quality Report*—yet the median annual rate of change across indicators was only 2.3 percent.⁵

The federal government should seek by 2016 to double the current annual rate of improvement in quality metrics tracked by AHRQ from 2.3 percent to 4.6 percent. Likewise, leaders should develop targets for non-AHRQ measures that mirror achievable benchmarks already attained by top performers. To ensure quality improvement and reporting efforts are

Exhibit 2. Total National Health Expenditures (NHE), 2011–2021: Current Projection and Goals

Projected annual growth rate, NHE per capita	NHE, 2021	Cumulative percentage increase in NHE, 2011–21	Cumulative NHE, 10 years ending in 2021 (2012–21)	Cumulative savings from current projection, 2012–21	NHE/GDP, 2021
Gross domestic product (GDP) per capita + 1.2 (5.1%, current projection)	\$4.9 trillion	81.9%	\$37.9 trillion	—	20.1%
GDP per capita + 1.0 (4.9%)	\$4.8 trillion	77.0%	\$37.5 trillion	\$0.4 trillion	19.6%
GDP per capita + 0.5 (4.4%)	\$4.6 trillion	71.6%	\$37.0 trillion	\$0.9 trillion	19.0%
GDP per capita (3.9%)	\$4.5 trillion	66.3%	\$36.5 trillion	\$1.4 trillion	18.4%

Source: Authors’ calculations.

concentrated in areas of health care where they will be most productive, the focus should be where the potential is greatest for improvement in patient outcomes, safety, and rates of preventable complications. Specific priority indicators could include: the share of people with diabetes and those with heart disease who have their conditions under control; rates of admission to hospitals or emergency rooms for adverse reactions to medications; and numbers of preventable complications from asthma, diabetes (including amputation and blindness), pneumonia, and congestive heart failure. Exhibit 3 illustrates recent trends and possible outcomes if rates of improvement are accelerated; as performance improves, targets can be raised further.

In promoting these goals, federal leaders must understand that, in the U.S. health care system, change is both a “top down” and “bottom up” process.⁶ Performance improvement will occur when

millions of clinicians and patients across our vast country are able to “do the right thing,” day in and day out, because they have access to the best available information—about health and health care, and about medical evidence relevant to care decisions—when and where they need it. Clinicians and patients also need environmental supports that will enable them to choose diagnostic and therapeutic pathways that maximize the value of care. And they require support to establish and maintain innovative care teams, with new roles for the full range of health professionals to facilitate coordination and provide enhanced access to patient-centered care. Moreover, prevailing financial incentives have to encourage high-value decisions, and organizational arrangements must support collaboration, coordination of care, and the availability of services, both medical and social, that can be most useful in improving patient health. Finally, the clinical and

Exhibit 3. Illustrative Performance Improvement Targets

Indicator	Baseline	Baseline improvement rate	Target improvement rate	Target
Potentially avoidable hospitalizations per 100,000 population for chronic conditions	1,037 per 100,000 (2007)	2.2% (2000–07)	4.4% (2016)	809 per 100,000 (2016)
Adults with hypertension whose blood pressure is under control	41.2% (2005–08)	2.6% (2001–08)	5.2% (2016)	53.2% (2016)
Admissions for uncontrolled diabetes without complications per 100,000 population	21.1 per 100,000 (2007)	4.0% (2000–07)	8.0% (2016)	13.4 per 100,000 (2016)
Hospital patients with heart failure who received recommended hospital care	95.0% (2008)	2.7% (2005–08)	5.4% (2016)	100% (2016)
Adults age 50 and older who received colorectal cancer screening	60.1% (2008)	2.4% (2000–08)	4.8% (2016)	75.9% (2016)
Adults ages 18–64 at high risk (e.g., those with respiratory disease) who received a flu shot in the past 12 months	31.7% (2008)	1.6% (2000–08)	3.2% (2016)	37.0% (2016)
Hospital patients with pneumonia who received recommended hospital care	89.8% (2008)	3.2% (2007–08)	6.4% (2016)	100% (2016)
All-cause 30-day readmission rates for patients discharged alive to a nonacute care setting with a principal diagnosis of heart failure	24.9% (2010)	–0.7% (2008–10)	1.7% (2016)	22.5% (2016)

Source: Agency for Healthcare Research and Quality; Centers for Medicare and Medicaid Services/The Joint Commission; authors’ estimates.

organizational culture must promote learning and continuous improvement.

The federal government can facilitate the creation of all these conditions. Among other things, it can clear away obstacles, help align incentives, and promote the flow of information. But it cannot do the work itself. The work will fall overwhelmingly, as it should, to the millions of autonomous private and public individuals and institutions in the United States. Every action the federal government takes related to performance improvement should be focused on making it possible and easy for other private and public sector actors to deliver the best care they can. The federal government cannot do this from Washington alone. It will need partners close to the ground, in communities across the nation.

At a minimum, government must ensure that its policies and actions are not inhibiting the dissemination of health information, the alignment of incentives, the coordination of care, and a culture of learning and improvement. This will require that federal leaders manage and coordinate their programs with unprecedented vigor, discipline, and effectiveness.

Programmatic Priorities to Support Local Improvement

Choosing the target or level of intervention. For reasons implied above, we subscribe to the view that major health care change, like health care itself, is local. Fundamental performance improvement occurs in communities where patients and their caregivers live and work. Creating the conditions for improvement, therefore, starts at the community level. This theory has underpinned a number of important recent initiatives, including the HITECH Beacon Community program and the Robert Wood Johnson Foundation's

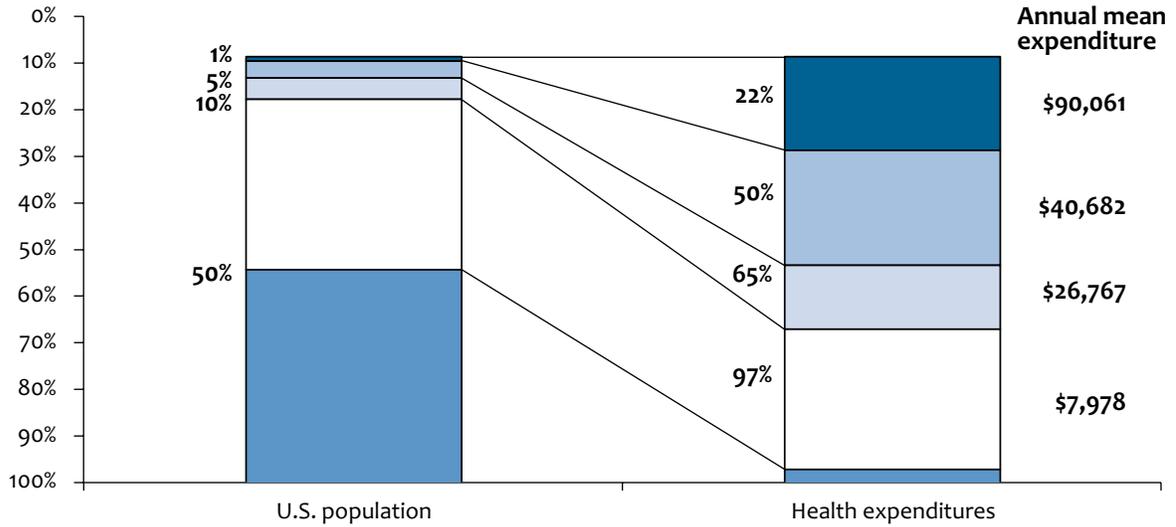
Aligning Forces for Quality program.⁷ The definition of community will vary significantly in different parts of the country and health system. A community could be a neighborhood, a city, a county, a hospital referral region, or even a state. Communities themselves will have to define the unit in which effective performance improvement is possible.

If we accept that the community is an appropriate level for targeting the intervention, we must then decide what it is communities should endeavor to accomplish. A promising initial focus could be on improving the care of their high-cost patients. We know that 5 percent of the U.S. population accounts for 50 percent of health care costs, and that 10 percent accounts for 65 percent of costs (Exhibit 4).⁸ High-cost patients generally have multiple chronic conditions, such as congestive heart failure, coronary artery disease, diabetes, and asthma, for which well-defined metrics exist for gauging quality of care.⁹ We also know that patients with multiple chronic conditions are more vulnerable than healthier individuals to problems related to the safety of care, such as adverse drug events and medical mistakes (Exhibit 5).¹⁰ If our goal is to accomplish rapid improvements in the value of services provided, logic dictates we focus where opportunity resides: the sickest, most-expensive, and vulnerable among us. This is both a humane and pragmatic choice.

Selecting tools. Success in improving health care performance for high-cost patients with multiple chronic conditions will require the forceful, coordinated application of multiple tools. But we cannot do everything at once. With the understanding that communities must be given sufficient flexibility to adapt to their local conditions, we suggest three evidence-based tools be utilized: payment reform, to encourage accountability; primary care, to improve

Exhibit 4. Health Care Costs Concentrated in Sick Few— Sickest 10 Percent Account for 65 Percent of Expenses

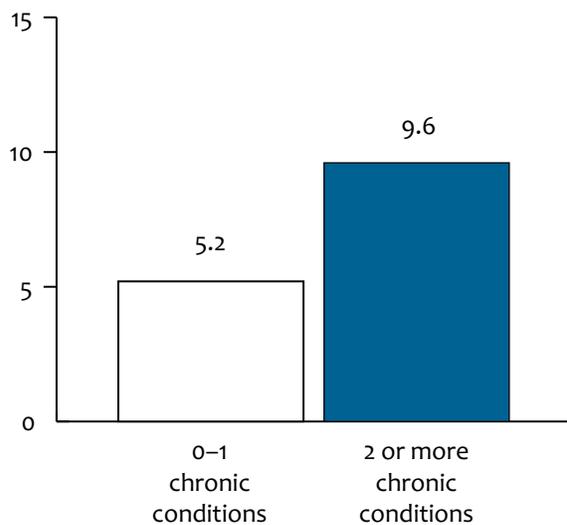
Distribution of health expenditures for the U.S. population, by magnitude of expenditure, 2009



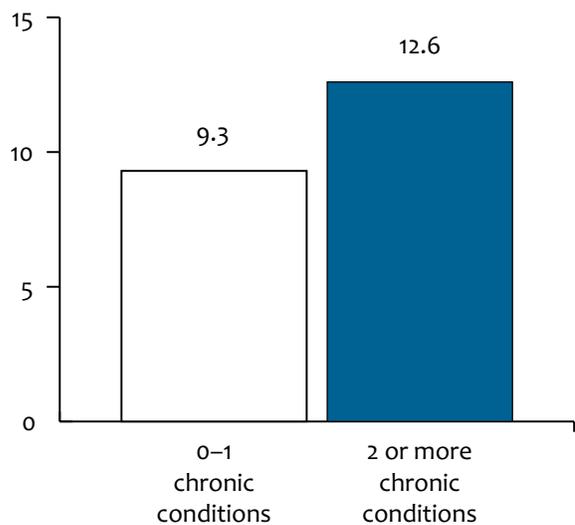
Source: Agency for Healthcare Research and Quality analysis of 2009 Medical Expenditure Panel Survey.

Exhibit 5. Patients with Multiple Chronic Conditions Are More Likely to Undergo an Adverse Drug Event or Medical Error

Percent reporting wrong medicine or wrong dose



Percent reporting medical mistake



Note: U.S. patients only.
Source: 2011 Commonwealth Fund International Health Policy Survey.

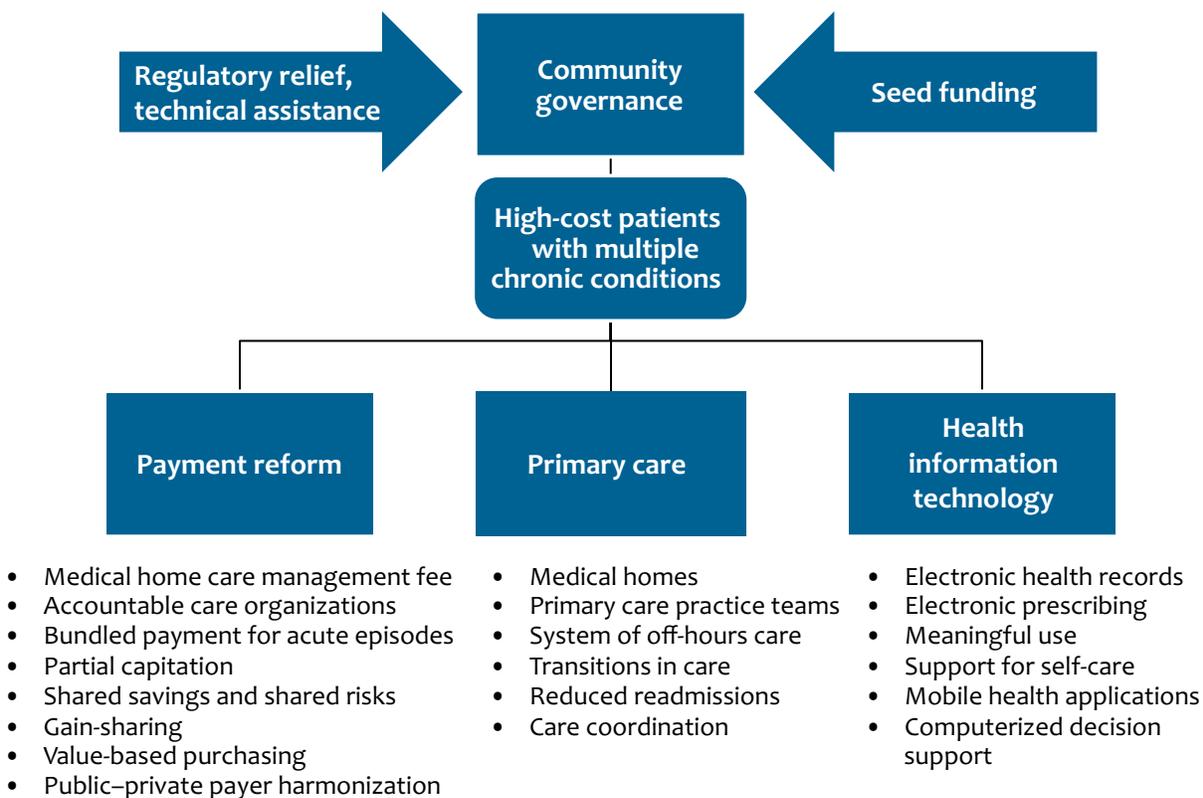
care coordination; and HIT, to promote information use and sharing (Exhibit 6). If carefully designed to support each other, initiatives that deploy these three tools have the potential to achieve rapid progress and fuel care system innovations.

Payment reform is essential to enable providers, and perhaps patients, to reap a portion of the savings that result from reduced costs and better quality.¹¹ One stakeholder’s cost is another’s revenue, and the income from high-cost patients is a mainstay of many health care providers’ economic welfare. To make it easier for these providers to reduce unnecessary or marginally useful services, gain-sharing will be essential. All payers, providers, and patients should be included in gain-sharing—not just Medicare providers and beneficiaries—to maximize the impact at the community level. The goal should be communitywide ACOs for high-cost patients

with multiple chronic conditions (discussed further below).

Nothing is more important for improving performance in caring for complex, high-cost patients than properly coordinated care and enhanced access to a care team 24 hours a day.¹² Care coordination, along with access, is the key to unlocking value, by reducing waste and duplication of services, preventing threats to safety, and monitoring quality of care. A critical question for a high-performing health system, however, is where the capability and responsibility for care coordination and enhanced access should rest. While there is no one answer, we believe that primary care practitioners (PCPs), as first-contact providers in most U.S. communities, will always play a critical role in coordinating their patients’ care, as they do in so many other Western health systems.

Exhibit 6. Community-Based Strategy for Improving Care of High-Cost Patients



Previous research has shown that countries with a strong primary care foundation have better population health outcomes, more equitable care, and greater efficiency of health services.¹³ Patients with access to a regular primary care physician are more likely than those without such access to receive recommended preventive services, obtain necessary treatment before more serious and costly problems develop, and have fewer preventable emergency department visits and hospital admissions.¹⁴ A robust supply of primary care providers is associated with lower mortality, higher life expectancy, and better self-rated health status.¹⁵

Interventions that “empower” primary care are therefore fundamental to any community-based program of performance improvement for high-cost patients. Such interventions might include increasing the supply and capabilities of primary care clinicians, or providing support to primary care practice teams that expand the roles of nurses and other nonphysician clinicians. This means, in turn, ensuring that primary care practices can function as patient-centered medical homes and that the local quality of professional life for PCPs is sufficient to attract and retain them.

The implementation of gain-sharing and care coordination programs depends on accurate, timely, and actionable information at the point of health care decision-making. Health care providers cannot manage health care expenditures unless they can access information about their patients’ ongoing costs of care in real time, when potentially expensive tests and treatments are ordered. Nor can providers prevent duplicative or wasteful care, or avoid dangerous drug interactions, unless they have reliable information on what they and their colleagues have done for patients in the past, what medications patients are using, and how these medications interact.

According to Commonwealth Fund–supported research, use of HIT is associated with both better quality and lower average adjusted costs for hospital admissions and lower mean hospital costs for a variety of clinical conditions, including heart failure and coronary artery bypass grafting.¹⁶ It would be exceedingly difficult to match these gains and support effective gain-sharing and care coordination with paper-based record systems. Program participants that are not certified as “meaningful users” of HIT should therefore be required to detail how they would achieve the objectives without electronic records.

Equally important is that community-level electronic health information systems support data exchange and clinical decision support. The former allows information to be shared across the many providers caring for a particular high-cost patient within the community, while the latter helps clinicians make optimal decisions based on the vast store of personal health information and medical evidence that electronic exchange makes available. Ideally, electronic information systems would have robust capabilities in still another realm: the support of patients, and their families, in managing their conditions themselves. Mobile health applications for self-care are growing very rapidly and offer great promise for the future.¹⁷

More specifically, we propose that the federal government work with other public and private stakeholders over the next five years to launch a nationwide, community-based initiative to improve the care of high-cost patients with multiple chronic conditions. This program should recruit 50 to 100 locations, covering roughly 60 percent of the U.S. population. As outlined above, these could be a combination of neighborhoods, cities, counties, hospital referral regions, or states, but all eligible

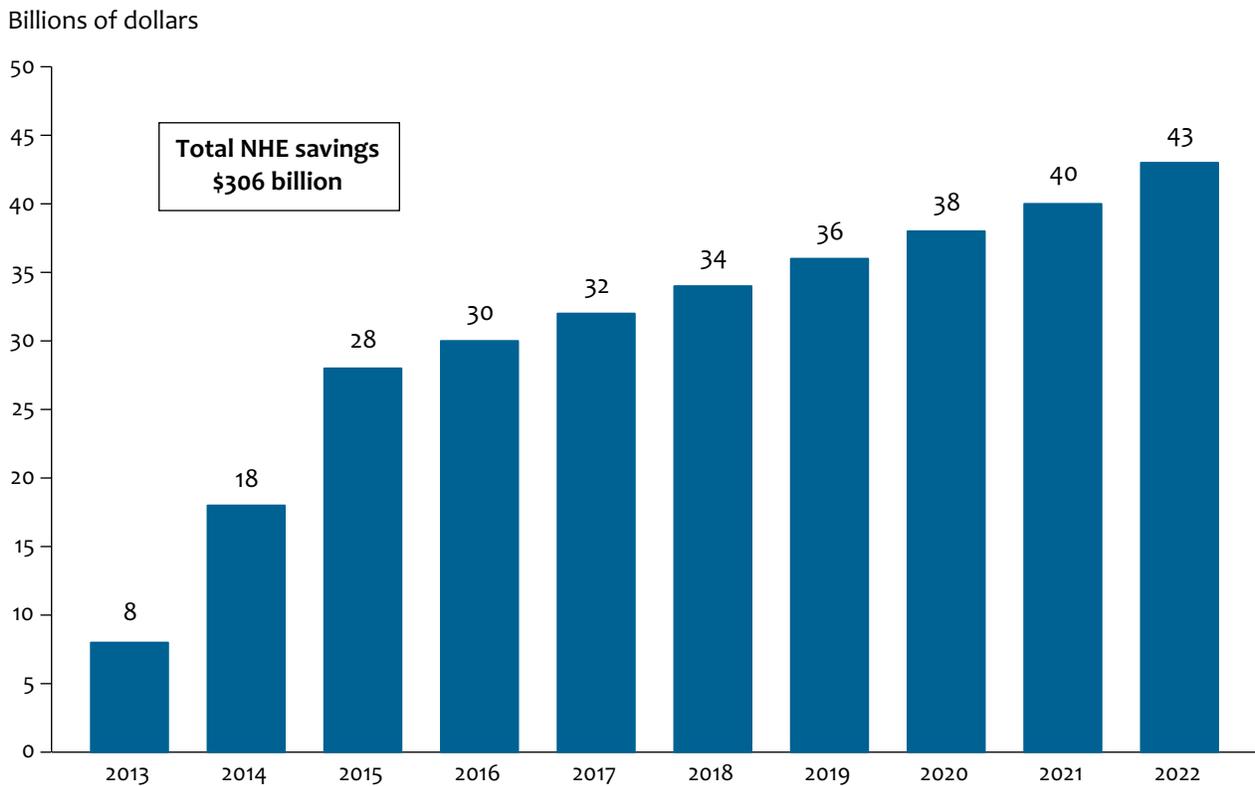
communities should have significant concentrations of high-cost patients.

In return for financial and technical support and regulatory accommodations, participating communities should involve all or most local payers and providers in community-based accountable care arrangements. Additional financial resources and technical support should be made available to communities that express an interest in the initiative but are not initially selected to participate. We believe that the diverse authorities contained in the Affordable Care Act, ARRA, and the HITECH Act enable DHHS and other federal agencies to unite around this coordinated, opening thrust of a multi-phase campaign to improve U.S. health care performance.

Recent research by the Urban Institute and The Commonwealth Fund has found that building on the reforms contained in the Affordable Care Act to improve care for high-cost, chronically ill patients has the potential to save \$306 billion over the 10-year period from 2013 to 2022 (Exhibit 7).¹⁸ The recommended combination of new payment strategies to further promulgate the patient-centered medical home model and encourage providers to be more accountable for the cost and quality of care delivered has the potential to save \$184 billion, if implemented in the 50 to 100 locations that would voluntarily take part in the program. These savings account for 21 percent of the target of \$893 billion in national health system savings described above.

Simplifying. DHHS must ensure that all its diverse programs support this initiative, and that

Exhibit 7. Net National Health Care Savings Associated with Improved Chronic Care Management



Source: J. Holahan, C. Schoen, and S. McMorro, *The Potential Savings from Enhanced Chronic Care Management Policies* (Washington, D.C.: The Urban Institute, Nov. 2011).

none detract from it. Obviously, new and existing legislative authorities require the department to undertake many other activities with important health care objectives. All these activities, however, should at least consider how they support or impede the community-based high-cost patient initiative.

For example, the work of CDC and OASH in the areas of blood pressure and diabetes control, heart disease prevention, obesity reduction, immunization, and smoking control can and should complement community-based plans to improve care for high-cost patients. HRSA should make certain that community health centers in the 50 to 100 selected locales serve as primary care medical homes improving care for high-cost patients. CMS quality reporting and management activities should focus, to the extent possible, on the chronic conditions prevalent among high-cost patients, develop quality metrics relevant to patients with multiple chronic conditions, and minimize the burden of reporting other quality metrics for providers in participating communities. Medicare and Medicaid should operate with the same core goals, payment incentives, quality metrics, and reporting requirements.

These extensive coordinating activities should be managed through a DHHS-wide coordinating committee, chaired by the Secretary of Health and Human Services. Before launching any new initiatives, DHHS agencies should submit to the committee an impact statement evaluating possible effects on the community-based high-cost patient program. The goals should be to reduce overhead and administrative complexity, to set clear targets for improving care outcomes and cost performance, and to enable timely data feedback to community care systems.

Build in Feedback

Robust, timely evaluation should inform implementation of the high-cost care improvement initiative.

Early evaluations should assess the process of implementation itself, including the rate of recruitment of new communities, their characteristics (to ensure they include requisite populations of high-cost patients and are broadly representative of the U.S. population), their success in launching community-based initiatives, the nature of those initiatives, and other key program attributes. Later evaluations should report cost and quality metrics based on public and private claims data, uploads from electronic health systems, public health data reported to state authorities, and selected primary data collection activities. The DHHS secretarial coordinating committee should review these data on a monthly basis, or as often as useful.

Act Fast

The federal government often fails to act fast—or at all—because it lacks the authority to be flexible and innovative. But, with the enactment of health reform, DHHS, for the first time in its history, has the tools to promote large-scale performance improvement and to do it fast.

The critical legislative provision is the Center for Medicare and Medicaid Innovation (Innovation Center), which has broad authority and \$10 billion to undertake novel programs to contain Medicare and Medicaid costs while protecting quality of care.¹⁹ A community-based high-cost patient initiative would fit easily within the Innovation Center's mandate. For example, the Affordable Care Act encourages demonstrations promoting medical homes, coordinated care for patients with multiple chronic conditions, and payment reforms using risk and gain-sharing. The law further encourages the Innovation Center to establish "health innovation zones," which emphasize teaching institutions' leadership role regarding care innovation. But the legislation also authorizes supporting geographic areas, or

zones, engaged in performance improvement through broad-based local alliances. In addition, the law provides for innovation in the way Medicare and Medicaid work together, particularly for the 9 million beneficiaries who are enrolled in both programs, often referred to as “dual eligible.”²⁰ For these beneficiaries—as well as the disabled, frail, and/or chronically ill elderly Medicaid or Medicare beneficiaries—community care systems need to include long-term care and home care, as well as office-based and hospital care.

We propose that, over the next 12 months, the agencies use the extraordinary new resource represented by the Innovation Center to create 50 to 100 community-based Health Improvement Communities (HICs) that will mobilize public and private resources to improve the care provided to high-cost patients. These communities could include waivers for Medicaid to coordinate seamlessly with Medicare for the care of dual eligibles. The communities should further have provisions enabling private payer participation, to align incentives and support local action.

We suggest that DHHS use a range of additional programs and resources to fundamentally redesign payment, primary care, and information use in designated HICs. HICs should be encouraged to develop innovative gain-sharing payment arrangements that are consistent across public and private payers. Payment redesign should materially improve the revenue, flexibility, and resources available to medical homes in ways that promote and reward care coordination by PCPs for high-cost patients. HICs should be strongly encouraged to have comprehensive HIT plans for their communities, and to coordinate those plans both with the Health Information Technology Regional Extension Centers and with the State Health IT Coordinators and State Health Information Exchange Plans created under

the HITECH Act. Regional Extension Centers should prioritize HIT support for PCPs within HICs. Where HICs overlap with Beacon Communities or Aligning Forces for Quality Programs, these programs should coordinate activities to the maximum extent possible.

In its recently announced Comprehensive Primary Care Program, the Innovation Center included a number of the key characteristics required to build the primary care component of an HIC as we envision it. We recommend that the Innovation Center accelerate the program, expand it beyond the five to seven sites currently planned, focus it more clearly on high-cost patients with multiple chronic conditions, and link it more explicitly to other CMS and DHHS initiatives.

In all this work, the Innovation Center should provide as much flexibility as possible to HICs, support timely data needs, and minimize regulatory and reporting burdens, other than those vital to ensure cost containment and quality improvement. While participation must remain voluntary, regional diversity of HICs should be a priority.

THE PERFORMANCE IMPROVEMENT IMPERATIVE

Performance improvement is hard work, harder even than extending insurance to uncovered populations. There are examples in public insurance programs and in Massachusetts of large-scale successes in covering the uninsured and regulating private insurance markets. No comparable examples exist of high-performing health systems that are readily transferable or replicable, and there is a reason: redesigning health care provision requires changes in the daily work of clinical care, in how patients and clinicians think, relate to one another, and behave. This is

profoundly unsettling and difficult to do, and to do fast.

Improving care for high-cost, chronically ill patients is necessary but not sufficient to bring national health spending to a more sustainable level and accomplish all the desperately needed changes in our health care system. Policymakers could choose other places to start. Other priorities for performance improvement—such as the care delivered to vulnerable populations, pregnant women, or newborn children—provide compelling motivation for action.

But whatever the initial focus, meaningful and systemwide performance improvement is vital. Government and its private partners must decide and act; waiting is not an option. Federal and private leaders must use the new authorities available under the Affordable Care Act and other federal statutes to foster dramatic innovation in our health care system. There has never been a better time.

NOTES

- ¹ Patient Protection and Affordable Care Act (P.L. 111-148), as modified by the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152); American Recovery and Reinvestment Act of 2009 (P.L. 111-5); and Health Information Technology for Economic and Clinical Health Act (Title XIII, P.L. 111-5).
- ² K. Davis and S. Guterman, “Achieving Medicare and Medicaid Savings: Cutting Eligibility and Benefits, Trimming Payments, or Ensuring the Right Care?” The Commonwealth Fund Blog, July 13, 2011.
- ³ Office of Management and Budget, *Living Within Our Means and Investing in the Future: The President’s Plan for Economic Growth and Deficit Reduction* (Washington, D.C.: OMB, Sept. 2011).
- ⁴ Commonwealth Fund Commission on a High Performance Health System, *Why Not the Best? Results from the National Scorecard on U.S. Health System Performance, 2011* (New York: The Commonwealth Fund, Oct. 2011).
- ⁵ Agency for Healthcare Research and Quality, *2010 National Healthcare Quality Report* (Rockville, Md.: Agency for Healthcare Research and Quality, March 2011).
- ⁶ S. Guterman, K. Davis, K. Stremikis, and H. Drake, “Innovation in Medicare and Medicaid Will Be Central to Health Reform’s Success,” *Health Affairs*, June 2010 29(6):1188–93.
- ⁷ See http://healthit.hhs.gov/portal/server.pt/community/healthit_hhs_gov__onc_beacon_community_program__improving_health_through_health_it/1805 and <http://www.forces4quality.org/>.
- ⁸ Agency for Healthcare Research and Quality analysis of 2009 Medical Expenditure Panel Survey.
- ⁹ Congressional Budget Office, *High-Cost Medicare Beneficiaries* (Washington, D.C.: CBO, May 2005).
- ¹⁰ 2011 Commonwealth Fund International Health Policy Survey, <http://www.commonwealthfund.org/Surveys/2011/Nov/2011-International-Survey.aspx>.
- ¹¹ S. Guterman, K. Davis, C. Schoen, and K. Stremikis, *Reforming Provider Payment: Essential Building Block for Health Reform* (New York: The Commonwealth Fund, March 2009).
- ¹² T. Bodenheimer, E. H. Wagner, and K. Grumbach, “Improving Primary Care for Patients with Chronic Illness,” *Journal of the American Medical Association*, Oct. 9, 2002 288(14):1775–79; and T. Bodenheimer, E. H. Wagner, and K. Grumbach, “Improving Primary Care for Patients with Chronic Illness: The Chronic Care Model, Part 2,” *Journal of the American Medical Association*, Oct. 16, 2002 288(15):1909–14.
- ¹³ B. Starfield, L. Shi, and J. Macinko, “Contribution of Primary Care to Health Systems and Health,” *Milbank Quarterly*, 2005 83(3):457–502; and K. Davis, C. Schoen, and K. Stremikis, *Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compares Internationally, 2010 Update* (New York: The Commonwealth Fund, June 2010).
- ¹⁴ M. K. Abrams, R. Nuzum, S. Mika, and G. Lawlor, *Realizing Health Reform’s Potential: How the Affordable Care Act Will Strengthen Primary Care and Benefit Patients, Providers, and Payers* (New York: The Commonwealth Fund, Jan. 2011).
- ¹⁵ J. Macinko, B. Starfield, and L. Shi, “Quantifying the Health Benefits of Primary Care Physician Supply in the United States,” *International Journal of Health Services* 2007 37(1):111–26.
- ¹⁶ R. Amarasingham, L. Plantinga, M. Diener-West et al., “Clinical Information Technologies and Inpatient Outcomes: A Multiple Hospital Study,” *Archives of Internal Medicine*, Jan. 26, 2009 169(2):108–14.
- ¹⁷ M. N. Boulos, S. Wheeler, C. Tavares et al., “How Smartphones Are Changing the Face of Mobile and Participatory Healthcare: An Overview, with Example from eCAALYX,” *Biomed England Online*, April 5, 2011 10:24.
- ¹⁸ J. Holahan, C. Schoen, and S. McMorro, *The Potential Savings from Enhanced Chronic Care Management Policies* (Washington, D.C.: The Urban Institute, Nov. 2011).
- ¹⁹ Section 3021 of the Affordable Care Act. For analysis of this provision, see 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 the Payment and System Reform Provisions in the Patient Protection and Affordable Care Act of 2010* (New York: The Commonwealth Fund, Sept. 2010).
- ²⁰ J. Millman, “Medicare Agency Announces Office for ‘Dual Eligibles,’” *The Hill*, Dec. 29, 2010.

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