

# FAREWELL TO FEE-FOR-SERVICE?

A “Real World” Strategy  
For Health Care  
Payment Reform

Working Paper 8  
December 2012



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# PREFACE

In just a few short years, debates on provider payment reform have emerged from technical obscurity to national prominence. Payment reform is now seen as self-evidently fundamental to U.S. health reform, quality improvement and cost containment. No national health policy prescription is complete without the exhortation to move from a health care system “that pays for volume to one that pays for value.”

But this apparent national consensus masks a number of critical uncertainties. What does the emerging evidence reveal about the effectiveness of different payment reforms? What contextual factors explain where and when different models are being adopted? And in aggregate, how big a financial impact might payment reform make over the coming decade, using plausible assumptions about likely net savings and speed of national adoption?

The consensus also glosses over a number of likely trade-offs inherent in new incentive and payment models, and their implementation. What is the right balance between local adaptation versus national uniformity, particularly in public programs? Where to strike the tradeoff between clinical sophistication versus ease of administration and scalability of new incentive structures? Will greater financial risk-sharing by providers accelerate consolidation that in turn drives costs higher? To what extent will gross savings be used to incentivize provider participation, as against being released as an efficiency “dividend” to lower health care costs for families, employers and governments? How to advance multi-payer initiatives which are easier for providers to respond to, but which may result in slower “lowest common denominator” solutions? These are but a few of the “real world” considerations that payment reformers must weigh and monitor. And these are therefore some of the practical design and implementation questions analyzed in this working paper.

This working paper aims to be a thoughtful and nuanced report from the frontline of payment reform experimentation and adoption, drawing on a number of data sources. We examine multi-year national database of episode-based performance measures for roughly 250,000 US physicians across 21 medical specialties. We use results from our new national survey of physicians to test provider attitudes toward payment reform. And we provide early reports on various “state of the art” payment reform pilots and initiatives under way across the country, including some of those being led by UnitedHealthcare or facilitated by Optum. We will publish more data as they become available.

If “to will the end is to will the means,” then continuing to grapple with these practical matters will be essential for payment reform to deliver on its promise. But we think that is a journey well worth undertaking.

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December 2012

# EXECUTIVE SUMMARY

America's health care system is on an unsustainable path. There are well documented gaps in care and variation in quality. The federal government projects that national health spending will rise from \$2.8 trillion to \$4.8 trillion over the coming decade — accounting for nearly 20 percent of the U.S. economy.

There is now widespread agreement that paying providers of health care on a fee-for-service basis is a key contributor to both our cost and quality problems. Such payments encourage the use of more services (and more expensive ones), but fail to reward high-quality or coordinated health care. As a catalyst for further action, this eighth Working Paper from the UnitedHealth Center for Health Reform & Modernization:

- assesses the spectrum of options for reforming payments;
- publishes results of a new national survey of physicians' views about payment reform; and
- shares new UnitedHealth Group data and "real world" implementation experience about what it will take to genuinely unleash the potential of payment reform.

In doing so, the Working Paper stresses that reforming payment incentives alone will be insufficient to make a difference — unless matched by support for doctors, hospitals, and other providers to give them the tools they need to succeed, and tailored to the needs of communities and providers which are at different stages of readiness for change. Payment reforms should also be seen not as an end in themselves, but rather as a key component of a broader strategy to align incentives for providers and consumers and give both groups the information they need to improve patient health. Taking a flexible and staged approach to payment reforms is

also key — given the uncertainty that exists about which particular initiatives, or combinations and sequences of steps, will prove most effective at improving value in health care in different communities. The Working Paper is organized as follows:

**Chapter 1** reviews **the evidence about cost and quality problems** in the current health care system, and the contribution that fee-for-service payment makes to those problems — diagnosing the "condition" that payment reforms are designed to "treat."

**Chapter 2** discusses efforts to measure and provide **feedback about the quality and efficiency of care** to doctors and consumers, illustrated with data from UnitedHealthcare's assessment program, known as Premium Designation. Among the key findings, the data show that cardiologists and orthopedists providing high-quality care have about half as many complications and "re-dos" for key procedures as doctors who do not meet quality goals; and doctors delivering high-quality and efficient care incur total episode costs about 14 percent lower than do other doctors. That information also provides a foundation on which to align payment incentives — including incentives for consumers — to help providers improve their performance.

**Chapters 3 through 7** examine the major opportunities and challenges that arise along the continuum of payment reform options, from modified fee-for-service payments through to capitation. **Chapter 3** examines **scenarios for the net savings that might result from payment reforms** — which could range from \$70 billion up to \$1 trillion over 10 years. Even at the higher end of that range, Americans' health care costs would still rise faster than their incomes — indicating that payment reforms, while crucial, are not a "silver

bullet.” The discussion then focuses primarily on several major initiatives and pilots that UnitedHealthcare has undertaken as well as Medicare’s recent efforts in each of the following areas:

- **Pay-for-performance and care management initiatives** — including performance-based contracting, which links payment increases for doctors and hospitals to measures of their quality and efficiency, and pilots of patient-centered medical homes (PCMHs), which seek to strengthen primary care (**Chapter 4**);
- **Bundled or episode-based payments** — including Optum’s “Centers of Excellence” program for complex care, an innovative pilot program designed to identify and reward best practices for chemotherapy regimens, and related initiatives now underway in Medicare (**Chapter 5**);
- **Shared-savings and shared-risk approaches**, including Accountable Care Organizations (**Chapter 6**); and
- **Capitation payments** to providers, drawing on UnitedHealthcare’s extensive experience with such arrangements, and discussing their uses and limitations and the importance of incorporating more quality and efficiency metrics into those payments (**Chapter 7**).

Across UnitedHealthcare, more than \$18 billion dollars in annual payments are made through value-based contracts that span our commercial, Medicare, and Medicaid lines of business. Those contracts include performance-based and bundled payments and involve PCMHs, Accountable Care Organizations, and capitation arrangements. Recently, a rigorous analysis of UnitedHealthcare’s first four PCMH pilots found that they reduced gross medical spending by 4.0 to 4.5 percent over two years and generated a 2:1 return on investment while quality measures improved.

Incorporated throughout the paper are results from our **new national surveys of physicians**, which show that:

- Physicians see wide variations in the quality of health care currently provided in their communities and a significant potential to improve the efficiency of care. For example, **59 percent said that they see “significant differences” in the quality of care provided by doctors in their local area, and on average doctors thought that health care costs could be reduced by 18 percent without sacrificing quality.** (Interestingly, this compares with a 25 percent figure from consumers.)
- Many physicians are aware of or participating in new payment models, but interest in them varies.
  - 74 percent of primary care physicians surveyed were familiar with the term “medical home,” and 41 percent said their practice had already joined or formed a medical home or was planning to do so;
  - 74 percent of specialists surveyed were at least somewhat familiar with proposals to create bundled or episode-based payments; only 14 percent were interested or very interested in pursuing such arrangements (although another 31 percent were somewhat interested); and
  - 52 percent of all physicians were familiar with the term Accountable Care Organization (ACO), and 24 percent said their practice was already part of one or expected to join one.
- Even so, **only 28 percent of doctors thought that practices in their community were well prepared or adequately prepared to assume greater responsibility for managing their patients’ care**, and only 12 percent thought they were well prepared or adequately prepared to assume greater financial risk for managing that care.

The paper also highlights a number of payment reform initiatives being pursued by states in their Medicaid/CHIP programs and health insurance for state employees.

**Chapter 8** discusses a number of **implementation issues** that are common to most or all of the payment reform options, including: the need for providers (and health plans) to assess their readiness for reform; the key role of support and infrastructure (including but not limited to electronic health records and data exchanges); the role of multi-payer initiatives; the need to manage implementation costs for reforms; the importance of patient engagement and cost-sharing mechanisms in aligning incentives for consumers and helping them improve their own health; and some risks and pitfalls that may arise along the way — including the risk that these initiatives will either be evaluated too hastily or fall victim to unreasonable expectations.

**Chapter 9** concludes by providing an **action agenda** on payment reform for each major stakeholder, including doctors and hospitals, health plans, and state and federal governments in their roles as purchasers and regulators. Key recommendations include:

- **Doctors and hospitals** and the organizations and specialty societies that represent them — as well as respected and independent standard-setting authorities — need to continue to help develop and validate further measures of care quality that are consistent and focus on high-value dimensions of quality.
- **Health plans** need to continue developing payment models that are easy to implement and that make it simpler for busy providers to deliver high-quality care. This would include “tool kits” that providers can use to help them succeed under these new models, including timely data and user-friendly feedback on their performance.
- **Employers** should continue to be important catalysts for testing new payment models, allied with new employee incentive programs.
- **Consumers** need transparent information about performance and should embrace value-based benefit designs that help them make good choices, and can also take more responsibility for their own health — aided by online tools and mobile apps that make it much easier for them to navigate the health care system.

- **Federal and state** purchasers of health care and health insurance should continue their efforts to develop and test new payment models and work with health plans and providers to coordinate those efforts appropriately, while seeking to minimize regulatory barriers that might limit efforts to improve the system’s efficiency.

There is little doubt about the general direction that payment reforms need to take. Inevitably some tradeoffs will need to be addressed regarding the degree and type of financial risk that providers bear and how savings from payment reforms are shared between the providers that generate them and the consumers, employers, and taxpayers that ultimately bear the costs of health care. But whatever the precise combination or sequence of payment reforms that different communities pursue, it is now time to move faster along the path to higher performance and value.

# PART A – THE CURRENT STATE OF PROVIDER PAYMENT, QUALITY, AND PERFORMANCE

## Chapter 1: What’s wrong with fee-for-service payment?

The American health care system has many strengths, delivering treatments that save or improve the lives of countless patients every day. But there is widespread agreement that the quality of care provided in this country is not nearly as high as it could be or should be. While many people fail to receive recommended care, others receive tests or treatments that appear to provide little or no medical benefits and may even cause harm. At the same time, spending on health care consumes a large share of the nation’s resources — about 18 percent of gross domestic product (GDP) in 2012 — and has been rising relentlessly for decades, straining the budgets of the employers and government agencies who sponsor health insurance and of the individuals and families who ultimately bear those costs as enrollees and taxpayers.

Contributing to those problems, though by no means their only cause, is the fee-for-service method of payment that predominates across U.S. health care. That method affects the care that is delivered through the incentives it provides and the incentives it fails to provide:

- To the extent that fee-for-service payments exceed the (marginal) costs of delivering additional services in an efficient way, they encourage providers of health care to deliver more services and more expensive services.<sup>1</sup>
- Paying separate fees for each individual service to different providers of care also facilitates the fragmented and uncoordinated delivery of care and accommodates wide variations in treatment patterns for patients with the same condition — variations that are not evidence-based.
- Fees are typically the same regardless of the quality of care provided, and thus do not provide incentives for high-quality care — and in some instances, such as avoidable readmissions to hospitals, total payments are greater for lower-quality care.

Some past efforts have sought to improve the accuracy of fee-for-service payments so that they more closely approximate providers’ costs, at least on average. But to the extent such efforts would involve cuts in payment rates, the resulting savings have often been offset, at least partially, by increases in the volume and intensity of services provided.<sup>2</sup> Instead of tinkering with the existing system, it has become a truism that the health care system must move away from “paying for volume” toward “paying for value.” The challenge is in figuring out how to do so. All too often, proposals to reform health care take a “Field of Dreams” approach, assuming that if you build new payment arrangements, better care delivery will simply come.

The purpose of this Working Paper is to describe our experiences with and perspectives on the challenges and opportunities that exist to improve care and lower costs by changing the ways in which care is paid for — and also to highlight that changing payment methods is only one component of a successful strategy; a necessary but not sufficient step. Getting better care and better health will require not only incorporating existing and validated measures of care quality into payment systems, but also improving the measures of care quality. And to translate the potential gains from payment reforms into the reality of higher quality and more affordable health care, the delivery of that care will need to be better coordinated.

So what is the available evidence about the impact of fee-for-service payment methods on spending and care quality? Studies examining these effects are described in detail in Appendix A, but their main findings can be summarized here as follows:

- Fee-for-service payment can generate a substantially higher level of costs for health care without yielding higher-quality care — a finding that dates back to the historic RAND health insurance experiment that



was completed three decades ago. The effects of fee-for-service payments on rates of cost growth, however, are less clear.

- Fee-for-service payments at least accommodate large geographic variations in spending for health care, a phenomenon that has been studied most extensively by researchers at Dartmouth using Medicare data. In 2006, for example, they found spending per enrollee in major markets varied from less than \$7,000 in Minneapolis to about \$12,000 in New York City — with even higher costs observed in Miami (over \$16,000 per enrollee).<sup>3</sup>
- Attributing all of the geographic differences in utilization and spending to the use of fee-for-service payment, however, would not be accurate because the incentives are broadly similar nationwide — so the observed differences must reflect, at least in part, varying responses to those incentives as well as variations in the levels of fee-for-service payments relative to providers' costs.
- Although studies relying on Medicare data have found that variation in payment rates plays a limited role in spending variation — reflecting the use of administered prices in that program — studies using private-sector data have found wide variations in fees for the same services, largely reflecting the bargaining leverage of some hospitals and medical groups.
- Fee-for-service payments also have accommodated wide variations and shortcomings in the quality of care that is provided. Instances of overuse, underuse, and misuse of care have been widely documented, and a recent federal report found that patients received recommended disease management for chronic conditions and appropriate acute care about three-quarters of the time in 2010 — an improvement from the 55 percent rate found in another landmark study 10 years earlier but still a long way from optimal care.<sup>4</sup>
- While dedicated health professionals seek to do what is best for their patients, financial incentives may affect treatment choices in the many grey areas of medicine — as suggested by studies which find that geographic variation in surgery rates is greater in cases where the medical community lacks consensus

about appropriate treatments. And instances in which improving care reduced providers' revenues and margins are well-documented.

What can be done to address the shortcomings of fee-for-service payment? In theory, one could seek to align payment rates more closely with the costs of efficient providers, so as to remove incentives to over-supply (or under-supply) services. In practice, however, that is difficult for several reasons. For one, payment rates in the private sector must be negotiated with, and thus agreed to by, doctors and hospitals. Determining objectively what those costs are is another challenge. Third, payment rates which collectively cover providers' average costs — and thus allow providers to “break even” allowing for normal margins — will also tend to exceed providers' costs for delivering an additional service (the marginal cost); that situation arises because some input costs for providers are fixed and thus do not vary with service volume. But given those economics, designing a fee-for-service payment system that does not distort incentives in some way may simply not be feasible.<sup>5</sup>

It also might be tempting to narrow the scope of the challenge and focus on payment rates in high-spending areas. Yet the findings about geographic variation in how medicine is practiced do not mean that we can simply cut payment rates in high-cost places to convert them into low-cost places. Recently, two experts — who have frequently collaborated with the Dartmouth researchers — made that point even more bluntly:

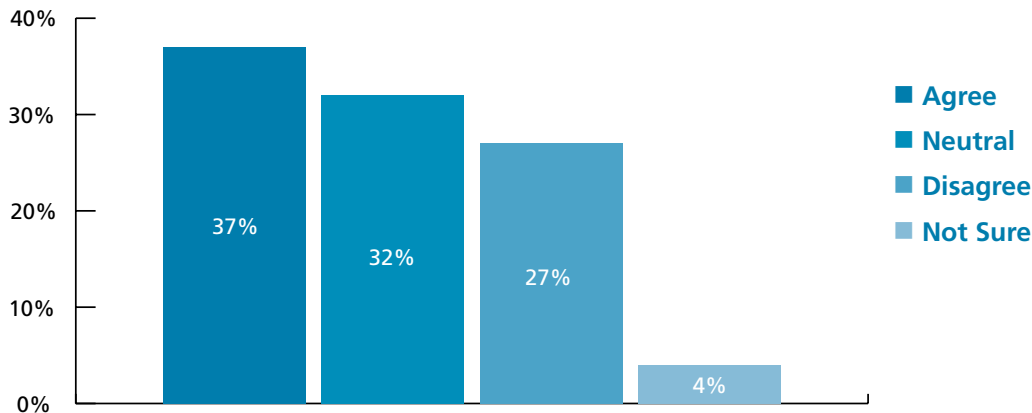
Miami is not just Minnesota with 30 percent waste added on. Cutting reimbursements alone will not automatically make high-spending areas adopt the systems, culture and experience of low-spending areas. Rather, we need to change the broader incentives under which medicine is practiced, including removing the incentives to practice without regard to outcomes.<sup>6</sup>

### **Physicians' perspectives on fee-for-service payment**

To gain insights into physicians' views about payments, UnitedHealth Group recently commissioned two surveys from Harris Interactive. (The surveys were conducted in October 2011 and June 2012; see Appendix B for a discussion of their methodology.) Regarding fee-for-service payment methods, physicians expressed mixed views, with many still seeing advantages in a fee-for-

## Physicians have mixed views about fee-for-service payments

Fee-for-service payment encourages the use of more services or more expensive services



Fee-for-service payment methods encourage coordination of patients' care with other doctors or institutions

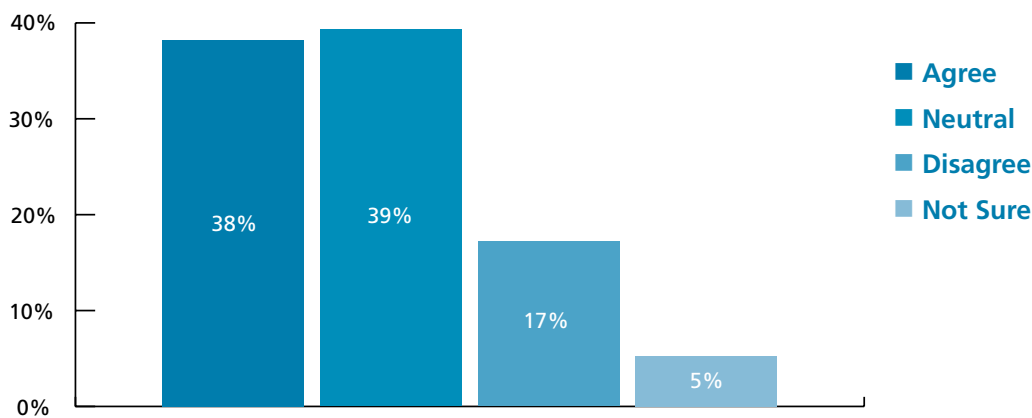


Figure 1.1; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, June 2012

service system (see Figure 1.1). While 37 percent of doctors thought that fee-for-service payments encourage the use of more services or more expensive services, 27 percent disagreed and another 32 percent had a neutral opinion. Furthermore, 38 percent of doctors agreed with the statement that fee-for-service payments encourage coordination of care while only 17 percent disagreed. And doctors agreed more strongly with the view that fee-for-service payment encourages them to provide an appropriate level of care, with 59 percent agreeing and only 15 percent disagreeing.<sup>7</sup>

In those surveys, doctors estimated that their practices received 62 – 68 percent of their revenues from fee-for-service payments; 23 – 30 percent came in the form

of capitated payments, and the rest were classified as other risk-based payments. (These responses could overstate the share of capitated payments nationwide.<sup>8</sup>) An even larger share, 70 percent, reported that their own compensation was tied to practice revenues — they were solo practitioners, received a share of their group practice's revenues or earnings, or were paid a salary plus volume-based incentives; the remaining 30 percent reported being paid purely on a salary or hourly basis. As those figures indicate, fee-for-service reimbursement is deeply ingrained in the U.S. health care system, and replacing it will take time and effort.

The survey also found that doctors are acutely aware of the problems of high cost and variable quality that afflict

our current health care system. In the June 2012 survey, nearly six out of ten respondents — 59 percent — said that there were “significant differences” in the quality of care provided by doctors in their local area (see Figure 1.2). By contrast, only 44 percent of consumers were aware of these differences, suggesting a meaningful “transparency gap” between care providers and the general public about care quality.

When asked how much they thought that health care costs could be reduced without sacrificing quality, the

average response among those who expressed an opinion was 18 percent in both the October 2011 and June 2012 surveys (see Figure 1.3). (This compares with a 25 percent average estimate from our parallel survey of consumers.) The median response was 15 percent savings in the October 2011 survey and 10 percent savings in the June 2012 survey. A first step toward achieving those savings is surely to measure and compare the quality and efficiency of the care provided in a precise way — a subject to which we now turn.

### Doctors see significant differences in the quality of physician care

Are there significant differences in the quality of care provided by doctors in your area?

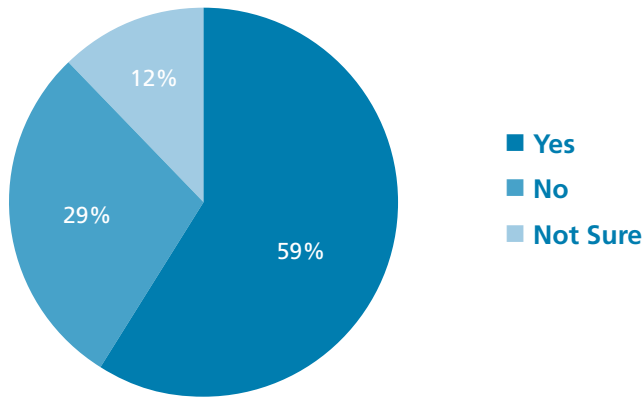


Figure 1.2; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, June 2012

### Doctors see significant opportunities to reduce costs without sacrificing quality of care

Without sacrificing quality, how much do you think health care costs in your community could be reduced?

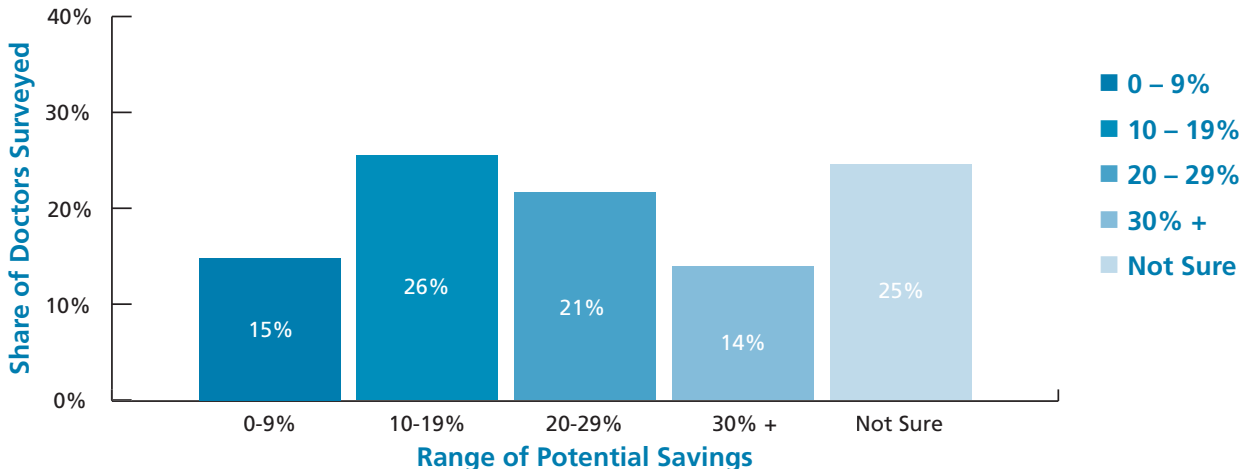


Figure 1.3; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, June 2012  
 Note: Components may not sum to totals due to rounding

## Chapter 2: Measuring the quality and efficiency of health care

The transition from paying for volume and intensity to paying for value and outcomes — and the parallel changes required in care delivery — must involve measuring the quality, cost, and efficiency of health care. Over the past several years, the scale and scope of performance-assessment programs in the private sector have expanded rapidly, aided by the efforts of many stakeholders to help create common standards and identify best practices in measurement.

Similar efforts in the Medicare program have made slower progress, and more generally the scope of quality measurement efforts will need to continue expanding and also to shift from the current emphasis on processes of care and avoidable complications toward better measures of outcomes. Among other things, that would allow assessments of performance to go beyond measuring whether episodes of care are delivered efficiently to examine whether those episodes were clinically appropriate or could have been prevented by better care. This chapter reviews the current state of the art of this field, examines some potential concerns and practical solutions, and offers suggestions for both policy and practice going forward.

### The evolution of transparent performance assessment

Reflecting concerns about current performance — and consistent with the management axiom that “you can’t manage what you can’t measure” — various performance-assessment programs have arisen in both the public and private sectors in recent years. Though often relying on the same underlying data, those programs have had diverse objectives, including:

- measuring performance to provide feedback to physicians and other care providers to facilitate continuous improvement;
- seeking to identify and reduce unexplained variation in practice patterns;
- promoting transparency to inform patient choice and create higher-functioning markets for better clinical care; and

- providing a foundation for efforts to address rising health care costs by aligning incentives for care providers, payers, and enrollees.

After decades of health services research demonstrated the persistence of quality defects, unexplained practice variation, and significant overuse, underuse, and misuse of clinical services, health plans and employers have worked with the medical profession to develop and launch new, large-scale initiatives to measure and improve performance assessment and foster greater transparency about performance on a broader, system-wide basis.<sup>9</sup> One advantage of initiatives led by health plans and employers is that they have claims data covering a broad range of providers and thus can generate useful comparisons that are beyond the scope of individual physicians or even large group practices. (Toward this end, some states have established or are setting up all-payer claims databases.) These efforts were facilitated by a series of reports from the Institute of Medicine documenting the substantial shortcomings of the health sector’s current performance and the opportunities to improve care quality and patient safety.<sup>10</sup>

Early efforts to measure the performance of physicians, hospitals, and health care delivery systems were criticized on a number of fronts, including: lack of reliable, valid, standardized performance measures; excessive reliance on population measures rather than more clinically nuanced, condition-specific measures; absent or inadequate risk-adjustment to account for differences in patient severity or other factors that could affect measured performance levels; and lack of stakeholder collaboration and engagement.

Over the past decade, however, significant progress has been made on all of these fronts. National initiatives such as the National Quality Forum (NQF) and the Physician Consortium for Performance Improvement (PCPI) have developed rigorous processes for reviewing and endorsing reliable, valid performance measures. Multi-stakeholder groups such as the AQA Alliance (which focuses on ambulatory care quality), the Surgical Quality Alliance, the Hospital Quality Alliance, the Consumer-Purchaser Disclosure Project, and the National Priorities

Partnership, among others, have created forums for broad stakeholder input and priority-setting. On the methodological front, growing computational power, the availability of large data sets, and the emergence of increasingly sophisticated analytic methods have created opportunities to develop and deploy new programs for transparent performance assessment and improvement at a national scale. Even so, many challenges remain — among them, the need to incorporate clinical data along with claims data to develop better measures of outcomes and clinical appropriateness, and to ensure that the development of new and better measures proceeds with all deliberate speed and is adequately staffed.

### **UnitedHealthcare’s Premium Designation program.**

In 2005, UnitedHealthcare first deployed a program known as Premium Designation, which evaluates physician performance on quality and efficiency in 21 different fields of medicine — including primary care and obstetrics, cardiology, and orthopedic medicine. The program utilizes extensive claim and administrative data sets for UnitedHealthcare’s commercially-insured members, and applies sophisticated “episode-based” cost analyses using tools developed by Optum. All together, the specialties that are included account for more than 60 percent of the medical spending covered by UnitedHealthcare’s employer plans. Around the time the program was launched, only one-third of physicians said that they received any feedback about their performance, and only one-in-five got any reports about their delivery of recommended care or their patients’ clinical outcomes.<sup>11</sup>

UnitedHealthcare’s Premium Designation program analyzes the performance of physicians against both quality and efficiency benchmarks. Quality is measured first, and only those physicians who meet or exceed quality benchmarks are evaluated for efficiency. (For additional information about quality measurement under the program, see Box 2.1.) Efficiency is measured against benchmarks that are risk-adjusted and tailored to each physician’s specialty and market to account for differences in average costs. On both dimensions, performance is measured relative to other physicians.<sup>12</sup>

This program serves several purposes. First, it offers information to UnitedHealthcare’s members to help them make choices about where to seek medical care. Second, it provides physicians with information about their performance compared to national standards and to their peers in order to facilitate improvement. Third, it conveys information to employers and other plan sponsors that can be used to promote better health care and value-based purchasing. For example, employers may use the Premium Designation program as a basis for “tiering” their health insurance benefits, with reduced co-pays or other cost-sharing incentives for enrollees who use designated physicians.

**Evolution of the program.** The Premium Designation program has continued to evolve since its inception, and each “release” of the program has expanded the scale, scope, sophistication, and usability of the information. The program now includes about 250,000 eligible physicians — or roughly one-third of all practicing doctors — and currently operates across 145 markets in 41 states. The analysis examines the treatment of more than 75 different conditions (factoring in different levels of severity whenever appropriate) and involves more than 300 specific measures of care quality. In addition to assessing doctors, the program designates high-quality and efficient specialty centers for the treatment of cardiac conditions, congenital heart disease, and infertility, and for joint and spine surgery and neonatal care. These centers have now been designated in 40 states and over 100 markets and are available to UnitedHealthcare’s members nationwide.

More broadly, a number of recent developments have combined to increase confidence in both the accuracy and value of performance measurement efforts by helping to define standards for such initiatives, and to address concerns that have been raised.<sup>13</sup> Multi-stakeholder groups representing consumers, providers, and purchasers of health care have reached agreement on a set of best practices for developing transparent and independently validated programs of performance measurement and reporting, and accreditation and oversight procedures also have been developed. The Premium Designation program comports with those

standards and has been accredited under the National Committee for Quality Assurance (NCQA) Physician and Hospital Quality program. As a result of these and other steps, health plans are committed to:

- Ensuring that rankings for doctors are not based solely on cost and clearly identify the degree to which any ranking is based on cost;
- Using established national standards to measure quality and cost efficiency, including measures

endorsed by the NQF and other generally accepted national standards;

- Employing several measures to foster more accurate physician comparisons, including risk adjustment and valid sampling;
- Disclosing to consumers how the program is designed and how doctors are ranked, and providing a process for consumers to register complaints about the system; and

### **Box 2.1: Quality measurement in the Premium Designation program**

To assess care quality, UnitedHealthcare's Premium Designation program uses all of the relevant measures of care quality that have been endorsed by the National Quality Forum plus additional evidence-based measures that were developed with medical specialty societies or expert panels and reviewed by committees of practicing physicians. Those measures reflect recommendations for screenings, diagnostic tests and treatments that are widely accepted by medical professionals as key elements of high-quality care. Examples include the regular testing of glycosylated hemoglobin (HbA1c) levels for all people with diabetes and maintaining use of beta-blocker medicines for patients who have suffered a heart attack.

For each of their patients, physicians have opportunities to provide care that meets evidence-based practice standards. They are evaluated by comparing the proportion of their patients who receive recommended care during a given time period (one to three years, depending on the measure) to similar groups being cared for by other physicians. The specific metrics that apply depend on the specialty involved, patient demographic characteristics, and the type of medical condition. For example, a primary care doctor will be assessed on such measures as whether he conducts appropriate screening tests to detect diabetes or other chronic conditions for his asymptomatic patients, while a knee surgeon will be evaluated by comparing her delivery of evidence-based care and avoidance of redo procedures to the performance of other knee surgeons. Since patients often see multiple physicians, the methodology incorporates rules for attributing opportunities to physicians, seeking to ensure, for example, that doctors are assessed only on the basis of conditions that are within the scope of practice for their specialty.

Physicians are assessed by comparing their performance to peer-group compliance rates for each quality measure. These measures are then aggregated to develop an overall quality score for each physician. To determine whether he or she receives a quality "star" under the Premium Designation program, a physician's performance is compared to the 75th percentile of the distribution of all measured physicians with a similar mix of patients and quality rules. This higher-than-average standard was chosen to further support quality improvement.

Recognizing that claims data for treating UnitedHealthcare's patients generally represent a sample of a physician's overall practice patterns, the comparison incorporates statistical tests to determine whether any observed differences reflect true distinctions in performance or are likely to represent random variations that may be outside of the physician's control. Most physicians who have enough claims data to permit evaluation of their care meet the quality criteria and receive a quality star under this system since they do not differ in a statistically significant way from the 75th percentile benchmark. This may occur even when the absolute compliance rate observed for the physician is below the 75th percentile.

- Disclosing to physicians how rankings are designed and providing a process to appeal disputed ratings.

In sum, large-scale, transparent measurement of the care delivery system’s performance — both on quality and efficiency grounds — has moved from the pilot stage to large-scale deployment in the private sector, coinciding with the development of various voluntary and quasi-regulatory standards and requirements around those measurements.

### The impact of performance measurement on quality and efficiency

What have been the effects of these measurement initiatives on the quality and efficiency of care that is provided? Academic analyses have yielded varying results, but one key study found that while sharing hospital quality data privately among hospitals had limited effects, public reporting of such data spurred improvement.<sup>14</sup> Those effects could stem from patients switching to higher-performing providers and from poor-performing physicians and hospitals changing their practice patterns in an effort to improve their rankings and retain their patient panels.

UnitedHealthcare has tracked the impact of the Premium Designation program and found that it has contributed to improving the quality and efficiency of care provided to our members. Out of roughly 250,000 physicians included in the program in 2011, 43 percent received both the quality and cost-efficiency designations, and another 14 percent received only the

quality designation. (As noted above, only doctors who meet the quality requirements are evaluated for cost efficiency.) For 26 percent of the doctors in the program, insufficient data was available to evaluate their care quality, and the remaining 17 percent did not meet the quality requirements (see Figure 2.1).

Those differences in overall care quality reflect real and significant differences in the care that patients receive. For example:

- Cardiologists who earn a quality designation have a 55 percent lower complication rate for stent placement procedures and 55 percent fewer redo procedures than cardiologists who do not receive the quality designation.
- Orthopedic surgeons who earn a quality designation have a 62 percent lower complication rate for knee arthroscopy surgeries and 46 percent fewer redo procedures than orthopedic surgeons who do not receive the quality designation.

As those examples illustrate, some of the quality measures reflect outcomes of care and not just care processes.

Physicians who receive both quality and efficiency designations have lower costs per episode, on average, compared to non-designated physicians — about 14 percent lower, when averaged across all of the specialties included in the program. Those results varied by specialty:

### Physicians’ performance on quality and efficiency

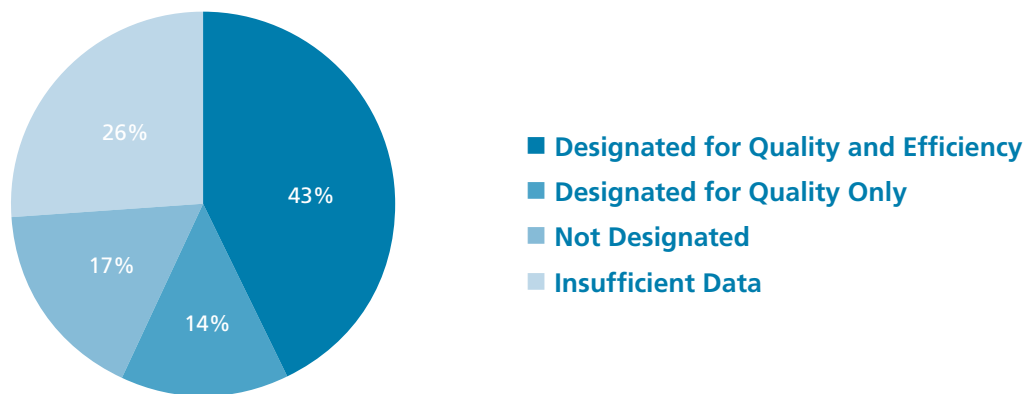


Figure 2.1; Source: UnitedHealth Premium Physician Designation Program, 2011



- Orthopedic surgeons designated for both quality and efficiency have 21 percent lower costs than non-designated orthopedic surgeons.
- Endocrinologists designated for both quality and efficiency have 10 percent lower costs than non-designated endocrinologists.
- Cardiovascular surgeons designated for both quality and efficiency have 18 percent lower costs than non-designated cardiovascular surgeons.

In a recent research paper published in *Health Affairs*, we used data from the Premium Designation program to examine costs for selected episodes of care more closely — covering the treatment of some common chronic conditions as well as major medical procedures and their associated services — and the quality of care associated

with them.<sup>15</sup> We found that episode costs varied widely across markets, whereas variation in care quality was far more modest. Although the analysis of episode costs included only those doctors who had received a quality designation, they demonstrated some variability in the quality of their care — yet those differences could not explain the differences in costs that we observed across markets. For example, the overall quality scores for episodes of care centered on a diagnostic coronary artery catheterization varied across markets from a low of about 81 percent to a high of 100 percent, with most markets falling between 86 percent and 96 percent. Typical costs for those episodes, however, varied from about \$4,000 in low-cost markets to \$10,000 – 12,000 in high-cost markets, and that variation was not correlated with the quality scores (see Figure 2.2).

### Relationship across markets between episode costs and care quality for diagnostic coronary artery catheterization

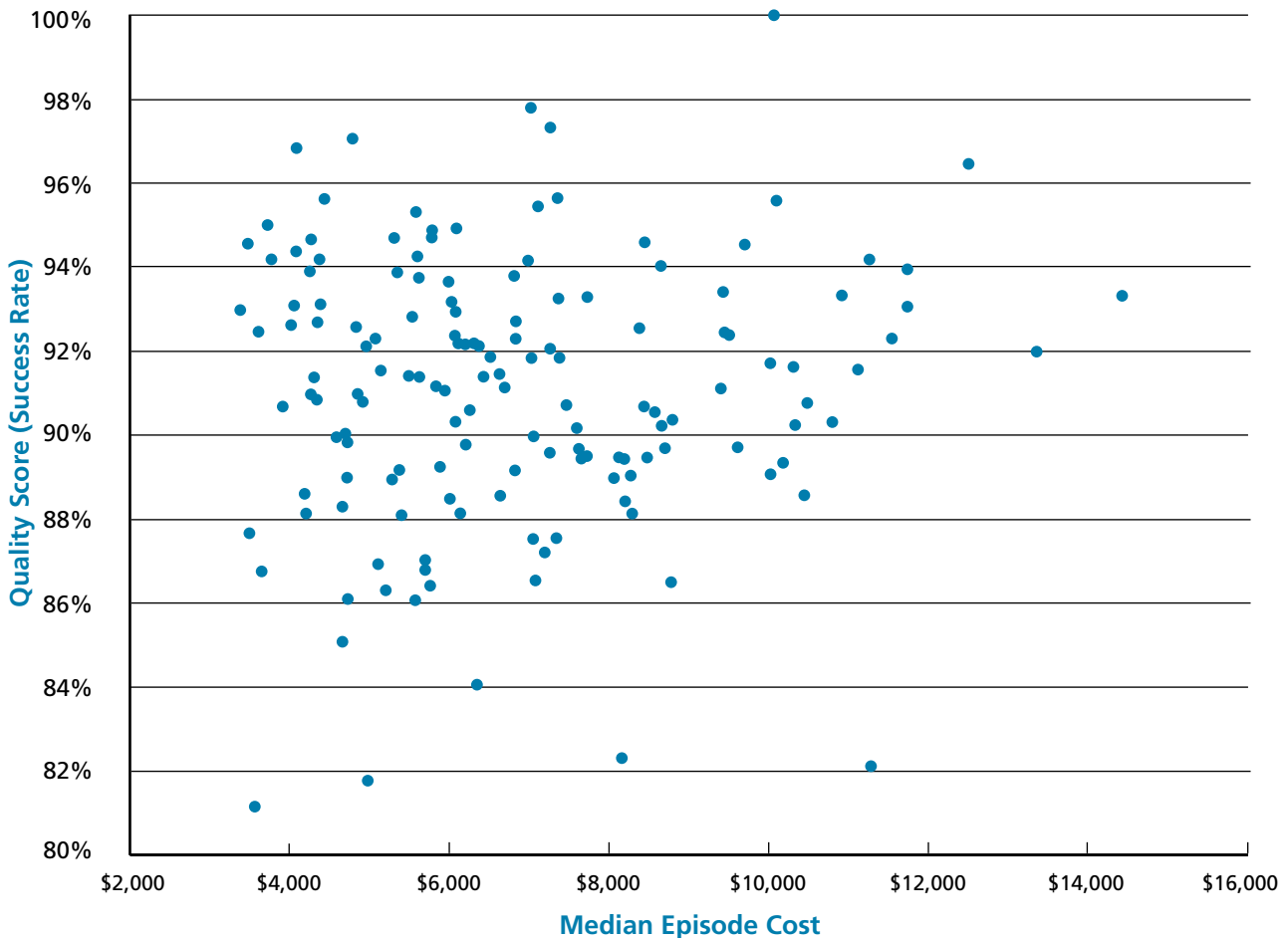


Figure 2.2; Source: UnitedHealth Group analysis of data from the UnitedHealth Premium Physician Designation Program (see endnote 15)

Note: Each point represents a hospital referral region, which is a widely used method to define markets for medical care; see Appendix A for further discussion.



The reductions in medical costs that can be realized from the Premium Designation program partly depend upon the extent of consumers' use of physicians (and hospitals) designated for quality and efficiency. The savings realized also will vary from market to market based upon a variety of factors including: the benefit design that is employed and the incentives and tools that are used as part of a consumer engagement strategy to encourage the use of designated providers; the scope of the provider network; the underlying level of spending and degree of practice pattern variation in the local market; and the share of local doctors who are primary care physicians, since they can foster the use of designated physicians through their referrals.<sup>16</sup>

More generally, the impact of performance measurement initiatives can depend on several other factors. For one, it is clear that the details of program implementation — including such things as the readability of reports and web sites and the ease of accessing and interpreting the data provided — can make a significant difference. That holds true both for the information provided to patients and the feedback reports given to providers. In some cases, measurement and feedback programs can be tailored to meet the needs of physicians in a given area. Programs that also include financial incentives for providers, patients or both can have stronger effects. (Pay-for-performance initiatives are discussed in Chapter 4, other payment-based incentives are discussed in Chapters 5 – 7, and steps to provide more information about treatment costs to patients and align their incentives are covered in Chapter 8.)

### **Medicare's efforts to assess providers' performance**

While substantial progress has been made in the private sector in measuring and assessing the quality and efficiency of care, the pace of development in the Medicare program has been slower, particularly in the case of physicians. Because Medicare is such a large payer — accounting for about 23 percent of all payments for physician and clinical services and about 28 percent of all hospital payments in 2011 — those efforts will need to accelerate, both to help improve performance for Medicare beneficiaries and to facilitate broader efforts to measure and improve quality and efficiency across the health care system.

For physicians, Medicare's current efforts related to measurement and transparency include a quasi-voluntary Physician Quality Reporting System (PQRS), a related feedback program for doctors about the quality and efficiency of their care, and a website providing some information to the public about doctors who accept Medicare patients. By 2015, Medicare also is scheduled to begin instituting a value-based payment modifier for physicians in larger practices, which is supposed to factor in both quality and cost measures and will use performance data from 2013; by 2017, that adjustment will apply to all or nearly all doctors. However, implementation of those initiatives has been hampered by a variety of obstacles. In particular, few physicians are participating in the reporting program, even though they are foregoing modest bonus payments as a result and will face future penalties if they fail to report enough quality measures in 2013. According to the most recent federal reports, more than 623,000 physicians were eligible to participate in 2010, but only about 182,000 did so — a participation rate of about 30 percent.<sup>17</sup>

Moreover, efforts to test and deploy the feedback program have been hampered by problems with the data and methodology used. A recent report from the Government Accountability Office found that about 80 percent of the roughly 9,000 physicians involved in an initial phase of that program could not be given feedback in 2010, mostly because the number of Medicare beneficiaries whose care could be attributed to them was below the initial thresholds for data reliability that had been established.<sup>18</sup> Last March, Medicare sent feedback reports on the quality and total costs of patients' care to more than 20,000 doctors in selected states. But rather than attributing episodes of care to specific doctors, the reports grouped enrollees' total costs into care which a doctor "directed," "influenced," or "contributed" to, depending on the share of evaluation and management services provided to patients by that doctor.<sup>19</sup> Reflecting those limitations, the information now available on Medicare's "Physician Compare" web site is of relatively limited utility — and does not provide comparisons of performance.

## Physician responses on performance and feedback mechanisms

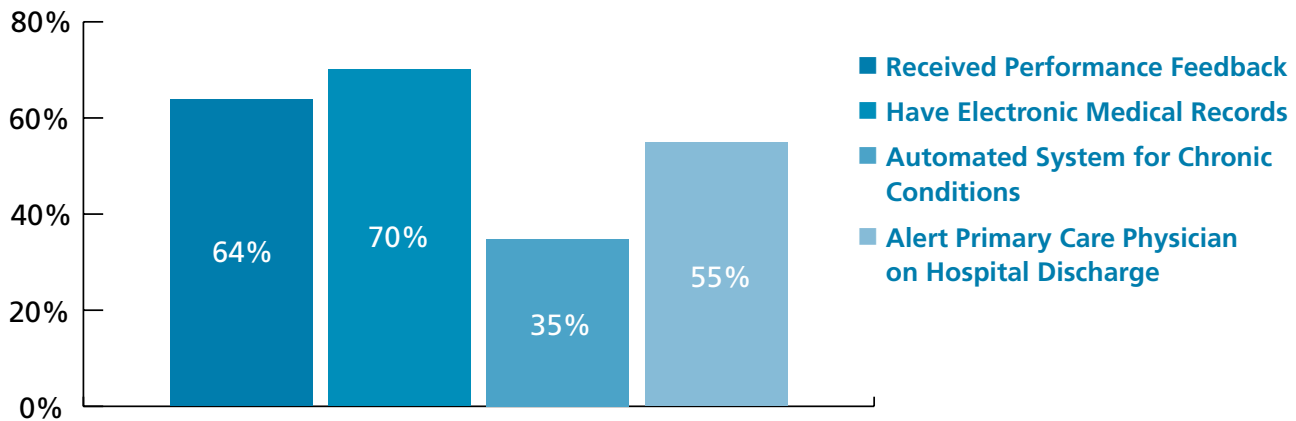


Figure 2.3; Sources: UnitedHealth Center for Health Reform & Modernization / Harris Interactive surveys of physicians, October 2011 and June 2012.

Medicare's assessments of hospital quality are further along. Since the threat of payment reductions for non-reporting was instituted in 2004, nearly all acute-care hospitals have reported data to Medicare on a selected set of process-of-care measures. The measures focus on care that is related to the treatment of heart attacks, heart failure, and pneumonia, such as giving aspirin to heart attack patients or flu vaccinations to pneumonia patients. Medicare also measures rates of readmission and mortality rates for those conditions. (More recently, the list of quality measures was expanded to include metrics related to asthma care for children and the prevention of surgical site infections, but even so the scope of metrics used remains rather limited.)

A substantial amount of this information is available on Medicare's "Hospital Compare" web site, although consumers are left to sort through the various measures themselves as no summary statistics or overall rankings or assessments are provided. Perhaps those limitations help explain the findings of a recent study which concluded that the Hospital Compare initiative had "modest or no impact" on mortality rates for those three conditions, once general trends in quality improvement were factored into the analysis.<sup>20</sup> Medicare does not apply the "star rating" methodology that is used to assess the performance of Medicare Advantage plans to the fee-for-service program.

### Physician survey results on performance measurement and feedback

In the surveys that UnitedHealth Group commissioned from Harris Interactive, physicians were asked several questions related to performance measurement. When asked whether they had received any form of quantitative feedback on their performance in the previous year — including specific measures of care quality or costs or how their performance compares to benchmark levels or the performance of their peers — 64 percent said they had received such feedback (see Figure 2.3). That figure represents a notable increase from the one-third rate reported in 2003 but still leaves room for improvement.<sup>21</sup> The responses were somewhat higher for primary care physicians than for specialists, but the share receiving feedback was lower among solo practitioners.

One barrier to better performance measurement and better performance itself may be the lack of an effective system of electronic medical records. In the June 2012 survey, 70 percent of physicians said they had such a system. Another 22 percent of the doctors surveyed said they were planning to implement electronic medical records within the next two to three years. In the October 2011 survey, however, only 35 percent said they had a computerized or automated system in place to track patients with chronic health conditions and ensure appropriate monitoring and follow-up care. A larger share of doctors — 55 percent — said in October that

there is a system in place to alert primary care physicians when patients are admitted to or discharged from the hospital, in order to ensure that appropriate follow-up care is scheduled. In sum, an information infrastructure is arising but may still lack the connectivity needed to make it fully effective (as discussed further in Chapter 8).

### **The future of quality and efficiency measurement and transparency**

Although substantial progress has been made in recent years, much work remains to be done to extend the scale and scope of performance measurement efforts in both the private and public sectors. At least initially, one focus should be to continue improving the measures themselves and increasing the role of outcome-based measures and effects on patient health in judging performance. Ultimately, some determinations will need to be made about how well care quality can be measured and how best to incorporate measures of quality and outcomes into the payments that providers receive in order to increase the efficiency of the health care system.

**Improving the measures.** Further development of agreed quality measures is needed so that assessment efforts can cover more specialties, reach a larger number of physicians, and capture a larger share of total spending for health care. Medical specialty societies could help by developing further standards of care (one recent example being efforts to identify overused services).<sup>22</sup> Spurred by several provisions of the recent health care legislation, the Centers for Medicare and Medicaid Services (CMS) will need to resolve the many issues and challenges it faces in order to expand the application of performance measurement in the Medicare program. Those public and private sector efforts and the work of expert multi-stakeholder groups can and should be complementary and mutually reinforcing. Indeed, appropriate data-sharing arrangements could bring together public and private claims — including both Medicare and Medicaid data — to generate a more complete picture of performance and address the obstacles that can arise when individual payers are able to observe only a limited number of the patients treated and episodes managed by a given physician. The recently formed Health Care Cost Institute,

which brings together extensive claims data from UnitedHealthcare and several other national health plans, could be a channel for such efforts.<sup>23</sup>

Further progress regarding the types of quality measures used is also needed — because ideally, we would like to measure the quality and efficiency of health care by assessing its impact on patients' health. But as one recent assessment summed up, today "quality usually means adherence to evidence-based guidelines, and quality measurement focuses overwhelmingly on care processes."<sup>24</sup> For example, of the 78 measures included in the Healthcare Effectiveness Data and Information Set (HEDIS) for 2010 — which is the most widely-used quality-measurement system — 73 are clearly process measures, and none are true outcomes. Certainly this is the case for physicians; quality measures for hospitals tend to focus on evidence-based processes as well as avoidance of errors (for example, limiting or reducing hospital-acquired infections).

Based on UnitedHealth Group's experience in this area, development of new and improved quality measures should be guided by the following set of principles:

- Measures should be clearly defined and based on scientific evidence;
- Measure design should encourage acceptance by and participation from the provider community;
- Minimizing the administrative burden of measurement and eliminating redundant measures and data collection efforts is important;
- To the extent feasible, measures should be aligned across programs and standards should be uniform;
- Development efforts should focus on high-value measures and avoid a "kitchen sink" approach to adding new measures, which can dilute their impact; and
- Quality measurement and improvement programs must be allowed to mature over time.

Measurement of outcomes could be improved by including assessments from patients about changes in their health — an approach that would be consistent with the recent emphasis placed on delivering patient-

centered care. For example, patients could take relatively simple surveys before and after they receive a treatment in order to estimate the extent of their improvement, and in principle such patient-reported outcome measures could be aggregated by physician to provide an additional measure of their care quality (see Box 2.2).

In practice, some additional development work might be needed to validate and build support for using functional status or improvement — which can be affected by many factors — to assess providers' performance. Adding patient-reported outcome measures may be one way to augment episode-based profiling with methods to assess the appropriateness of the observed episodes.

### **Incorporating the measures into payment**

**systems.** Developing better information about the quality and efficiency of health care delivery is not only

useful in itself, but also can make key contributions to performance improvement through their incorporation into payment systems — so that incentives also are aligned. As discussed in Chapters 4 – 7, those efforts are already well underway, but greater use of performance measures for payment will undoubtedly help spur further refinement of the measures. Those endeavors will have to be accompanied by parallel efforts to deploy tools and programs to help providers make the changes in care delivery procedures that are necessary (as discussed in Chapter 8). While challenges will undoubtedly arise, improving and applying performance measurement will be a crucial step toward increasing value and controlling costs in the health sector.

## **Box 2.2: Measuring outcomes at QualityMetric**

QualityMetric, a subsidiary of Optum, is an industry leader in the field of measuring health outcomes. QualityMetric's health surveys provide scientifically valid assessments of physical and mental health, and the data they generate on patient-reported outcomes can be used to measure treatments' success, prove their value, and identify opportunities for improvement. An analysis using the SF-36v2® Health Survey to examine the relationship between current well-being and future health care utilization and costs was recently published.<sup>25</sup>

For years, QualityMetric's tools have been used in clinical trials, but increasingly they are being used before a trial to determine market needs and after FDA approval to monitor patients and engage consumers. Hospitals and doctors employ these tools to track patient progress before and after treatment. Some even use the surveys to help determine if patients are prepared to undergo surgical procedures. These surveys also can help to break down communication barriers, allowing doctors and patients to discuss health and treatment progress more openly.

Those tools, especially the SF-12v2® Health Survey, also are used to assess the effectiveness of treatments by measuring patients' functional health and well-being pre- and post-treatment. For example, they were used in two recent studies published in *The New England Journal of Medicine* that called into question the efficacy of vertebroplasty, a common surgical treatment for patients who have suffered spinal fractures due to osteoporosis.<sup>26</sup>

## PART B – THE CONTINUUM OF OPTIONS FOR PAYMENT REFORM

### Chapter 3: How much could be saved by reforming provider payments?

How much in savings could payment reforms generate over the next decade? Although the effects on spending will depend on a wide array of factors, here we model scenarios focused on two key dimensions: the adoption rate or share of total spending that is affected by payment reform initiatives; and the percentage reduction in spending that would be achieved on average by adopters, net of any gain-sharing arrangements with doctors and hospitals — that is, the net savings that might be available to reduce insurance premiums for employers and families and lower federal and state spending on health care.

#### Scenarios for savings

Examining a broad range of assumptions, we find that payment reforms could generate a significant amount of savings — as much as \$1 trillion over 10 years — but even then the share of GDP devoted to health care would be higher than it is today and health care costs would continue to rise faster than incomes. More likely scenarios would yield savings in the range of \$200 – 600 billion through 2022, large dollar figures but relatively small shares of cumulative health spending or GDP. What these scenarios imply is that payment reform — while a crucial step on the path to more affordable care — may not be a panacea, and will have to be paired with other efforts to keep people healthy and develop more cost-effective means of treatment in order to generate additional savings. Payment reforms also must be part of a broader strategy that includes consumer engagement and involves transparent measures of performance, value-based insurance designs that encourage action, and convenient tools that make it far easier for consumers to navigate the health care system than has been true in the past.

**Adoption rates.** How quickly and broadly will payment reforms be implemented? While some have already been adopted by a modest number of providers, predicting the rate of spread or ultimate adoption rate is challenging. For one thing, it is hard to specify exactly what it means to “adopt” payment reforms — which models are involved and what the precise payment terms under them are. Rather than taking an overly prescriptive approach, here we simply think of “adoption” as involving a set of initiatives that strongly encourage providers to deliver high-quality care more efficiently, with an unspecified mix of strong performance incentives, bundled payments, shared-savings and shared-risk arrangements, and capitation payments, a mix that reflects the market structure and capabilities of the local community. Based on historical precedents and our own judgment, a reasonable range of adoption rates for major payment reforms over 10 years might run from 20 percent at the low end to 60 percent at the high end.<sup>27</sup>

Different paths also could be envisioned for the adoption of payment reforms. One might expect relatively rapid initial adoption of some models, followed by a slowing adoption rate as the communities and provider groups least ready for change gradually come around. For other models, however, initial adoption rates might be low as stakeholders wait to see how early trials perform, but adoption could accelerate in later years. Given the uncertainties involved — and also for simplicity — the scenarios presented here reflect an assumption that adoption will increase over the coming decade in a linear fashion to reach the assumed rate.

**Savings per adopter.** Estimating the savings that reform initiatives might generate when they are adopted is difficult, partly because many of them are being field-tested and refined. In some cases — as subsequent chapters discuss — initial effects may be limited, but greater savings might materialize in later years once the “kinks” of these models get worked out. In other cases, significant savings might be observed early on in selected instances, but it may be hard to know whether those results can be generalized or if they reflect certain favorable characteristics of early adopters that may prove challenging to replicate. In light of those competing considerations, the scenarios presented here use a single, constant savings rate.

Two other considerations also will tend to limit the impact that payment reform initiatives will have on national health expenditures (NHE) as a share of the U.S. economy.

- One is that a substantial minority of that spending is outside the scope of such initiatives. Examples of such out-of-scope spending include medical research and investment, costs for dental care, third-party payments for health care outside of insurance (such as charity care), some administrative costs, and a portion of spending on long-term care. Overall, we estimated that about 30 percent of NHE would be out of scope.

- The other consideration is that some portion of the gross savings generated under new payment arrangements is likely to be retained by providers. At a minimum, some of the savings will need to be shared with doctors and hospitals in order to give them incentives to generate savings in the first place and to cover the implementation costs of adopting new payment and delivery methods. Moreover, the division of gross savings among stakeholders will partly reflect their respective bargaining power.

One way to frame the potential savings is to start with estimates about the share of health care spending in this country that appears to have little, if any, impact on patients’ health. Some experts have estimated that share to be in the neighborhood of 30 percent (see Appendix A), but a more reasonable range of gross savings might be 15 – 20 percent on the higher end — similar to the average of survey responses by physicians cited in Chapter 1 — down to perhaps 5 percent if reform initiatives prove less successful. And if we further assume that about half of the gross savings typically will accrue to providers (e.g., through bonus payments), then net savings might range between 2 percent and 10 percent.

## Potential effects of payment reforms on health care spending

Baseline		Impact Measure	Net Savings to the Health System		
2012 GDP Share	17.9%		Low	Medium	High
NHE 2013 – 22 (\$B)	39,113		2%	6%	10%
2022 GDP Share	20.0%				
Adoption Rate in 10 Years					
Low	20%	10-Year Savings (\$B)	-70	-200	-340
		%GDP Change in 2022	-0.1%	-0.2%	-0.3%
Medium	40%	10-Year Savings (\$B)	-130	-400	-670
		%GDP Change in 2022	-0.1%	-0.3%	-0.6%
High	60%	10-Year Savings (\$B)	-200	-600	-1,010
		%GDP Change in 2022	-0.2%	-0.5%	-0.9%

Table 3.1; Source: UnitedHealth Center for Health Reform and Modernization, 2012

NHE = National Health Expenditures; GDP = Gross Domestic Product

NOTE: For this analysis, the NHE projections were extended to 2022 using the growth rate projected for 2021.

“%GDP Change in 2022” is the percentage point change in the share of GDP spent on health care in that year.



Another source of uncertainty is whether reform initiatives will reduce the growth rate of spending or simply yield lower levels of spending. On this point, the experience of the 1990s — when the shift in enrollment to HMOs and similar plans helped keep health care spending at about the same share of GDP from 1993 to 1999 — may be instructive. In general, analysts have concluded that the effect was largely a series of shifts to a lower level of spending but did not change the growth rate of spending fundamentally. Here we adopt that model, with spending levels reduced as the adoption rate increases, leaving open the question of whether the growth rate will decline after full adoption is achieved. Even if the growth rate of spending does not change, savings would continue to accumulate year after year (so long as the growth rate does not accelerate in the future).

**Savings estimates.** Using the range of assumptions described above, aggregate savings from payment reforms over 10 years could be as little as \$70 billion or as much as \$1 trillion — with more likely scenarios ranging from \$200 billion to \$600 billion (see Table 3.1). Not surprisingly, a low savings rate of 2 percent would translate into a limited impact on spending regardless

of the adoption rate. Even with a higher savings rate of 10 percent, however, the reduction in national health expenditures — while considerable in dollar terms — would constitute less than 1 percent of GDP in 2022, and NHE as a share of the economy would rise from 17.9 percent in 2012 to over 19 percent in 2022. The impact of certain scenarios also can be illustrated by examining the 10-year spending paths that they would generate, shown as a share of GDP (see Figure 3.1). As the figure indicates, health care spending ultimately would rise faster than GDP under each scenario.

Implicit in these scenarios is that average savings are similar across all sectors of health care that are in scope for savings, but other combinations — with greater savings in some areas and less in other areas — also would be consistent with these estimates. In particular, the effects may differ between Medicare and private insurance. On the one hand, the potential for gross savings may be lower in Medicare because current projections of spending already include substantial reductions in payment rate updates for providers. On the other hand, Medicare’s unmanaged fee-for-service program may present more opportunities for gains in the efficiency of health care delivery. If the effects

### Paths of national health expenditures under different scenarios for payment reforms

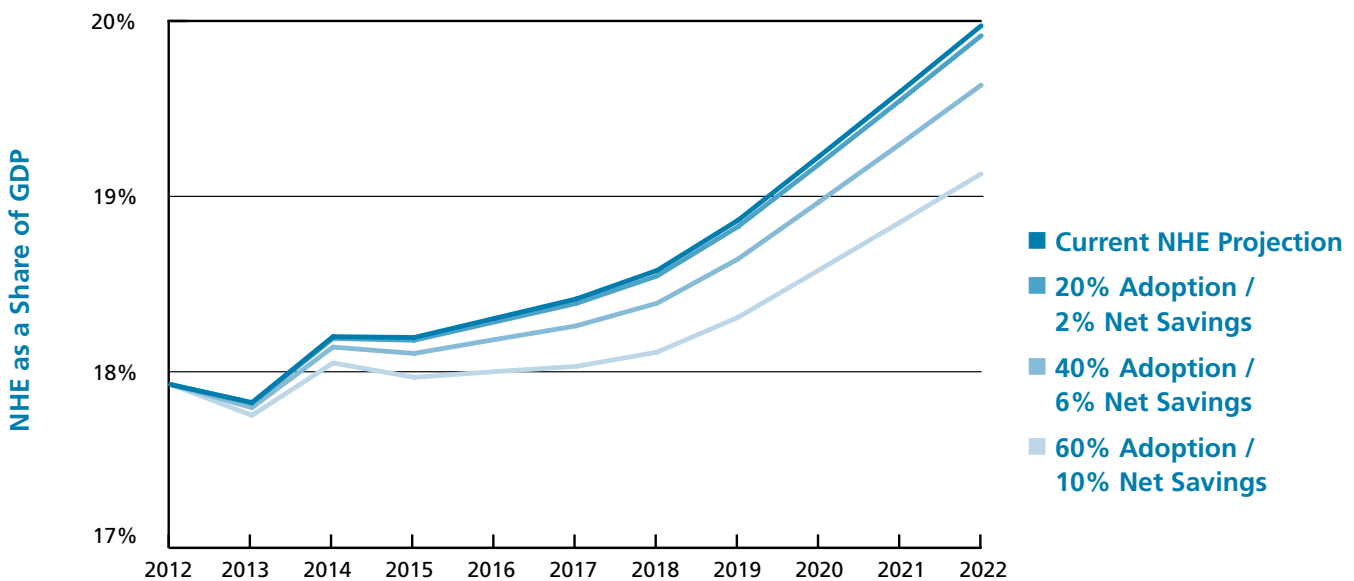


Figure 3.1; Source: UnitedHealth Center for Health Reform & Modernization, 2012  
 NHE = National Health Expenditures; GDP = Gross Domestic Product  
 NOTE: For this analysis, the NHE projections were extended to 2022 using the growth rate projected for 2021.

on Medicare's spending were strictly proportional, it would account for about 27 percent of the savings. Similarly, savings for Medicaid would represent about 23 percent of the total, with about one-third of those savings accruing to state governments and the remainder accruing to the federal government.

### The continuum of reform options

The remaining chapters in this section examine the range of options that exists to move away from fee-for-service payment in order to encourage the provision of both higher-quality and more efficient care. These options exist along a continuous spectrum but can usefully be grouped into four categories:

- Pay-for-performance and care management initiatives, in which fee-for-service payments are adjusted or modestly supplemented with bonuses to reward quality and efficiency or with additional fees to fund investments in care coordination — a prominent example being the Patient-Centered Medical Home;
- Bundled or episode-based payments, in which providers generally receive a fixed sum to cover all of the costs of services delivered to a patient during a hospitalization or episode of care, or to treat a particular disease for a defined period of time;
- Shared-savings and shared-risk approaches, used most notably with Accountable Care Organizations (ACOs), in which payments to providers are closely tied to controlling the overall cost of the care that their patients receive while achieving quality targets; and
- Capitation payments, where providers receive a fixed dollar amount, usually pre-paid monthly, which is designed to cover the cost of delivering some or all of the services provided to the enrollees in their care, and which may be supplemented with incentive payments for achieving quality goals.

Working together, UnitedHealthcare and Optum have experience with and are actively engaged in developing and refining all of these approaches. All told, UnitedHealthcare has more than \$18 billion in annual spending tied to such value-based contracts. The purpose of this section is to review that experience

— highlighting both the opportunities and challenges that have been identified along the way. Yet rather than thinking of various reforms as disparate or even competing initiatives, a more useful perspective is that they lie roughly along a continuum, with the movement along it requiring greater degrees of clinical integration and coordination and involving more financial risk and accountability.

The options also differ in their scope. Patient-Centered Medical Homes focus on the provision of primary and preventive care and the coordination of treatment regimens for chronic conditions, whereas episode-based payments give providers full financial responsibility — but only for the treatment of specific conditions or the care related to specific surgical interventions. By contrast, shared-savings and shared-risk arrangements can involve more limited degrees of financial risk but encompass all costs for care, and the scope of capitation payments can range from primary care or physician services only to all acute-care spending.

As providers, health plans, and other interested parties consider where to start and how to move along the continuum, some common themes will emerge regarding the readiness of providers and of private and public insurers to participate and the key role of external support and infrastructure development. (These themes are discussed in Chapter 8.) But before examining those common themes, it is important to focus on the key components and features of each individual step along the compensation continuum.

**States as laboratories.** The discussion here centers on UnitedHealthcare's and Optum's initiatives in the private sector and on steps taken by the Medicare program, but states also are experimenting with various payment reforms. Those efforts involve their Medicaid programs — both directly within the fee-for-service sector and through private health plans serving Medicaid — as well as the Children's Health Insurance Program (CHIP) and the insurance plans they provide to state employees. While those efforts primarily have focused on testing medical home models or encouraging greater use of performance incentives in managed care contracts, states also are pursuing ACOs, bundled payments, and hybrid approaches.



States have particular capabilities and incentives to pursue those models. Through their various health programs, states have relationships with providers, experience with provider network development and contracting, and insights into the structure of local markets and the role of community providers. Many states have data infrastructure (and in some cases, multi-payer databases) and organizational infrastructure that is oriented to track quality and cost. States are also central players in building health information exchanges that include both payer and provider data — an effort that will aid in the development and implementation of payment reform models. Improvements in those programs can enhance the quality of health care services and generate savings for the state — helping to address a substantial source of pressure on their budgets. State-level initiatives are highlighted throughout this section.

## Chapter 4: “Pay-for-performance” and care management initiatives — including Patient-Centered Medical Homes

An incremental step towards payment reform is to augment or enhance fee-for-service payments to reward providers for delivering high quality and affordable care — an approach generally referred to as “pay for performance,” or P4P. The structures of such programs vary widely, but they commonly provide enhanced fees or a bonus payment based on achievement of defined performance goals, improvement in performance, or a combination of the two. Typically, these programs assess performance using a mix of metrics that encompasses not only clinical quality and patient satisfaction, but also the total cost, appropriateness, and possible overuse of services.

Such programs have become very popular over the past decade, but one challenge has been the administrative burden that is involved in collecting and analyzing the data and providing feedback to each physician. In some cases, the administrative costs to the practices involved may have equaled or exceeded the bonus payment that they received. Over the last several years, UnitedHealthcare has developed and tested a program for its commercial health plans that rewards higher-performing physician practices through automated, performance-driven enhancements to their fee schedules — known as Practice Rewards. Though not a large-scale P4P program, it is one of the few that operates without placing additional administrative burdens on physician practices, and is built off the “chassis” of the Premium Designation program for assessing the quality and efficiency of care. The Practice Rewards program was developed to facilitate the journey towards greater value, and to test methods and administrative approaches that could form the basis of larger-scale payment reform models down the road.

As further experience is gained, however, programs linking financial incentives to performance will continue to evolve — with the goal of having a greater impact than first generation P4P programs, which studies have generally found to yield modest results. Over the next few years, for example, UnitedHealthcare is building on insights derived from the Practice Rewards initiative as it rolls out a broader performance-based contracting

approach that provides clear and tangible incentives to improve quality and efficiency. At the same time, the company is intensively testing a more focused approach — the Patient Centered Medical Home — that combines P4P-style quality bonuses and a new care management fee with specific changes in processes of care that are designed to produce better outcomes. Recently, an analysis of UnitedHealthcare’s first four PCMH pilots found that they yielded gross reductions in medical spending of 4.0 to 4.5 percent over two years and generated a 2:1 return on investment while quality measures improved.

### The transition to performance-based contracting

As a step in the development of better incentives to improve the quality and efficiency of care, UnitedHealthcare first implemented the Practice Rewards program in 2006 and subsequently expanded it to 84 markets in 27 states. The program recognizes and rewards physicians who meet defined quality, efficiency, and administrative criteria by providing them with an enhanced fee schedule — that is, higher fee-for-service payment rates. Physicians who have received the quality and efficiency designation through the UnitedHealth Premium Physician Designation program are eligible for inclusion in Practice Rewards; actually receiving an enhanced fee schedule in the program is based on superior performance and on market-specific considerations (including overall cost trends). As discussed in Chapter 2, the Premium Designation program’s quality measures reflect nationally accepted, evidence-based medical standards and clinical guidelines that are specialty-specific and risk-adjusted (so that doctors are not penalized for treating sicker patients). Efficiency criteria are based on patient care provided over an entire episode of care, and consider all claims (including pharmacy costs) associated with a condition at the patient level.

Under Practice Rewards, solo practitioners or physician groups that attain certain performance scores could receive a 5 percent increase in their commercial fee schedule; practices also may qualify for rewards based on improvement in their performance, receiving a

3 percent increase for most claims. This program has been a useful first step in aligning incentives by directing enhanced reimbursement to physician practices that are delivering higher-value care — and doing so in a scalable, administratively efficient manner. The program also has raised the visibility of the data from the Premium Designation program, giving doctors and practices a financial incentive to monitor the feedback they receive about their relative performance.

Having said that, a number of factors help explain why the impact of the Practice Rewards program on performance has — as expected — been modest. In particular, the fee schedule enhancements themselves were modest and generally constituted a small share of a practice’s total revenue from all payers. It also may have been difficult for a physician’s office to know whether specific initiatives they might undertake would translate into higher payments. Broader analyses of early efforts to implement pay-for-performance initiatives in both the public and private sectors also have found limited effects. For example, one recent study of the nation’s largest P4P program found “some positive changes but no breakthrough improvements in the quality of care.”<sup>28</sup> Similarly, reviews of Medicare’s main pay-for-performance demonstration program for hospitals found that it did not spur improvements in care processes or reductions in mortality rates.<sup>29</sup>

Based on this experience, UnitedHealthcare has developed a more comprehensive, larger-scale program to revise its core contracting methodology for physicians and hospitals — known as Performance-Based Contracting (PBC). Under this approach, the payment rate increases specified in contracts for medical groups and hospitals are tied to performance on specific quality and cost-efficiency metrics. For hospitals, those performance measures include risk-adjusted rates of

mortality, all-cause readmissions, and hospital-acquired infections, as well as the average length of hospital stays. For doctors, the measures include prescribing of generic drugs and avoiding preventable visits to the emergency room by their patients. Compared to earlier generations of P4P models, UnitedHealthcare’s PBC model provides clearer incentives for hospitals and physicians to improve performance in core areas of quality, safety, and cost, focusing on measures that are linked closely to significant improvement opportunities.

Starting in 2010, UnitedHealthcare began to roll out performance-based hospital contracts in select markets, and by 2014, the expectation is that most of its hospital and physician contracts will have a material share of the annual increases in payment rates tied to these performance measures. This approach dovetails with several recent initiatives governing Medicare’s payments to hospitals, which will be phased in over the next few years, including payment penalties for high levels of readmissions and hospital-acquired infections as well as a “value-based” payment modifier (which will include risk-adjusted costs of care as a factor). Similar state-level initiatives are highlighted in Box 4.1. For many providers, PBC will be a useful first step along the compensation continuum towards more accountability for patient care and stronger incentives to improve outcomes. The degree of financial risk they would face is limited, and the performance measures that are involved focus on outcomes that are already within providers’ control.

#### **Physicians’ views about pay-for-performance initiatives**

In our survey of physicians conducted by Harris Interactive, doctors reported that the mean percentage of practice revenue coming from P4P payments was 6 percent. Doctors expressed an interest in increasing the role of P4P and similar initiatives — specifically,

### **Box 4.1: State initiatives on value-based purchasing**

Many states are exploring value-based purchasing approaches in their Medicaid programs and in other state-run health programs (such as the insurance plans for state employees). States relying on managed care organizations to provide Medicaid benefits increasingly are looking to include pay-for-performance incentives in contracts, which can, in turn, be incorporated into providers’ payment incentives. Other efforts focus directly on encouraging the adoption of payment reforms through contracts with managed care plans.<sup>30</sup>

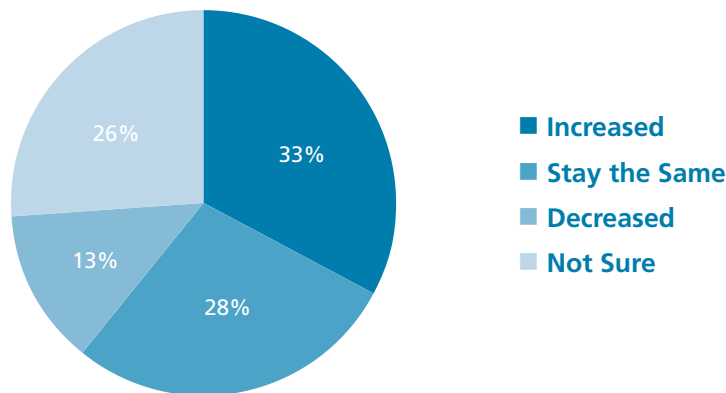
33 percent thought the link to performance measures should be increased, and only 13 percent thought it should be decreased (see Figure 4.1). Asked about how to improve the effectiveness of P4P and value-based purchasing programs, the option cited most often was to coordinate those programs and criteria across payers — 76 percent cited that as an improvement factor. Such steps would help to ensure that doctors’ offices are not being pulled in multiple directions or required to monitor a wide range of similar performance metrics. Surprisingly, increasing the size of incentive payments scored slightly lower, though the differences were relatively small (within the margin of sampling error).

### Patient-Centered Medical Homes

Another approach to payment reform that combines elements of pay-for-performance with specific changes in methods of care delivery is the Patient-Centered Medical Home (PCMH). Under this model, all patients are supposed to receive comprehensive, coordinated, patient-centered care, which is facilitated both by internal practice changes, such as employing nurse care managers and health information systems, and by new payment methods that incentivize coordinated care and provide resources to help finance the requisite practice infrastructure and staffing. Sometimes referred to as Primary Care Medical Homes, the PCMH concept was adopted as an organizing construct by the three main primary care specialty societies in 2007.

### Physicians’ views on pay-for-performance initiatives

Should the percentage of reimbursed services that are linked to performance measures based on cost or quality of health care be increased, decreased, or stay the same?



P4P programs could be improved by adopting the following steps:

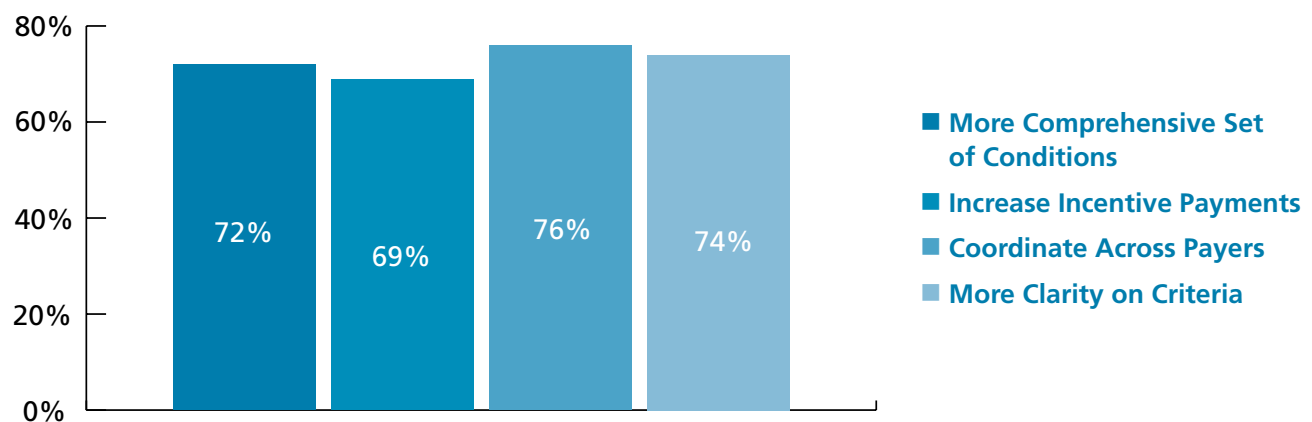


Figure 4.1; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, October 2011

Over the years, the PCMH concept has attracted significant attention, and a robust coalition of stakeholders has arisen to further develop and spread the model. UnitedHealthcare was an early supporter of these efforts, in particular working with the primary care societies to develop and deploy testable operating models of PCMHs. As discussed in more detail below, these models generally follow a “blended” payment approach, with claims continuing to be paid on a fee-for-service basis, a “care management” fee per member per month, plus performance-based bonus payments. One helpful step is that the NCQA (a well-respected nonprofit organization dedicated to improving health care quality) has developed a multi-level certification program that assesses practices on structural and process elements considered important for a high-performing PCMH. Also providing momentum behind this approach is the effort of states to develop PCMHs (see Box 4.2).

**Key features of PCMH models.** Currently, UnitedHealthcare is conducting pilots of PCMH models in 13 states around the country involving about 600 employer customers and more than 300,000 patients. Independent evaluations about the long-term effects of those pilots are not yet available, but it is already possible to identify several key attributes, practices, and processes that can lead to success:

- Establishing accountability for patient outcomes. Having primary care providers serve as the central provider for their patients — and assuming responsibility for coordinating all of the care that they receive, including specialty care — can improve clinical quality, help ensure appropriate use of services, and limit or eliminate redundancies in testing.

#### **Box 4.2: State initiatives on Patient-Centered Medical Homes**

Many states have developed patient-centered medical home models through their Medicaid and CHIP programs, with more than three-quarters of states having at least some experience with this model.<sup>31</sup> States view this model as a payment approach that can help improve primary care and chronic care, encourage collaboration with community-based providers, reward practices with higher payments based on practice performance, and provide support for care coordination. States have encouraged this model in both managed care and fee-for-service contexts (e.g., through primary care case management programs). States also have new options under Medicaid to use patient-centered medical homes for chronically ill individuals and to receive enhanced federal funds.

Most commonly, states employ models that involve a per-member-per-month payment to practices, but vary in their specific reimbursement approaches. Payments can differ by practice size. For example, Maryland pays more to smaller practices to account for the higher fixed costs they may incur. Some states vary payment according to the population treated by the practice and reflect the higher intensity of service and greater care coordination needs for at-risk groups. Monthly add-on payments also are used to encourage collaboration with different providers. Iowa, for example, pays primary care providers for remote consultations with hospital specialists.

Several states have payment strategies that reward practices for achieving better performance or meeting recognition standards for different performance levels. Some states, such as Alabama and Washington, go further and share savings with practices that exceed certain performance standards. Similarly, Washington allows physicians to share in savings if patients have fewer preventable emergency room visits and avoidable hospital admissions. Commonly, states provide technical assistance to medical homes participating in their Medicaid programs to help them meet expectations and improve performance.

- To help fulfill that responsibility, creating an advanced care team. That team includes nurse care managers and provides ready access to social workers or behavioral health professionals, pharmacists, and other health educators. Coordinating care is a complex task, requiring additional skills and resources that may not exist today within the typical primary care practice setting. While all team members do not have to be located in-house, employing a nurse care manager on-site is a key component of this broader coordination effort.
- Instituting automated processes to address prevention and wellness while allowing each member of the care team to work to the top of his or her license. Physicians need to understand that much of their current work can be facilitated by other members of the care team — allowing them to focus on decision-making for their complex patients. Similarly, using technology (such as e-mails or text messages) to provide reminders about immunizations, age-specific screenings, and wellness appointments is an effective means of communicating with patients while minimizing the time burden on clinical staff.
- Tightly managing care transitions across different settings of care. The employment of defined processes within the primary care practice to track their patients' use of other services and facilities is a critical step towards reducing emergency room (ER) visits, inpatient admissions and lengths of stay, readmissions, and redundancies of procedural testing. For example, conducting follow-up calls and educating patients who use the ER for non-urgent issues regarding appropriate use of urgent-care facilities can reduce ER visits significantly and serves to engage the patient within the primary care setting.
- Similarly, improving communication and coordination between primary care services and hospital care. Such initiatives have produced demonstrated reductions in length of stay and readmission rates. Conducting follow-up calls soon after discharge to ensure the patient understands his or her discharge instructions, is taking the appropriate medications, and has scheduled a follow-up visit can contribute to lower readmission rates and avoid further

exacerbation of their illness. (Those calls can be conducted by nurses employed by the physician practice or by dedicated teams of nurses working at health services organizations, such as Optum.) While the data are preliminary with respect to these metrics, practice self-reporting via the pilots indicate the positive impact of such interventions.

- Increasing access to the PCMH — not necessarily access to a physician but rather to the practice and care team. That team can include Nurse Practitioners, Physicians' Assistants, Advanced Practice Nurses, Registered Nurses, Occupational and Physical Therapists, and other professionals. Access can be provided in a variety of ways: on-line, in group settings, through kiosks and auto-messaging, and through alignment with urgent care settings, specialists, and other community-based health resources. By coordinating care across the care team, some of the practices in our pilots have increased practice capacity and started to see material growth in their patient panels; for the health care system as a whole, such steps to increase efficiency can improve overall access to primary care.

**Key external elements and prerequisites.** The sorts of steps outlined above are crucial to the success of a PCMH, but implementing them also requires a supportive environment — including leadership, analytic support, and aligned payments. First and foremost, practice transformation needs to be championed by an engaged physician and administrative leadership. Buy-in across the practice is a must to ensure the sustainability of process improvements. Since the level of change involved can be daunting for many practices to undertake and sustain, the PCMH model is not applicable for every primary care practice. Physicians and their staff must be ready and willing to embrace changing the way they practice medicine and deliver care.

Second, PCMHs need timely and actionable data in easy-to-use formats in order to drive decision-making about their patients' care. Toward that end, UnitedHealthcare supplies all of its pilot practices with timely ER and inpatient census reports. Practices use these data to identify which patients to follow most closely while they are hospitalized and how to follow-up post-discharge. In addition, they receive performance reports on patients with high-risk or complex conditions

or chronic health problems so that the practices can review their treatment plans and address any gaps in care. This arrangement allows the practices to put clinical standards and processes into place for common chronic illnesses like diabetes, asthma, hypertension, and depression. Physicians generally believe they are taking good care of all of their patients — so when they see population management reports that identify gaps in care, problematic test results or patterns, and missing biometric information, it can be truly eye-opening.

Third, PCMHs need a payment model that supports their revised care processes and aligns their incentives. While the payment model predominantly in place today combines fee-for-service reimbursement with a monthly care and performance-based bonuses, the design of each element varies across pilots. Many pilots use the National Committee for Quality Assurance (NCQA) certification process as the basis of the care coordination fee, with payments ranging from about \$40 to about \$100 per member per year depending on their certification level and certain other factors. For a typical primary care physician with a panel of about 2,000 patients, those fees can represent a substantial boost to income and could even help attract more doctors into primary care.

As for the performance bonuses, UnitedHealthcare has developed a “Maturity Model” which recognizes that practice transformation takes time. Under this model, providers are initially rewarded for instituting processes and structural components — for example, setting up disease registries for their patients or adopting electronic prescribing (see Figure 4.2). As the pilot advances, however, the bonuses are increasingly based on patient outcomes, including reductions in inpatient bed days and ER visits, as well as control of blood pressure and cholesterol levels (the latter of which are incorporated into a composite measure of clinical quality).

Finally, multi-payer initiatives merit serious consideration because they can have several advantages. For one, standardization of reimbursement structures and performance measures can be achieved across the program, and provider buy-in and willingness to make key changes may be enhanced if multiple payers are involved. To facilitate these efforts, neutral “conveners” have the ability — and in some cases the formal authority — to act as a governing or authoritative agent. Working through a convener, such as a government agency or regional healthcare organization, also has the advantage of engaging other stakeholders.

## UnitedHealthcare’s Maturity Model for Patient-Centered Medical Homes

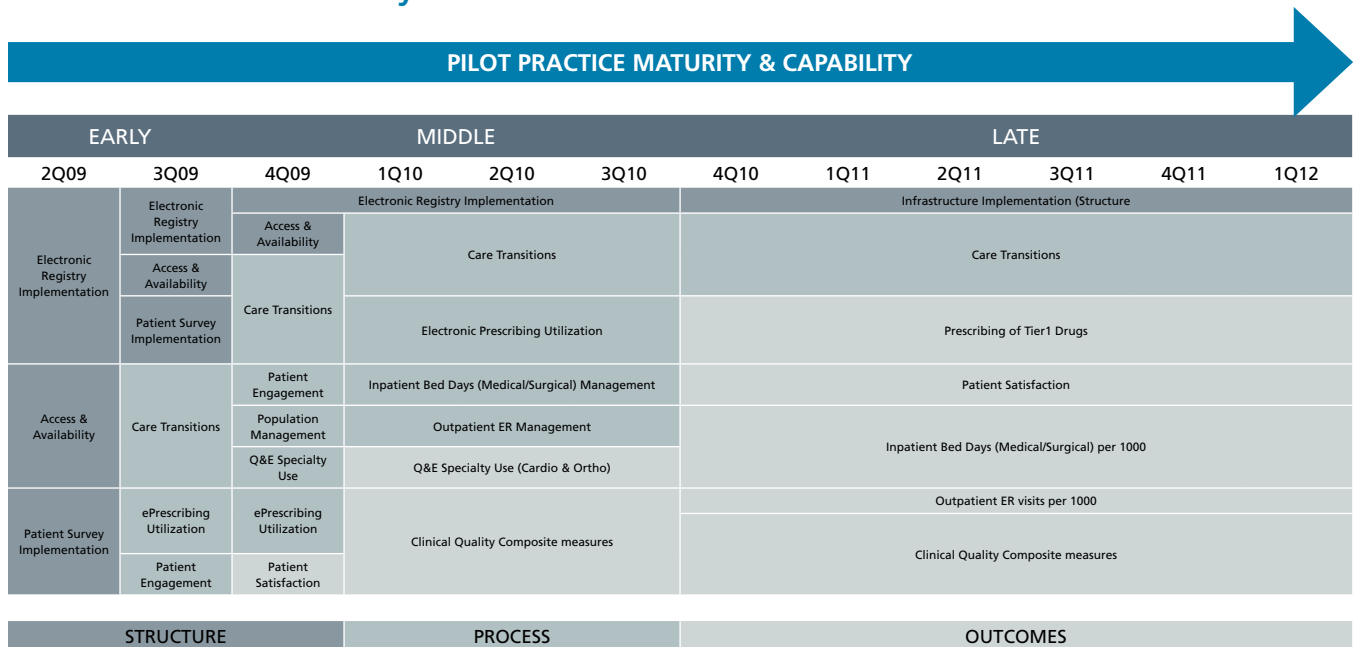


Figure 4.2; Source: UnitedHealthcare  
ER = Emergency Room; Q&E = Designated for Quality and Efficiency



As discussed further in Chapter 8, multi-payer initiatives can also have their disadvantages — in particular, the need for consensus can impede action or lead to lowest-common-denominator solutions. Still, multi-payer PCMH models can work in some instances. For example, UnitedHealthcare is actively participating in a multi-payer initiative spearheaded by CMS — known as the Comprehensive Primary Care Initiative — involving many of the PCMH principles (see Box 4.3).

**Preliminary Results for PCMH Pilots.** While many of UnitedHealthcare’s PCMH pilots will be subject to independent third-party evaluation, we have also

conducted an internal assessment of the first four pilots that were launched in Arizona, Colorado, Ohio, and Rhode Island starting in 2009. Compared to a control group of similar patients, and averaged across the four pilots over two years, gross savings on medical costs were in the range of 4.0 percent to 4.5 percent per year. After factoring in additional payments for care coordination and bonuses to the participating practices, net savings averaged about two percent — thus generating a 2:1 return on investment — at the same time that notable improvements in care quality measures were observed.

### Box 4.3: The Comprehensive Primary Care Initiative

The Comprehensive Primary Care Initiative is a multi-payer effort fostering collaboration between public and private health care payers to strengthen primary care, led by Centers for Medicare & Medicaid Services. Under the initiative, Medicare is working with commercial and state health insurance plans to offer additional resources and bonus payments to primary care doctors who do a better job of coordinating care for their patients. UnitedHealthcare is participating in three of the seven geographic areas targeted in the initiative — Colorado, New Jersey, and the Cincinnati-Dayton region.

The additional resources provided under this initiative will help doctors to:

- **Manage care for patients with high health care needs:** Participating primary care practices will deliver intensive care management for patients with high needs. Primary care providers can create a plan of care that is tailored to each patient’s individual circumstances and values.
- **Ensure timely access to care:** Because health care needs and emergencies are not restricted to office operating hours, primary care practices must be accessible to patients 24/7 and be able to utilize patient data tools to give real-time, personal health care information to patients in need.
- **Deliver preventive care:** Primary care practices will be able to proactively assess their patients’ needs and provide appropriate and timely preventive care.
- **Engage patients and caregivers:** Primary care practices will have the ability to engage patients and their families in active participation in their care.
- **Coordinate care across the medical neighborhood:** Under this initiative, primary care doctors and nurses will work together and with a patient’s other health care providers and the patient to make decisions as a team. Access to and meaningful use of electronic health records should support these efforts.

The payment model includes a monthly care management fee paid to the selected primary care practices on behalf of their fee-for-service Medicare beneficiaries and, in years 2 to 4 of the initiative, the potential to share in any savings to the Medicare program. Practices will also receive compensation from other payers participating in the initiative, including private health plans, which will allow them to integrate multi-payer funding streams to strengthen their capacity to implement practice-wide quality improvement. Primary care practices are currently being recruited, with a goal of having about 75 practices participate in each region.



## Most primary care physicians are familiar with the term “medical home” and many are interested in forming or joining one

Are you familiar with the term “medical home”? If so, is your practice considering joining or forming a “medical home”?

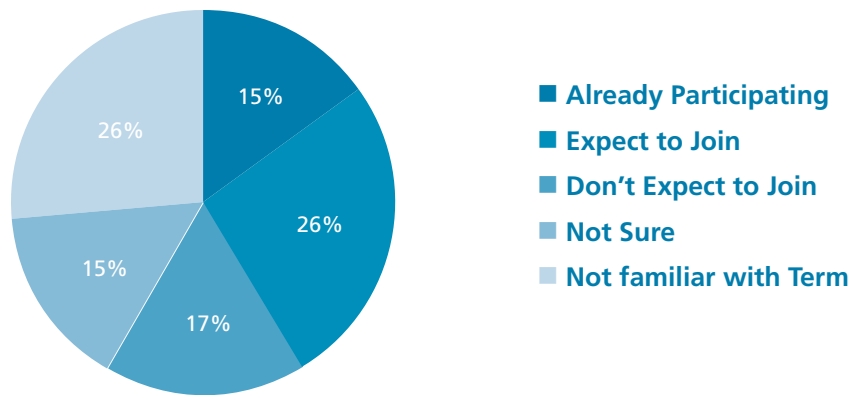


Figure 4.3; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, June 2012

The size of the PCMH pilots varied from about 4,500 patients in Rhode Island to about 10,000-15,000 in the other three markets. To estimate effects on spending, total medical costs for patients attributed to the PCMHs in each market were compared to a control group of patients living within the same market that was matched using statistical methods. Specifically, patients were matched using claims data from a period prior to the PCMH launch based on a broad range of factors including their age, sex, utilization rates and spending for various categories of health care services, and presence of certain chronic conditions. Once the PCMH pilots were launched, spending was tracked for both groups.

The patterns and sources of medical savings varied somewhat across the four pilots. In some cases, savings were substantial in the first year but diminished sharply in the second year, while in another case the first-year effects were minimal but the impact in the second year was more dramatic. Even so, savings were similar across the four pilots when averaged over the two-year period that we analyzed, with annualized reductions in gross medical costs of about 4.0-4.5 percent. Sources of savings for PCMH enrollees included reduced rates of complications for episodes of care and greater use of lower-cost facilities; comparisons of overall hospitalization rates, however, did not show a consistent pattern. At the same time, meaningful improvements

in care quality metrics for PCMH patients indicate that savings did not come from reduced use of evidence-based care.

**Physicians’ views about PCMHs.** In the most recent survey conducted by Harris Interactive, 74 percent of primary care physicians said they were familiar with the term “medical home,” and 41 percent said their practice was either part of a medical home already or expected to join one soon — meaning that 56 percent of doctors who were familiar with the concept were expecting to take up the idea (see Figure 4.3). Translating that strong interest into successful deployment will, however, require several challenges to be addressed.

### Looking ahead: opportunities and challenges.

While the PCMH is an attractive delivery model and has significant potential, it is important to gather strong evidence on both the key components of practice transformation and the associated outcomes — which should encompass a range of measures including processes of care, clinical quality, utilization of services, and total spending. There is a growing literature regarding PCMHs, but most published studies were completed with small populations or within a specific population segment (usually Medicare); moreover, many studies evaluated process metrics rather than cost or quality outcomes. Many of UnitedHealthcare’s PCMH

pilots will undergo an independent evaluation — by health researchers at Harvard, Cornell, or Mathematica — to help identify what works and what perhaps does not. A particular challenge in evaluating such pilots is that the practices volunteering to participate in them may differ from other practices in a variety of ways, so care must be taken to control for those differences.

The case for rigorous testing and evaluation is buttressed by recent studies highlighting some of the challenges for PCMHs that lie ahead. A recent analysis of the first large-scale demonstration of medical homes found that, even though the practices involved had volunteered to participate, implementation of the model was difficult “for components that required fundamental changes in established routines and coordination across work groups, or that challenged traditional roles and models of practices.”<sup>32</sup> According to that study, integration with community-based services, wellness promotion efforts, proactive management of population health, and adoption of team-based care processes presented the greatest challenges. Another recent study focused on small and medium-sized physician practices — which collectively account for about 90 percent of all physician office visits — and found that the average practice was only using about 20 percent of the care processes that are associated with the medical home model, or roughly 3 – 4 out of 17 specified processes.<sup>33</sup> The development of an NCQA certification process is an important step that will facilitate adoption of the PCMH model, and the number of doctors certified has grown rapidly — from fewer than 8,000 in December 2010 to about 20,000 in July 2012.<sup>34</sup> Even so, that figure represents less than 7 percent of all primary care doctors.

In sum, innovative reform approaches like the PCMH model can and should be used to help foster the delivery of high-value primary care. It is, however, just one tool to be employed across the U.S. to support primary care and can be integrated and aligned with other payment and delivery reforms. For example, PCMH models for primary care practices could be pursued alongside bundled or episode-based payment approaches for some types of specialty care, or PCMH models could be incorporated into — or evolve over time to become — shared-savings or shared-risk approaches focusing on the total costs of patients care.

## Chapter 5: Bundled and episode-based payments

Further along the continuum of clinical and financial integration lie payment reforms that aggregate the unit of payment from an individual service to a collection of related services for a given patient — with the payment made as one lump sum that does not depend on the number of services actually provided. Varying terminology is used to describe such approaches, including “bundled payments,” “episode-based payments,” and “case rates.” Whatever the term, the goal is to give providers stronger incentives both to coordinate the care that is provided during an episode — thus increasing care quality — and to appropriately control the costs of the episode.

Under this approach, providers have financial incentives to control the cost of the bundle — because if the costs differ from the payment, they generally keep all of the savings or bear all of the overruns. Unlike capitation arrangements, however, the scope of their financial risk is limited to a subset of patients’ costs rather than their total medical spending. The concept is that providers will bear “performance risk” in the delivery of a defined treatment (such as a heart bypass operation) but not “insurance risk” related to the probability and intensity of treatments that patients may need (such as the risk that they have a heart attack or need a heart transplant rather than a bypass operation). One concern raised about bundled payments is that they can provide incentives to skimp on services included within the bundle. For this reason, incorporating quality metrics and criteria into any bundled payment approach is a central consideration. Another concern, discussed further below, is that episode-based payments do not provide incentives to avoid episodes or address population health.

The scope of the payments that are bundled largely determines the extent of incentives created to monitor care coordination and cost, and that scope is a design feature which can be varied. One widely discussed approach is to bundle together all payments for services that are closely related to a hospitalization or major surgical procedure. The payment would cover pre-operative care, all of the physician and hospital services provided during an admission, and any follow-up care, rehabilitation services, or other post-acute care delivered within 30 – 90 days after discharge. With a fixed bundled

payment, the hospital and doctors involved would have a collective incentive to coordinate the care they provide in order to minimize complications from surgery, ensure a smooth transition following discharge, and prevent avoidable readmissions. Lesser degrees of bundling could also be pursued, and episode-based payments could focus instead on treatment of chronic conditions.

In the survey that UnitedHealth Group commissioned from Harris Interactive, physicians expressed some interest in bundled payment approaches — but less than we observed for other payment reforms. Although 74 percent of specialists surveyed were at least somewhat familiar with proposals to create bundled or episode-based payments, only 14 percent were interested or very interested in pursuing such arrangements. Another 31 percent were somewhat interested (see Figure 5.1). Not surprisingly, smaller practices were less likely to say they were interested in this approach, whereas multi-specialty group practices expressed greater interest.

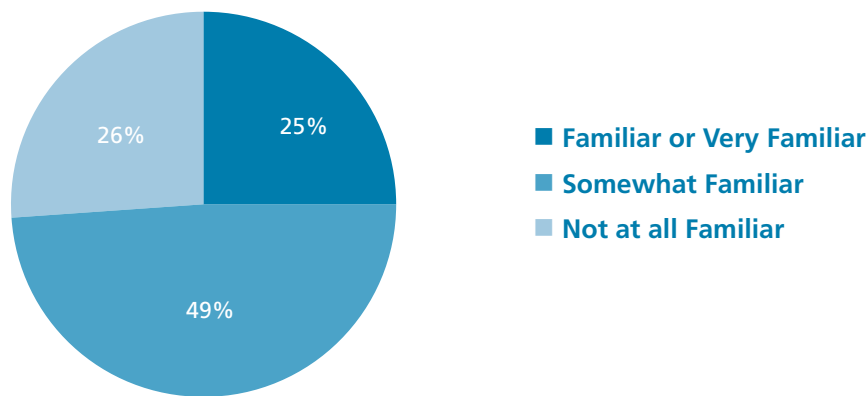
Versions of bundled payment are not new, and indeed are the historical norm for certain services (e.g., pregnancy). Over the past two decades, UnitedHealthcare has also pioneered the use of bundled payments and case rates for rare and complex medical conditions such as solid organ transplants — working with specialist physicians, professional medical associations, and many academic medical centers to develop and refine a “Centers of Excellence” program that has succeeded in achieving better outcomes and lower costs. More recently, UnitedHealthcare launched a pilot to test an approach to payment bundling for the treatment of several common cancers. Various efforts are underway to develop scalable models to bundle payments for other common treatments, such as knee replacements. Reviewing those efforts should help to shed light on many of the issues and challenges that the health care system will face in moving toward greater payment bundling.

### Optum’s “Centers of Excellence” program

Optum has more than 20 years of experience in developing and deploying a “Centers of Excellence” program for treating patients who need a solid organ or stem cell transplant or who have congenital heart disease

## Physicians are familiar with “bundled” or “episode-based” payments but current interest in participating is modest

How familiar are you with proposals to create “bundled” or “episode-based” payments?



How interested would you be in participating in a “bundled” or “episode-based” program?

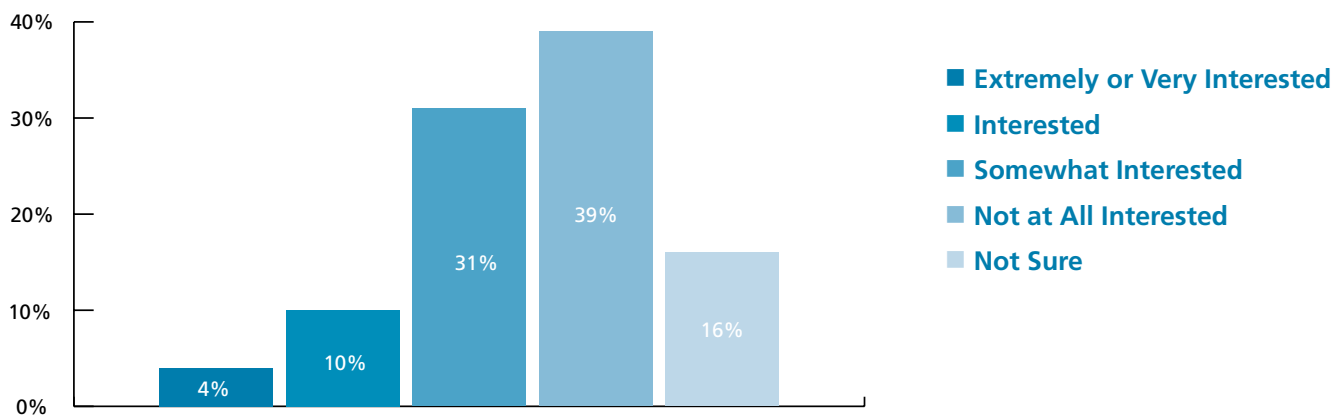


Figure 5.1; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, October 2011

or other rare conditions. These conditions require highly specialized expertise that is typically available only in academic medical centers. Optum pioneered the use of a comprehensive approach, which includes: a rigorous system of performance measurement and data-driven program qualification; the creation and support of a national network of Centers to improve options for patients and leverage competition to drive enhanced quality and efficiency; and aligned incentives through case rates for defined episodes of care.

Based on internal analyses and comparisons to industry-wide trends compiled by Milliman, Optum has been able to demonstrate that this program yields:

- Improved transplant survival rates at Centers of Excellence — about a three percent reduction in one-year mortality for liver transplants and a five percent reduction in one-year mortality for heart transplants;
- a 25 percent decrease in the average length of hospital stays for transplants;
- a 16 percent reduction in the incidence of transplants, through application of evidence-based appropriateness criteria; and
- average savings of 49 percent per case, compared with billed charges, for the transplants that do occur.<sup>35</sup>

The program operates as follows. First, an intensive qualification process is designed that is based on outcome and other performance metrics developed by professional specialty societies. Detailed evaluation criteria and multiple data sources are utilized, including real-time data linkages with relevant disease registries. Facilities that qualify are designated as “Centers of Excellence” for the type of transplant or disease involved. For example, a facility can be designated a COE for heart transplantation but not for liver transplantation. Currently, more than 160 facilities have received that designation for at least one type of medical treatment.

Second, Optum offers this network of centers to a wide range of patients — including enrollees in UnitedHealthcare as well as other health plans covering more than 48 million people in all — along with a highly specialized program of treatment decision support and coaching. Because these facilities may be located far from home, patients also are offered travel benefits to cover the costs of transportation and lodging. This package creates a national network of high-quality medical centers, giving patients a meaningful choice among top facilities and helping facilitate informed medical decision-making. By establishing a national market for these services, the program also provides incentives for these highly functioning centers to continue to improve their performance on quality, cost, and patient experience in order to attract further volume. This raises the bar on quality and encourages other centers to improve their performance so that they can qualify for the program.

Third, the payment model is aligned, with a comprehensive base payment rate for most services directly related to the transplant — covering hospital and physician costs for the procedure itself, costs related to organ procurement, as well as outpatient and pharmacy costs for up to 90 days following discharge. In some instances, additional payments are made for very high-cost “outlier” cases, while transplant-related services that are not covered by the bundled payment (either pre- or post-transplant) are typically paid on a fee schedule or per diem basis.

As the figures above indicate, this program has been highly successful and it constitutes the largest Centers of Excellence program in the country — managing more transplants than any program outside of Medicare and Medicaid. The general approach of using metrics endorsed by professional specialty societies, data from diverse sources to assess and manage performance, supportive benefit designs, consumer decision support, and episode-based bundled payments or case rates is one that could potentially be employed for a wider range of clinical services. Optum recently expanded its program to include bariatric surgery (such as gastric bypass surgery and gastric banding to address obesity) and is examining other procedures as well.

### **UnitedHealthcare’s pilot program for episode-based chemotherapy payments**

UnitedHealthcare is working with five medical oncology groups around the country to pilot a new payment model for cancer care that focuses on best treatment practices and better health outcomes. The first-of-its-kind program is aimed at improving the quality of care for patients with breast, colon, and lung cancers — which are among the most common forms of cancer. Initially, the episode-based payment will reflect each practice’s expected margins for chemotherapy drugs over a standard treatment regimen that is chosen by the oncology group for the specific condition. After that approach has been tested and evaluated, future revisions of the program may broaden the bundled payment to encompass other components of cancer care, including office visits, chemotherapy administration, and related lab tests.

This pilot program was developed for two main reasons. First, wide variations in chemotherapy regimens for these common cancers were observed both across and within oncology practices. As discussed in Chapter 1 and Appendix A, many studies suggest that, for a range of treatments, such wide variations may not be clinically warranted. Moreover, a recent study of chemotherapy treatments for lung cancer found that patients treated according to evidence-based guidelines had one-year costs that were 35 percent lower — with no difference in survival rates.<sup>36</sup>

Second, oncology practices stand out for the large percentage of revenues that come not from the delivery of professional services but from “mark-ups” on chemotherapy drugs — that is, the difference between the practices’ acquisition costs of those drugs and the payments that practices receive for them. Such arrangements have raised concerns about the incentives they create to prescribe more (and more expensive) chemotherapy drugs. Conversely, a program that promotes care based on protocols defined by physicians themselves, combined with a payment system that neither rewards nor penalizes oncologists for their choices about chemotherapy regimens, could potentially improve quality and reduce costs.<sup>37</sup>

Under this program, the participating oncology practices define for themselves the treatment protocols for those three common cancers. UnitedHealthcare then calculates the cancer care episode fee based on expected reimbursements for chemotherapy drugs to the group for that entire episode of cancer care, using the difference between the group’s current fee schedule and the drugs’ acquisition costs. The episode fee thus equals the margin for each drug times the expected quantity of drugs under the care protocol. In addition to the episode fee, a case management fee is added to reflect the time and effort that the oncologist’s office spends in managing the patient relationship and coordinating their care. As part of the pilot, office visits, chemotherapy administration, and other ancillary services like laboratory tests are paid based on current fee-for-service rates. The pilot program can thus be thought of as an important first step toward broader bundling of payments for chemotherapy, with the potential for expanding the bundle’s scope down the road.

Over the course of the pilot program, the medical groups may change their preferred chemotherapy protocols at any time with the development of new evidence, but the episode fee they receive will not change. The practices will be paid for all drugs at cost, so the physician will not lose or gain financially from adopting a new protocol. In effect, therefore, the pilot separates the oncologist’s income from drug sales, and neither rewards nor penalizes the practice for changing their chemotherapy choice. In recent testimony before Congress, Dr. Mark McClellan, the former administrator of the Medicare and Medicaid programs, described the program from

the perspective of one participating practice in the following way:

To get a better match between payments and what the oncologists think is most important for their patients, oncologists at the Kansas City Cancer Center ... have partnered with UnitedHealthcare to provide more resources for these other activities. They still get paid for costs related to the chemotherapy they administer. But instead of having to support their practice off the chemotherapy margins, they receive a bundled payment that is no longer tied to giving more intensive chemotherapy; instead, the bundled payment provides support for the treatment protocols that the physicians determine are most appropriate. The oncologists at Kansas City Cancer Center were willing to take on more accountability for the quality of their care and for avoiding unnecessary complications and costs if it would allow them to focus more on what they are trained and professionally determined to do — get their patients the care they most need.<sup>38</sup>

An important step toward achieving those objectives is to share data about the pilot’s effects (in full compliance with privacy requirements). Under this pilot, UnitedHealthcare is promoting discussions among the oncology groups about their performance, using clinical information to group patients appropriately so that they can be fairly compared. By combining claims information with clinical data, the groups will be able to see and compare their complication rates, relapse rates, pain control measures, and total medical costs. The performance of the participating oncology groups will be compared and the resulting data shared with the oncologists, with a goal of identifying best practices. Under the pilot, future increases in the episode fee will require the practices to achieve improved outcomes, a reduction in the total cost of care, or both.

### **Bundled payments in Medicare**

The Medicare program was a leader in the use of bundled payments, having adopted a prospective payment system for inpatient admissions in 1983. Under that system, hospitals receive a fixed payment per admission, the amount of which depends primarily on the patient’s diagnosis or the procedure that is performed. Payments for physician services provided



during a hospitalization are made separately, however. In the 1990s, Medicare also tested a “Centers of Excellence” model in which several hospitals received a bundled payment for heart bypass surgery that covered both facility and physician costs. Despite encouraging results — including improved outcomes and average savings of about 10 percent at the participating hospitals — that demonstration was not subsequently expanded, perhaps reflecting opposition from non-designated facilities. Medicare is conducting an “Acute Care Episode” demonstration, which bundles hospital and physician payments for designated orthopedic and cardiac procedures at five hospitals. A full evaluation of that demonstration is not yet available.

Under the recent health reform law, Medicare is supposed to initiate a pilot program for bundling payments related to a hospitalization to begin operation in 2013. In August 2011, CMS spelled out a proposal under which providers could volunteer to participate in one of several models for bundled payments.

- In one model, the bundle would encompass only hospital payments for an admission and related pre-admission services but also allowed for gain-sharing between the hospital and physicians.
- In a second model, the bundle would include both hospital and physician services provided during an admission as well as related post-acute services, physician visits, hospital readmissions, and possibly other services (as specified by applicants) provided within 30 – 90 days after discharge.
- In a third model, the bundle would encompass services provided post-discharge but not the initial hospital admission.
- Under a fourth model, Medicare would make a prospective payment to the admitting hospital to cover both hospital and physician costs incurred during an inpatient stay; the amount of the payment would be negotiable but would have to reflect at least a 3 percent discount from historical fee-for-service costs for similar episodes in that hospital.

The second and third models involve retrospective payment bundling; under that approach, providers would be paid their usual fee-for-service rates, and those incurred costs would then be compared to a target cost for the episode that would be agreed in advance

and would reflect at least a modest discount from historical episode costs. To the extent that costs actually incurred fall below the target, the difference would be shared among participating providers. However, if costs exceeded the target, participants would have to pay back the difference to Medicare. (CMS recently suspended implementation of the first model.)

Within broad guidelines, applicants for this demonstration will have substantial latitude to define the scope of both the episode itself and the payment bundle. Allowing such flexibility during the initial stages is understandable, though it does raise some questions about how to scale up an episode-based payment system. Initially scheduled for March, applications for most of the bundled payment models were due in late June. Like CMS, many states are pursuing episode-based and bundled payment initiatives (see Box 5.1).

### **Approaches to bundling: policy and practical considerations**

Episode-based payment methods have justifiably garnered substantial interest and have the potential to improve the efficiency of health care. The examples discussed above help to establish “proof of principle” for these methods. However, as one prominent assessment recently noted, if the use of episode-based payment is to be expanded, several critical barriers must be addressed. These include “the lack of standard methods for constructing ‘episodes,’ the need for reliable software to automate bundled payment, and the limited number of provider groups prepared to accept risk and manage clinical care.”<sup>41</sup>

Although progress has been made over the years in defining episodes and payment bundles, more work is needed. First and perhaps foremost, some consensus needs to emerge about the appropriate scope of the payment bundle and what categories of services should be included. This will take time and may result only from experimentation with different approaches and methods. At least initially, episode-based payments that are centered on a surgical procedure may be the easiest to implement, which is one reason that pilot testing and Medicare’s initiatives have focused on such bundles. But other approaches — such as UnitedHealthcare’s pilot on cancer care, which focuses on a clearly defined treatment — can also be pursued simultaneously.

## Box 5.1: State initiatives on episode-based and bundled payment

States are in the early stages of developing episode-based payment programs in Medicaid and other state-run health programs, and have made the most progress testing episodic payment approaches in specific circumstances.<sup>39</sup> Bundled payment demonstration projects for acute care episodes were explicitly authorized under Medicaid for a limited number of states starting in 2011.<sup>40</sup> The limited efforts to date have included those requiring hospital and physician services. For example, Minnesota is developing a voluntary approach — referred to as the seven “baskets of care” — that bundle payments for certain health conditions or episodes of care such as children’s asthma and knee replacement. Recent reports also indicate that Arkansas is pursuing a broad initiative to shift towards bundled payments.

Many states are looking to adopt episode-based payment strategies under Medicaid in both fee-for-service and Medicaid managed care settings, though the approach holds particular promise in the context of fee-for-service (or primary care case management) arrangements. States pursuing episode-based payment strategies through managed care would use the contracting process to define the payment approach, related analytics, and data reporting needs. Low Medicaid payment rates and relatively small market shares with some providers may impede states’ abilities to fully pursue this model. Therefore, state efforts may initially be focused on small-scale initiatives such as enhanced payments to hospitals to reduce readmissions or an increase in bundling of payments for outpatient hospital services.

A second set of issues involves which particular procedures, treatments, or conditions to establish as the basis of the episode. Two key criteria are the degree of financial risk faced by providers and the potential to reduce costs without compromising patient outcomes.<sup>42</sup> In short, the cost of providing the bundle may vary, but providers must be able to control these costs while continuing to deliver high-quality care. Episodes for which current costs vary substantially but outcomes are similar thus constitute the strongest candidates for episode-based payments.

Another important criterion is the degree of discretion involved in undergoing the procedure or treatment involved. Establishing bundled or episode-based payments provides incentives to control the total costs of the services contained in the bundle but does not provide incentives to limit the number of episodes or bundles that occur. (Fee-for-service payments, of course, do not provide either incentive.) The feasibility of establishing mechanisms to monitor the medical appropriateness of episodes is thus another important consideration in choosing which procedures and treatments are targeted for bundling. As noted above, Optum’s Centers of Excellence program has been able to reduce the incidence of transplants per million members

by about one-sixth through the application of rigorously developed and evidence-based criteria — reflecting the fact that another surgical treatment or medical approach is often more appropriate.

Even after choosing which types of services will be included in a bundle and what procedure or treatment will be its anchor, a third set of challenges involves determining which specific services that patients receive belong in the bundle. As noted in Chapter 2, UnitedHealthcare’s Premium Designation program uses episode-grouping software — developed by Optum — to evaluate the efficiency of care for comparable episodes provided by doctors that participate in that program. But providers may be more prepared to accept modest adjustments in payment rates that are based on such efficiency measures than they are to base their entire payment on the results of such groupers; in particular, providers may be understandably reluctant to accept financial responsibility for all of the services captured by them — including services delivered by other doctors and facilities — if they do not have coordination procedures in place.<sup>43</sup> On a practical level, it is no small matter ensuring that services included in the bundle are paid for once and only once.



Moreover, challenges have arisen in applying episode groupers to enrollees who have multiple, chronic, and related health problems. For example, one recent study examining episode-based payment approaches found that 54 percent of Medicare patients who had suffered a heart attack also had an episode of care for congestive heart failure in the same year and 35 percent also had a diabetes episode — making it difficult to determine which services belong in which bundle.<sup>44</sup> Recent work by UnitedHealth Group’s Center for Health Reform and Modernization has also documented wide variation in episode costs for privately insured patients — which highlights both opportunities to improve episode efficiency but also challenges facing providers in trying to control episode costs.<sup>45</sup> More generally, recent studies have highlighted some of the challenges involved in implementing bundled payment models.<sup>46</sup>

A fourth key issue to address is the payment rates and methods that are used. A bundled payment system creates incentives to reduce the costs of an episode, but who captures those savings depends on the level of the payments and how they are updated over time. The CMS initiative uses a discount from historical costs as the cost target. That approach can help to ensure that some savings accrue to Medicare, but it could also lead to significant differences in payment rates for the same episode of care, and does not reward providers who are already delivering efficient care. More generally, providers may seek some compensation in return for bearing financial risk.

Additional issues related to payment methods include the following:

- In some cases, bundled payments may need to include add-ons for “outlier” cases that are very high cost (as is also done in Medicare’s current payment system for hospitals). A knee replacement that becomes infected, for example, can cost five times as much as a knee replacement without complications. While some types of infections may be fully preventable, an element of chance can remain for other infections or complications — so in the absence of outlier payments or similar mechanisms, the financial risk of episode-based payments could be too great for many providers to bear.

- Another option is to introduce risk-sharing around the bundled payment, at least in the initial stages of the transition to bundling. Rather than receiving a fixed payment, costs could be compared to that dollar amount and providers could capture a portion of any savings and bear a portion of any cost overruns.

Last but not least, efforts to develop episode-based payment models need to address several issues of administrative feasibility. Because they represent a departure from current methods, there could be considerable administrative and capital expense required to adjudicate episode-based payments — particularly at scale. UnitedHealthcare administers roughly two million claims per day, so specifying and installing the requisite logic into claims processing systems in a seamless manner is a complex task. Participating providers and facilities also would need to have financial arrangements in place to receive and distribute bundled payments — the terms of which need to ensure that participants’ incentives are aligned with the goals of the reform effort. In some ways, those challenges might be reduced by making fee-for-service payments as services are delivered and then reconciling against the target episode cost afterwards. However, such “pay and chase” arrangements can be difficult to implement (particularly at scale), and create additional uncertainty for providers about how much they will ultimately be paid.

Since there is no “one size fits all” payment reform model or pathway, and local markets vary considerably in terms of their performance on quality and efficiency of care — as well as their readiness for engaging with alternative payment models — it makes sense to develop a diversified portfolio of options. The use of episode-based models for certain procedures and treatments could be combined with payment structures that have a broader scope and seek to address total spending and population health but do not require providers to accept full risk. These approaches are explored further in the next chapter.

## Chapter 6: Shared-savings and shared-risk approaches — including Accountable Care Organizations

Further along the compensation continuum — and requiring a greater degree of clinical integration among providers — are shared-savings and shared-risk arrangements. These options are designed to move away sharply from the incentives that are created by fee-for-service payment to increase the volume and intensity of services that patients receive. Shared-savings and shared-risk arrangements allow groups of providers to keep a meaningful share of the savings that arise if they are able to limit gross expenditures — while also generating savings for patients, employers, and taxpayers in the form of lower net costs. Unlike episode-based payments, arrangements that encompass all spending also create incentives for providers to avoid inappropriate episodes of care and to prevent episodes from occurring in the first place by maintaining or improving the health of their patient panel. Although such arrangements could be used in conjunction with episode-based payments or other subsets of patient expenditures, the focus of most current discussions is on sharing risk or sharing savings based on the total costs of patients' care.

While clearly distinct from capitation payments, shared-savings and shared-risk programs also differ noticeably from pay-for-performance programs. While most P4P programs offer relatively modest bonuses to individual providers that are based on a defined set of indicators within their scope of control — such as hospitals' rates of infections or primary care physicians' appropriate use of screening tests — shared-savings and shared-risk programs typically offer incentives to a group of providers that reflect total population quality and costs. Not only are the financial rewards and penalties available to care providers generally larger, but they also vary more directly with the total costs of patient care than do typical bonuses in P4P programs.

These approaches generally include several safeguards as well. In particular, shared-savings payments are typically conditioned on meeting quality targets; risk adjustment mechanisms can also be used so that doctors are not discouraged from treating sicker patients. The payment arrangements also moderate the financial exposure of providers. Shared-savings models, also

called gain-sharing, are a “one-sided” arrangement in which providers share in estimated savings if spending is below a target but are not at risk for higher-than-expected costs. With a shared-risk or “two-sided” approach, providers also bear a portion of the costs (through reduced or recouped payments) if total costs exceed the target amount. Even so, their degree of risk can be limited because — unlike episode-based or capitated payments — providers usually do not bear the full burden of cost overruns, and because these arrangements can include caps on the extent of shared losses or shared savings that accrue to providers.

Accountable Care Organizations (ACOs) are one means of implementing shared-savings and shared-risk arrangements — and they constitute one of the most widely discussed payment and delivery innovations in health policy today. The basic ACO concept is that a group of care providers agrees to take responsibility for quality and cost performance for a defined population during a defined time period. By organizing care more effectively and aligning the incentives of participating providers, the idea is that ACOs can both improve care quality and reduce total costs — and can benefit financially as a result. An attraction of the ACO model is that it may be able to bridge the gap between the limited number of locales (as in Southern California) that currently feature well-integrated, multi-specialty medical groups and the broad areas of the country where small-scale and single-specialty physician practices predominate. A wide range of existing care delivery systems could begin the transition into ACOs. The ACO payment model also has the advantage of allowing provider groups to evolve from a shared-savings arrangement to increasing levels of shared risk as their capabilities for and experience with managing patient care — not just for individuals but at the population level — increases.

The high level of discussion about and interest in ACO arrangements was reflected in the survey of physicians that UnitedHealth Group commissioned from Harris Interactive. Nationally, 52 percent of all physicians were familiar with the term ACO, and 24 percent said their

practice was already participating in one or expected to join one — meaning that nearly half of doctors familiar with the concept were pursuing it (see Figure 6.1). Although primary care physicians (PCPs) and specialists were about equally likely to have heard of the term ACO, interest in participating was notably higher among PCPs — 55 percent of PCPs familiar with the term were pursuing or planned to pursue the option, compared to 38 percent of specialists.

Still, the challenges of coordinating care and managing patients’ overall expenditures should not be underestimated. Key issues that will need to be resolved as ACO models evolve include: how patients are assigned to ACOs; how care quality is measured; how spending targets are established for purposes of determining whether savings have been achieved; and how savings are distributed. Deeper issues include how providers are going to reorganize their practices to improve care delivery and control spending, and how to limit the risk of cost increases stemming from an increase in the market power of providers. The next sections reviews UnitedHealthcare’s experience with some shared-savings initiatives and then discusses some of the lessons learned from a recent Medicare demonstration program and from the comprehensive efforts led by Tucson Medical Center and Optum to establish an ACO in the Tucson area.

### UnitedHealthcare’s shared-savings program within Medicare Advantage

UnitedHealthcare has been operating a successful shared-savings program for several years as part of its Medicare Advantage plans in certain markets. Under the program, PCPs can retain the savings that result if their practices meet quality requirements and hold down total spending for their patients’ care. The shared-savings program encourages PCPs to practice evidence-based medicine, prevent avoidable admissions and emergency room visits, coordinate patients’ specialty care, and avoid duplication of testing or other services.

The shared-savings program was first employed in the St. Louis market and was expanded to other areas in 2007. It now operates in 25 markets, involving 68 providers groups and more than 4,000 PCPs. Medical groups are accountable for the patients who choose one of their physicians as their PCP. To qualify for shared savings, specified thresholds for care quality must be met. At the end of the year, total covered spending for their patients is compared to a target amount, which is a percentage of the total payments made by CMS to the Medicare Advantage plan. If spending is less than the target amount, the group can keep all of the savings. In general, medical groups are not at risk if spending exceeds the target amount (though in some cases, provider groups have elected to assume downside risk

### Physicians’ familiarity with and interest in forming or joining an ACO

Are you familiar with the term “accountable care organization”? If so, is your practice considering joining or forming an “accountable care organization”?

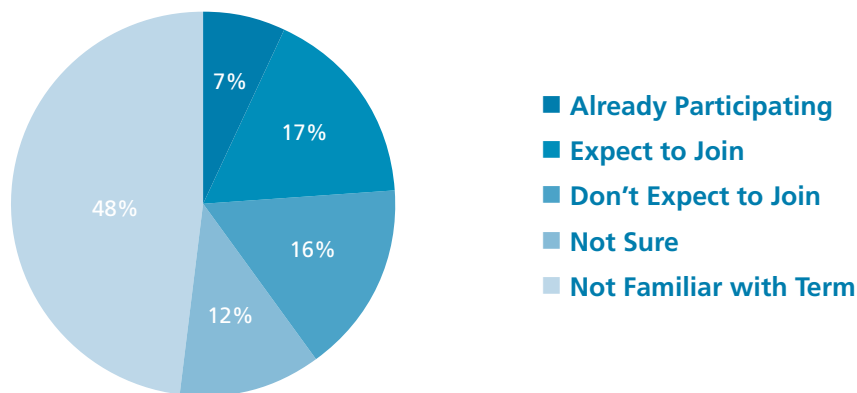


Figure 6.1; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, June 2012

or take capitation payments). To help them achieve their goals, physicians receive timely reports on their patient census and use of services along with financial and clinical updates.

To date, all of the medical groups participating in the program have been able to meet their requirements for care quality and thus become eligible for shared savings. In 2011, about half of the participating groups actually received a shared-savings payment. For the groups that were able to generate savings, the average savings were about \$500 to \$600 per enrollee per year or roughly 5 percent of average Medicare costs per enrollee — an amount which can represent a significant fraction of a PCP's income. To the extent that those shared-savings payments increase compensation for PCPs, they can also help attract or retain primary care doctors.

### **UnitedHealthcare's cardiology pilot**

In 2008 and 2009, UnitedHealthcare developed a pilot program to address the costs of cardiovascular care in one market where those costs were significantly higher than the national average. Under this program, UnitedHealthcare convened most of the large cardiac specialty physician groups in the area and developed a program with several key features: timely claims data would be shared with the groups; a set of clinically appropriate interventions would be developed and deployed by these groups; and gain-sharing mechanisms would be used to distribute any savings that materialized. Under this program, fee-for-service payments continued under existing contracts, and UnitedHealthcare shared aggregate data on costs for cardiovascular care on a regular basis with the groups. The interventions focused on: optimal care of patients with low-risk chest pain consistent with the American College of Cardiology's treatment guidelines; development of office-based triage protocols; and reducing hospital admission rates.

For several reasons, however, this pilot did not achieve its aim of reducing costs for cardiovascular care. First, payment updates included in local hospital contracts were strong drivers of cost increases, and ended up swamping any savings that could be achieved through physician-led initiatives on appropriateness of care and care management. Second, non-cardiac specialists — including ER physicians, hospitalists, and primary care doctors — were also significant drivers of utilization for

cardiac patients, but were outside the scope of the gain-sharing arrangements and thus did not have incentives to control costs. Third, simultaneous deployment of other initiatives apparently created distractions and competing priorities for the cardiology groups. One lesson to draw from this experience is that the design of financial incentives should be aligned with the clinical interventions and sources of expenditure that can be controlled by the providers involved in the initiative — which in some cases may require narrowing the scope of spending that is used to determine the spending targets and savings goals, and in other cases may require broadening the range of providers that participate.

### **Medicare's Physician Group Practice demonstration**

Another source of evidence about shared-savings initiatives is the Physician Group Practice (PGP) demonstration that CMS has been operating since 2005. In that demonstration, 10 large physician groups — each with at least 200 doctors — participated in a program in which they could share in the savings if they were able to meet targets for care quality and reduce spending growth for their Medicare patients. Medicare beneficiaries could continue to seek care from any provider, and patients were "attributed" to the PGPs retrospectively based on an analysis of where they received the plurality of their care. (In other words, beneficiaries were not assigned in advance to the PGP.) Whether the PGPs achieved savings for those patients was determined by comparing their spending growth to a benchmark based on spending growth for Medicare beneficiaries living in the same area but not receiving any care from the participants. Under the demonstration, the PGPs would keep 80 percent of the savings once they had reached a threshold of 2 percent savings (which was used to ensure that payments were not made to PGPs simply because of random variation in their patients' costs).

The demonstration attracted a number of well-known provider groups, including the Geisinger health system in Pennsylvania, the Marshfield Clinic in Wisconsin, and the Billings Clinic in Montana. The PGPs implemented or augmented a variety of care management programs aimed at addressing chronic diseases, high-risk and high-cost cases, transitional care following a hospital admission, and end-of-life care. Their performance on care quality was assessed using 32 measures, most

of which related to processes of care for delivering preventive services and treatments of heart disease, high blood pressure, and diabetes.

While the PGPs did well on those quality measures, the results on the cost front were decidedly mixed. By the second year of the demonstration, only four of the 10 groups were able to exceed the 2 percent threshold and thus receive shared-savings payments; by the third year, only five of the 10 groups received shared-savings payments, while two of the PGPs had costs that exceeded their target by more than 2 percent. Even ignoring the 2 percent threshold, the gross savings across all 10 PGPs amounted to about 1 percent of Medicare spending on their patients in the second year of the demo, rising to roughly 2 percent in the third year. Because most of the gross savings were captured by the PGPs that received shared-savings payments, an independent evaluation of the demonstration conducted by RTI for the Department of Health and Human Services found that the net savings to the Medicare program were “minimal.”<sup>47</sup>

RTI’s analysis also raised questions about whether savings were actually achieved under the demonstration because of disproportionate increases in disease coding for PGP patients, and because cost trends for the successful PGPs were also favorable prior to demonstration. The analysis suggested that those “trends might have continued had the demonstration not occurred.” For their part, the PGPs have raised questions about the methods used for determining savings, arguing that several aspects of the calculations worked to their disadvantage.

Those results, while somewhat sobering, may apply most directly to the Medicare ACO program (discussed further below) because it faces many of the same challenges regarding assignment of patients and provision of timely data about their use of services. Even so, some lessons from the PGP demo can also be drawn for the broader efforts to develop ACOs and other shared-savings models:

- First, determining whether and to what extent savings have actually been generated can be challenging — as the saying goes, the “devil is in the details.”

- Second, letting providers keep the vast majority of the savings gives them strong incentives to generate savings in the first place, but also limits the gains that can occur in terms of reducing health care spending. Yet if providers receive too small a share of the savings, the savings that materialize may also be smaller — so further testing is needed to determine the right balance and how to adjust the savings targets over time.
- Third, it may be difficult to generate new savings for provider groups that are already integrated — that is, the benefits of their integration may already be reflected in lower spending and higher quality of care.
- Fourth, and perhaps most importantly, the experience of testing shared-savings models with physician groups that are already integrated might not tell us much about how ACOs will work when they bring together providers that had not previously been affiliated — just as Optum has been working to do in Tucson and other areas.

### Optum’s ACO pilot in Tucson

Over the past few years, Optum has worked with the Tucson Medical Center (TMC), a large non-profit hospital, to establish and help operate an ACO. Formally announced in June 2011, this organization — now known as Arizona Connected Care — will play a critical role in helping to make the Tucson area a sustainable health community.<sup>48</sup> The experiences gained through that initiative highlight the opportunities and the challenges that can arise in the pursuit of higher-performing care delivery, and also illustrate the importance of closely coordinating the payment arrangements for ACOs with the infrastructure, technology, and support services that provider groups will need in order to succeed under those arrangements.

The formation of Arizona Connected Care — the first ACO in the region — had its origins in discussions that began in 2008 about aligning incentives between TMC and health plans. In 2009, TMC was one of the first three test sites nationwide selected by the Dartmouth-Brookings ACO Learning Collaborative.<sup>49</sup> In that program, the participating providers and plans agreed to work together to rapidly develop and test models



for performance measurement, feedback, and payment and to serve as a laboratory for innovation around the ACO concept.

As the initiative unfolded, stakeholders began to recognize that simply developing new payment models would not be enough — there were a number of fundamental tasks and competencies required for an ACO to succeed, many of which are Optum's strengths. These include: rigorous actuarial analysis to develop cost forecast models that form the basis of the savings calculations; substantial experience with clinical metric and performance reporting; expertise in methodologies for patient attribution and risk adjustment; and the development and execution of various programs aimed at clinical improvement and cost reduction.

Simultaneously, the leadership of TMC and its associated physician groups recognized that they needed to enhance and evolve their internal capabilities if they were going to achieve their goals for quality, cost, and patient experience as part of the ACO pilot program. They engaged Optum to assist them with tools and capabilities for effective management of population health, including analytic and technology services as well as contracting support. Part of this effort involved establishing new doctors' offices that include electronic medical records, decision-support tools, and other features designed to promote the use of best practices and continuity of care in treating patients. Optum has also established a health information exchange so that doctors and hospitals can share patient records in a timely and secure manner, and will also assist with care coordination and disease management and pharmacy benefit management programs and other efforts to improve population health.

The Arizona Connected Care initiative encompasses two sets of patients covered by UnitedHealthcare: about 23,000 members in commercial plans, and about 8,000 members in Medicare Advantage plans. These patients are identified and attributed to physicians participating in the ACO using both historical and current claims. Although the ACO is centered on a hospital system, it is physician-led and physicians will participate by subscribing to the ACO. Because they will not be employed by TMC, the model is one of "virtual" integration. The initial payment model is a shared-savings model, with 65 percent of the estimated savings going

to physicians and 20 percent to TMC; certain quality targets will have to be met in order to qualify for any shared savings. After two years, the model may shift to a shared-risk format.

Arizona Connected Care also was recently selected to participate in one of Medicare's ACO initiatives. Looking ahead, TMC also is interested in bringing other private health plans into the ACO.

### Medicare's ACO initiatives

The substantial interest that had been generated in private-sector ACO models contributed to their incorporation into the Medicare program. The draft regulations to implement ACO models that CMS initially issued were criticized as overly prescriptive and burdensome, but the agency largely took those concerns into account and refined the three basic options for ACOs to participate in Medicare. Those options are similar in many respects — with ACOs required to serve at least 5,000 Medicare beneficiaries while beneficiaries retain their rights to see any doctor or provider — but were designed to reflect different degrees of readiness on the part of ACOs to take responsibility for the quality and total costs of their patients' care.

- Under the shared savings option, ACOs can capture up to 50 percent of the savings they generate if they meet quality objectives. However, they will not be at risk if total spending for the enrollees attributed to them exceeds the target level.
- Under the shared risk option, the ACO can retain up to 60 percent of the savings they generate but will be liable for up to 60 percent of the losses if costs exceed the targets (subject to a cap on both the maximum gains and losses).
- The third option, known as the "Pioneer ACO" model, was designed for health care organizations and providers that are already experienced in coordinating care for patients across care settings. Initially, these ACOs would share savings and risk with Medicare, but in the third contract year successful Pioneer ACOs may shift to capitation arrangements or other population-based payments.

In April 2012, CMS announced the selection of the first 27 organizations that are participating as Medicare ACOs under the shared-savings or shared-risk options (all but

two chose the shared-savings option). In addition to TMC's Arizona Connected Care, that list also included AppleCare Medical ACO, a network of physicians that provide care to patients in Southern California — and which is a member of Optum's Collaborative Care delivery system for integrated care. Led by physicians, AppleCare Medical ACO partners with more than 800 physicians in the region, as well as major hospitals and medical centers across Southern California, to provide access to a full spectrum of facilities for providing patient care. The ACO is expected to serve nearly 8,000 beneficiaries. CMS has reportedly received about 150 more applications to become Medicare ACOs; in July, 89 new organizations were selected to participate, and additional announcements are expected later this year.

Last December, CMS also announced the selection of 32 Pioneer ACOs — one of which is Monarch Healthcare, another member of Optum's Collaborative Care delivery system for integrated care. A physician-led Independent Practice Association (IPA), Monarch was selected based on its demonstrated capabilities to offer high-quality, affordable care. Formed in 1994, it is the largest physician organization providing care throughout Orange County, California, and the only one with a county-wide presence. Monarch contracts with over 2,300 independent physicians to provide health care for approximately 172,000 patients in commercial, Medicare, and Medicaid managed care plans. For the Pioneer ACO Model, Monarch has selected an initial subset of 270 physicians for participation. Previously, the Dartmouth-Brookings ACO Learning Collaborative had also chosen Monarch to participate in an ACO pilot program for patients with commercial insurance.<sup>50</sup>

Although the progress to date has been meaningful, in many ways the real work on Medicare ACO is just beginning and will determine their success. As one observer recently put it, Medicare ACOs will face "important challenges in demonstrating their ability to provide high-quality care efficiently. These challenges include improving patient care without some key managed care tools, changing provider culture and care processes, achieving and sustaining the high level of savings needed for economic viability, and assuming prudent levels of risk."<sup>51</sup> Reflecting those challenges, the actuaries at CMS project that net federal savings stemming from the Medicare initiative — after bonuses

are paid to the ACOs that achieve measured savings — will be less than \$1 billion over the period 2012 – 2015, which constitutes a very small share of total Medicare spending over that period. It will be important for private-sector ACOs initiatives to reinforce and expand their impact on care delivery and affordability. State efforts to implement ACOs within Medicaid and other state-run programs will also build momentum behind these initiatives (see Box 6.1).

### Looking ahead: opportunities and challenges

Across the health system, development of ACO initiatives is proceeding at a rapid pace. Optum is responding to strong marketplace demand for tools and capabilities to manage population health effectively, and UnitedHealthcare is working to serve as a payer partner for ACO development with a number of other physician groups and hospital systems. To facilitate these efforts, UnitedHealthcare has developed an "ACO Readiness Assessment" tool that supports critical evaluation of potential opportunities for collaboration. This tool outlines the key organizational attributes that are most likely to yield success in an ACO — including strong clinical leadership and effective governance structures — as well as the critical elements and capabilities that support each attribute. Also, the tool guides providers who are potential ACO partners through a self-assessment and incorporates a "strategic partnership" guide to facilitate discussions between UnitedHealthcare and interested providers. (Because many of the same issues regarding readiness and implementation arise for a range of payment reform options, they are discussed more extensively in Chapter 8.)

As indicated above, implementation of ACOs and ACO-like approaches will involve answering a number of key questions about design elements — and operationalizing those design choices on a broader scale will require the development of complex "component-ware" in many cases. Additional issues will undoubtedly arise as implementation proceeds; for example, one recent study noted that an emerging issue for payers and providers — which is also highlighted by the provisions for shared savings in the CMS regulations — is to "resolve the tension between statistical certainty that savings have been realized and providing a meaningful and attainable incentive for providers to generate savings."<sup>55</sup> Incorporating shared-savings and shared-risk



## Box 6.1: State initiatives regarding Accountable Care Organizations

Several states have initiated efforts to develop their own version of an ACO model for their Medicaid programs as a way to leverage that program's purchasing power to reduce costs and improve quality.<sup>52</sup> In some cases, states have identified existing systems of care — such as integrated delivery systems, community-based provider networks, or fully developed medical homes — that can adapt to a more formal ACO structure. Meanwhile, CMS has initiated a state demonstration program to develop pediatric ACOs in Medicaid using the same incentive program developed for Medicare's ACOs, and states are looking at other ways to combine forces with Medicare ACOs.

States with long-standing risk-based managed care organizations — the dominant Medicaid delivery system for nonelderly enrollees in many states — are considering several ways to layer ACO models onto their existing system: either by encouraging those health plans to contract with ACOs; or by developing a next-generation program that looks more like a typical ACO (combining shared-savings provisions and performance metrics).<sup>53</sup> States with minimal penetration of risk-based managed care are also considering moving toward ACO models, possibly by building on existing medical home programs (as in North Carolina) and looking to provider-generated ideas. State efforts to deploy ACO models are, for the most part, in the early stages of development and interested states are engaged in planning activities such as stake holder meetings. Those efforts have been facilitated by state efforts to encourage providers and payers to collaborate.<sup>54</sup>

Several challenges specific to state ACO formation may affect the pace of deployment and the type of initiatives that are pursued. States with longstanding managed care programs may not see the need to develop their own ACO initiatives and instead may choose to work directly with health plans to implement payment reform initiatives. Prioritizing or aligning ACO efforts with other state initiatives such as dual-eligible demonstrations may prove more difficult. The up-front investments in system redesign necessary to build ACO models and shared-savings incentives also presents challenges for states in tight fiscal environments. More practically, state Medicaid programs may not be able to pilot ACOs with a sufficient number of patients and face challenges in developing methods for attribution of program enrollees and implementation of population-specific performance measures. States will need to address challenges already experienced by CMS in sharing claims data with providers and to work with provider groups to ensure they have stable governance and aligned objectives.

arrangements into the coverage provided by self-insured employers also can be challenging, since those claims are typically paid on an as-incurred basis.

Despite all of the questions that remain and the challenges involved, interest in developing ACO models remains high, fueled not only by the various initiatives that CMS is pursuing but also by demand from other private health plans and their employer customers. A recent review of those efforts highlighted the range of approaches that are being explored, and concluded that “not all providers are equally ready to enter into these arrangements with health plans and therefore [that]

flexibility in design of these arrangements is critical.”<sup>56</sup> That challenge also highlights the opportunities that exist to help providers develop the capabilities they will need to be held more accountable for the costs and quality of the care that their patients receive and to move along the payment continuum. The next step on that continuum is capitation payments, to which we now turn.

## Chapter 7: Capitation payments to providers

At the farthest end of the clinical and financial integration spectrum, physicians and other care providers may elect to take on full financial risk and accountability for a defined population — sometimes referred to as population-based payment. The typical mechanism to do so is called global capitation, under which a fixed payment (typically calculated per member, per month) is paid to an entity, such as a physician group; in return, that entity is responsible for providing all of the services that their patients need or use — encompassing not only primary and specialty care delivered by physicians, but also hospital care, prescription drugs, and other designated services.<sup>57</sup> Under such arrangements, the medical group is at risk for losses if its aggregate costs exceed the aggregate payment, but can achieve significant financial rewards if it manages to hold total costs below the payment.

Capitation has a long history in the U.S., intertwined with the evolution of health insurance and care delivery and reflecting the diverse paths taken in different parts of the country. While the 1980s showed slow but steady growth in the use of capitation nationwide, the 1990s witnessed an explosive increase in capitation, coinciding with a rapid conversion away from traditional indemnity insurance plans. According to a leading survey, the share of people with employer-sponsored coverage who were enrolled in traditional indemnity plans declined from 73 percent in 1988 to 10 percent in 1999, while the share enrolled in HMO or point-of-service plans grew from 16 percent to 52 percent over the same period.<sup>58</sup> (Note that capitation is also used by employers and other purchasers to pay health plans on a per member, per month basis — but the focus here is on capitation payments made by health plans to providers of care.)

UnitedHealthcare has several decades of experience using capitation, particularly through its PacifiCare division, and that experience reflects both its promises and its challenges. One lesson is that such payments are most suitable for larger physician groups and similar organizations that are well integrated clinically and have a pool of patients that is large enough for the “law of averages” to limit their financial risk; currently, many — if not most — physician practices would not be good candidates. Even among physician groups taking some

form of capitation payment, there have been shifts over the last decade away from global capitation toward capitation for physician services only.

One concern that physicians and others have expressed is that capitation payments may not encourage them to provide high-quality care — but increasingly, that concern can be addressed by incorporating into capitation contracts pay-for-performance incentives that are tied to quality measures. A greater concern is whether capitation arrangements will truly help to control the growth of health care costs or will instead encourage further consolidation among providers that can drive up payments and spending. A related issue is whether capitation arrangements will work under an open-network PPO plan, which has become the most popular form of insurance, given that current capitation payments are generally used under HMO or point-of-service plans. Given these challenges, global capitation may not be a suitable goal for all communities and settings. Instead, many areas will be able to achieve optimal performance — high-quality care at an affordable cost — using a mixture of the payment systems described in previous chapters.

While the 1990s saw rapid growth in the use of capitation, that period also demonstrated many of capitation’s limitations and challenges, and a shift ensued toward more open-access PPO models and back to fee-for-service payment. One recent study found that the share of physicians refusing to participate in capitation contracts rose from 36 percent in 1998 to 61 percent in 2008.<sup>59</sup> As that cautionary tale illustrates, it is indeed possible to go too far too fast in adopting payment reforms, so before considering another shift toward capitation payments, it is useful to review their major advantages and disadvantages.

### Advantages and disadvantages

Capitation arrangements encourage physicians to work together to optimize care and reduce unwarranted variation in practice patterns. Medical groups working in a capitated environment also have aligned incentives to develop robust medical management programs in order to reduce avoidable hospital admissions, coordinate care, organize care transitions, and direct care toward lower

intensity settings rather than emergency rooms and hospitals whenever appropriate. Unlike episode-based payments, capitation arrangements provide incentives to keep patients healthy — and thus avoid episodes and surgical procedures in the first place — and not just to limit the costs of episodes when they occur. Under capitation, physicians and their office staff can also provide services to patients in various ways (including e-mails and phone consultations) that can improve efficiency but are difficult to incorporate into fee-for-service payment systems.

These programs, if well-developed and well-managed, have the potential to achieve both higher quality and lower costs than are commonly observed. Figure 7.1 summarizes an illustrative assessment of the differences that we observe in Medicare between the performance of market-leading health systems that are paid via capitation and the typical performance that is observed with fee-for-service payment. In particular, use of

hospital care can be reduced substantially — with admission rates about 30 percent lower and inpatient days about 45 percent lower — while increasing patient satisfaction and the delivery of recommended care for chronic conditions.

At the same time, capitation by itself is not a panacea. In particular, capitation does not automatically yield higher quality of care, as evidenced in California. Despite some notable cases of superior performance, overall care quality for California typically ranks in the middle of the pack nationally, notwithstanding the greater prevalence of capitation arrangements there.<sup>60</sup> Indeed, capitation arrangements can sometimes impede the measurement of care quality, because they may not generate the claims data commonly used in analyses about quality. Also unclear is whether reductions in utilization of care under capitation translate into savings for the health care system. A widely noted examination conducted by the Attorney General’s office in Massachusetts found

### Illustrative comparison of performance: Medicare population

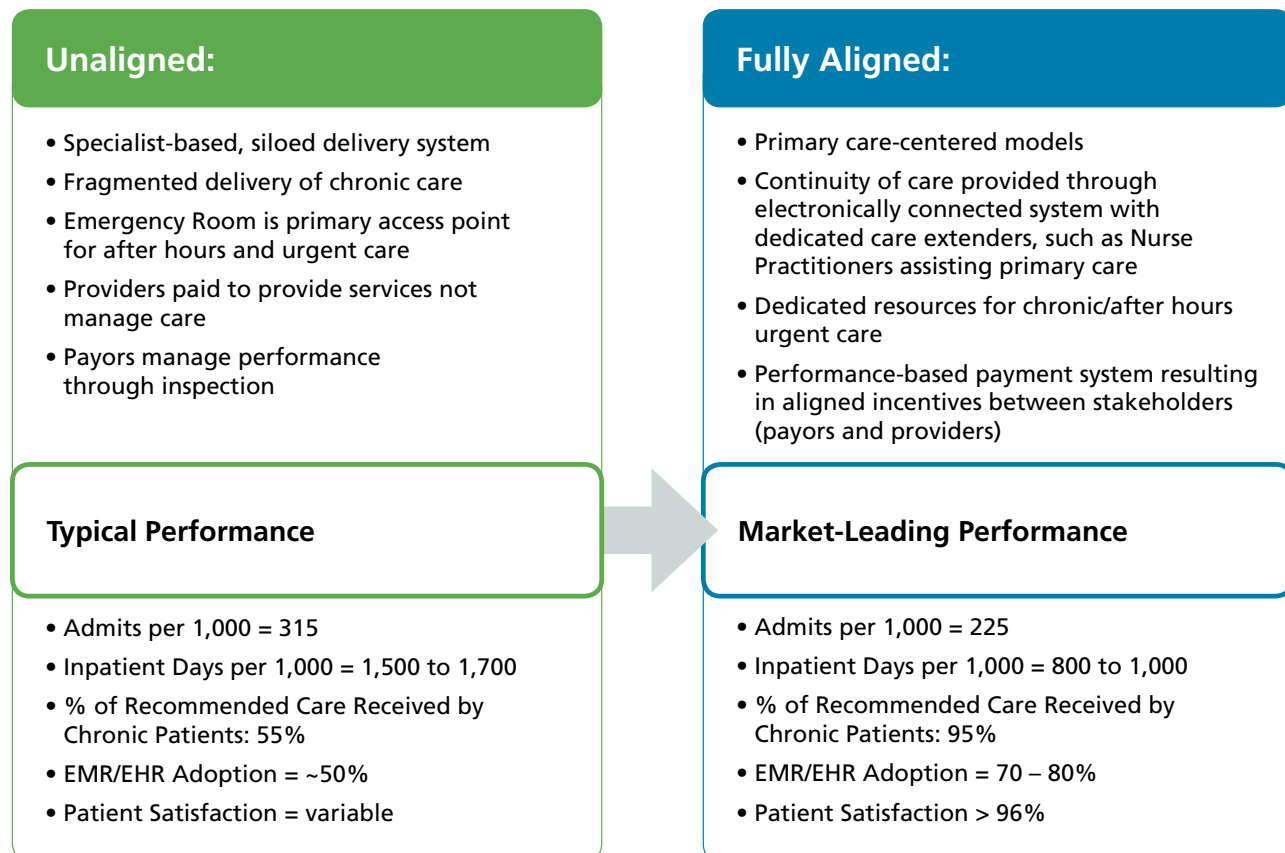


Figure 7.1; Source: UnitedHealth Group analysis of Medicare claims and industry benchmarks, 2011  
EMR/EHR = Electronic Medical Records / Electronic Health Records

that paying providers on a global basis has not yielded lower total medical expenses in that state. One reason is that many of the medical groups receiving capitation payments have had the market leverage to negotiate generous capitation rates.<sup>61</sup> Other experiments in Massachusetts such as the “Alternative Quality Contract” (discussed further below) are at too early a stage to generate a clear answer to this question.

UnitedHealthcare’s experience also indicates that, even when capitation reduces the level of spending, it may not have much effect on the trend of spending growth. That finding is consistent with academic studies that did not find differences in rates of cost growth between HMO plans that commonly employed capitation and other health insurance plans that typically used fee-for-service payment. The manner in which capitation rates are updated over time clearly plays a key role in determining the impact of capitation on spending; indeed, setting or updating capitation payments so that they simply equal providers’ incurred costs can actually undermine incentives for cost control.

Another concern about capitation arrangements is that they expose providers to insurance risk, in that the average costs of treating their patients depends, in part, on the severity of the health problems that their patient population develops — which is not entirely under the control of providers. The extent of this risk is mitigated for medical groups that have a large patient base simply because the law of averages makes it very unlikely that a disproportionate share of patients will all experience adverse health shocks (such as heart attacks) during a year. Even in California, however, it appears that many medical groups have retreated from global capitation payments and, instead, receive capitation payments covering only physician services, reflecting their concern that they cannot fully control hospital and pharmacy costs.<sup>62</sup> Such “professional services” capitation contracts can still provide strong incentives to control costs for physician care, but do not provide incentives to keep patients out of the hospital and could encourage shifts in the site of care. For that reason, professional services capitation can and should be combined with pay-for-performance programs that factor in metrics like hospitalization rates and inpatient costs.

A final concern stems from the fact that succeeding under capitated financing requires a very high level of financial, clinical and operational integration and acumen. Strong, stable governance is, therefore, critical. The degree of integration among providers that is required to succeed under capitation may also give those providers substantial market power — as has already been observed in California. A recent review of developments there noted that such “provider dominance could offset some or all of the potential of [payment] reforms to lower premiums through increased efficiency in delivery” of care.<sup>63</sup>

### Physicians’ views about capitation

Physicians’ unfavorable views of capitation are another barrier to its wider adoption. According to our survey of physicians conducted by Harris Interactive, 60 percent of doctors agreed with the statement that capitation payments shift too much risk to providers, while only seven percent of doctors disagreed (see Figure 7.2). Interestingly, physicians’ views did not differ substantially based on the size of their practice, even though doctors in larger practices would be less exposed to insurance risk under capitation.<sup>64</sup> At the same time, only 20 percent of doctors agreed with the statement that capitated payments encourage appropriate use of medical care, whereas 39 percent disagreed with that assessment. Doctors who had been practicing less than 10 years were more open to capitation arrangements than were doctors who had been in practice longer.

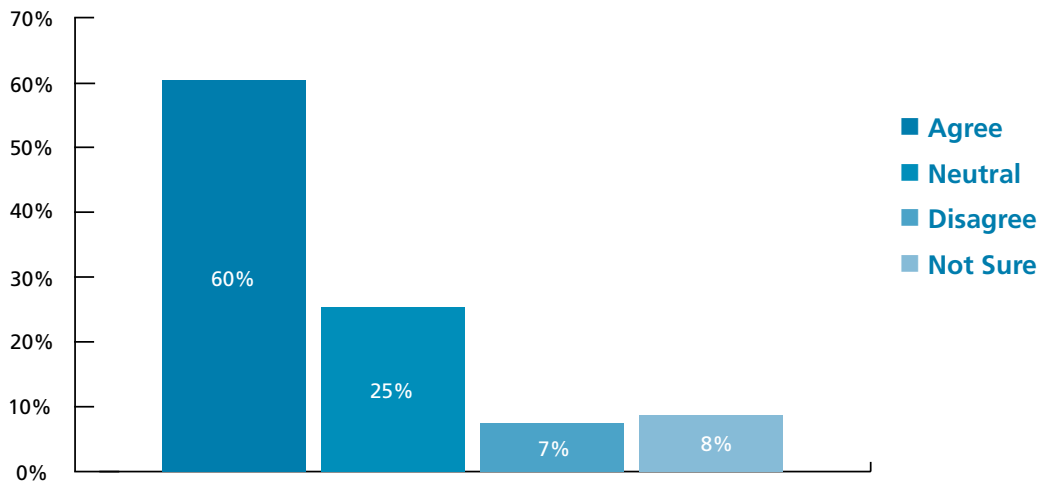
Overall, doctors estimated that their practices received 23 – 30 percent of their revenues in the form of capitated payments (although these percentages may overstate the prevalence of capitation nationally).<sup>65</sup> Not surprisingly, capitation is more common for larger provider groups.<sup>66</sup> Doctors in practices that received an above-average share of payments on a fee-for-service basis had somewhat more negative views about capitation, but the differences were not stark.

### A case study: the Alternative Quality Contract

In an effort to address concerns about capitation-style payments while providing incentives to control costs and improve the quality of care, Blue Cross/Blue Shield (BCBS) of Massachusetts recently initiated an interesting and much-discussed approach to payment reform known as

## Many physicians view capitated payments skeptically

Do capitated payments shift too much risk to providers?



Do capitated payments encourage appropriate use of medical care?

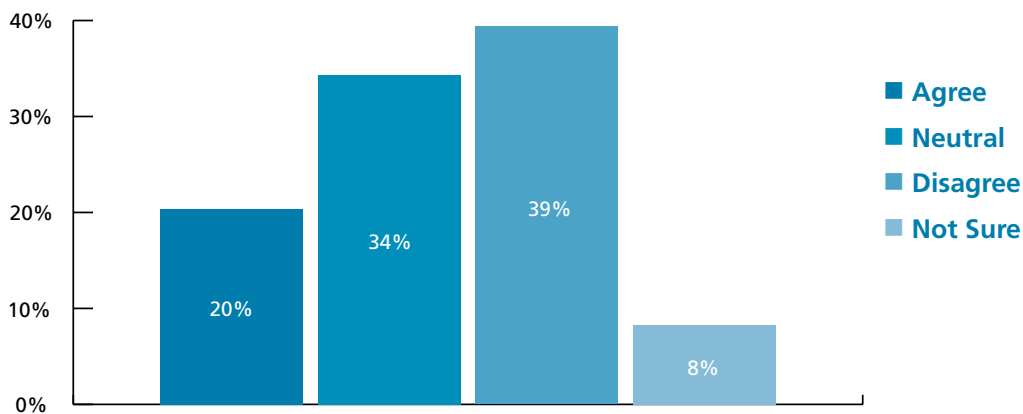


Figure 7.2; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, June 2012

the Alternative Quality Contract (AQC). Under this kind of contract, participating medical groups are required to keep total spending for their patients under a pre-determined budget, and are also eligible for substantial bonus payments if they achieve specified goals for care quality. Although initial evaluations indicate that aggregate spending has increased as a result of the AQC, this experiment warrants further attention going forward to see its effects over a longer period.

**Key contract features.** Rather than receiving a fixed monthly payment per patient, medical groups participating in the AQC are still paid on a fee-for-service basis. However, a budget target for each group is

established for each group and then actual spending is compared to the target.<sup>67</sup> How the budget targets are set and updated is obviously a critical design element. Under the AQC, the targets were based on historical spending for each group's panel of patients, updated by an agreed-upon trend factor. To encourage the participants to pursue longer-term savings opportunities, the initiative featured five-year contracts and also sought to ratchet down the target growth rates in later years. According to one evaluation of the AQC, however, some of the initial budgets were set at generous rates to attract "early adopters."<sup>68</sup> The other key feature of the contract is the quality bonuses, which can be as much as 10 percent of enrollees' medical costs.

**Preliminary results.** An evaluation of the AQC's initial results that was published in *The New England Journal of Medicine* found improvement on several measures of quality and reductions in gross medical costs, but also concluded that net payments by BCBS rose to AQC groups in the first year.<sup>69</sup> In particular, the study found that — compared to a control group of BCBS patients whose primary care physicians did not participate in the AQC and with adjustments for other differences — gross medical spending on AQC patients was about 2 percent lower than it would otherwise have been. Further analysis showed that those initial savings were achieved through changes in referral patterns rather than through changes in the number or types of services used; that is, the AQC patients were referred to providers who charged lower fees (particularly for outpatient care). Participating groups also received quality bonuses ranging from three percent to six percent of their budgets, technical support that cost up to two percent of their budgets, and budget surplus payments averaging three percent (because gross medical spending was below their target levels). Consequently, total costs for BCBS were probably four to nine percent higher than costs for comparable non-AQC patients.

The Attorney General's Office in Massachusetts also examined spending levels under the AQC and found that total expenditures (including quality bonuses and other payments) increased by about 10 percent for AQC provider groups between 2008 and 2009. By contrast, total spending for non-AQC groups increased by about two percent — a difference of about eight percentage points that is similar to the findings published in *The New England Journal of Medicine*. The Attorney General's Office also examined the provisions in the AQC agreements to reduce future growth of the spending targets, which are supposed to limit spending growth to an average rate of 5.6 percent through 2013 for the contracts they examined. According to that analysis, the "non-AQC providers would have to increase their spending by 9.75 percent ... every year until 2013 just to reach the same level of spending as the AQC providers" in that year, given the initial disparities in spending.<sup>70</sup>

More recently, results were released for the second year of the contract, finding a gross reduction in medical

spending of about three percent.<sup>71</sup> The analysis found that gross spending in 2010 was reduced by shifting some procedures, imaging, and tests to facilities with lower fees, and by reducing service utilization among some groups. Gross savings were found to be higher for participating groups that did not have prior experience with capitation payments, although further tracking will be needed to see whether those are one-time savings from capturing "low-hanging fruit" or instead can be sustained. Even so, it appears likely that net spending for AQC groups increased in the second year due to the bonuses that were paid for quality and for reducing gross costs. These findings again highlight the challenges that can arise in setting and updating capitation rates in ways that will help control the level and growth of total spending and insurance premiums.

### Whither capitation?

To what extent should capitation be the desired "end state" for payment reform? Overall, UnitedHealthcare's experience suggests that capitation can work well when there is a strong collaborative relationship between the medical group and the health plan. But experience suggests that it is critical to assess carefully the readiness of the delivery system to take on greater degrees of risk. In many cases, it may be more feasible for provider groups to start with performance-based contracting, episode-based payments, or ACO-style arrangements that evolve from shared savings to shared risk, before they consider moving to global or partial capitation.

In those places where capitation arrangements already exist or can be easily implemented, they increasingly will need to incorporate performance-based payments that encourage the delivery of high-quality care, using the various tools for measuring care quality and the methods for rewarding it discussed in previous chapters. For physician groups operating under capitation for professional services only, those arrangements also should include elements of performance-based contracting that encourage efficiency in the use of services that are outside the scope of the capitation payment (such as avoiding preventable admissions and trips to the emergency room and prescribing generic drugs when appropriate). And whatever the scope of capitation payments, measuring the efficiency of care



and then incorporating incentives and rewards for it will continue to be an important consideration to help ensure that growth in payments over time is reasonable. In other words, capitation contracts will work better if they incorporate performance-based contracting provisions.

Another challenge that needs to be addressed going forward is whether and how capitation payments can be integrated with PPO insurance designs, including the increasingly popular consumer-directed health plans (which generally incorporate a PPO provider network). The Attorney General's report found that as of 2011, providers in Massachusetts had entered into global risk contracts only for patients in HMO and point-of-service plans. Similarly, the Alternative Quality Contract applies only to patients enrolled in an HMO or point-of-service plan, so enrollees must seek referrals for specialty care.<sup>72</sup> Analyses of the delivery system in California also indicate that capitation payments are made only for HMO enrollees (partly reflecting regulatory limits on the financial risk that provider groups may bear).

The existing connections between capitated payments and HMO and point-of-service plan designs are understandable. Such designs make it easier to assign responsibility for patient care to the appropriate medical group — and also make it easier for those medical groups to ensure that care is coordinated and to manage the use of specialty care by their patients. But these connections also run counter to the desire for broad access to providers and consumer choice. Recently, new PPO products have been approved for sale in California that would use tiered copayments to encourage enrollees to obtain services from designated providers — with the lowest level of copayment reserved for doctors who are covered by capitated payments — while still allowing broad access without a referral. Given the potential interest in such products, developments on this front warrant careful observation going forward.<sup>73</sup>



# PART C – IMPLEMENTATION CHALLENGES AND NEXT STEPS

## Chapter 8: Common implementation issues for payment reforms

This chapter builds on the prior discussion of payment models by focusing on key questions that arise in trying implement and foster broader adoption of those models. More specifically, it discusses how to get such initiatives started and how to progress over time along the payment continuum in order to further encourage the delivery of high-quality and affordable care.

Those common issues include: assessing readiness for payment reforms; providing the necessary support and infrastructure; considering when and how to pursue multi-payer initiatives; managing the implementation costs of reform initiatives; engaging patients and aligning their benefits and incentives with the goals of payment reforms; and avoiding certain risks and pitfalls.

### Assessing readiness

The first and perhaps most important step is to assess whether provider organizations are ready, willing, and able to adopt new payment models — with what’s required of them clearly depending to a great degree on the extent of the change involved. Simply moving into a pay-for-performance system would not necessarily obligate providers to make substantial changes in how they deliver care, although ideally they would want to implement new measures that help them perform better in order to qualify for payment bonuses. For example, hospitals would be better served if they had systems in place to monitor readmissions, as well as initiatives they could implement to reduce avoidable readmissions — such as more user-friendly discharge instructions or transitional care nurses to help patients schedule needed follow-up care. Likewise, physician practices would be advised to adopt measures to track their panel of patients both to determine whether they have received appropriate screening tests and to schedule tests that are needed. (Health plans and health services organizations can help on both fronts, as discussed below.)

Taking more significant steps toward shared-savings or shared-risk arrangements, however, would also require more progress toward the clinical integration of participating providers. Specifically, successful efforts would need to include the following key components:

- **Physician leadership.** There is no substitute for the dedicated leadership of physicians in bringing about changes in the delivery of health care that are designed to encourage and reward quality and efficiency. Indeed, a recent review of the evidence about factors affecting the success of reform efforts conducted by the Government Accountability Office identified leadership as the most important one — because leaders play a key role “in promoting the adoption of interventions by their organizations, in winning acceptance among affected staff members for the changes those interventions entail, and in marshalling sufficient resources for the interventions to succeed.”<sup>74</sup>
- **Clinical coordination.** The practices involved in new payment models also need to have in place, or rapidly adopt, mechanisms both to track the care their patients are receiving and implement programs that can address gaps in care and avoidable costs that are identified as a result — including wellness initiatives and disease and case management programs. Having an effective system of health information technology — including at least a basic electronic medical record — would greatly facilitate those efforts. If such systems are not yet available, prompt feedback using data from health insurance claims can serve as a partial substitute. (Steps that third parties can take to help providers develop these capabilities are discussed below.)

- **Financial organization.** Effective financial accounting systems are also an important ingredient both for compiling and tracking data on patients' costs and for distributing financial rewards and penalties to providers based on their performance. For example, when the Tucson Medical Center and its collaborators formed an ACO (as discussed in Chapter 6), they created a separate legal entity to receive and distribute shared savings.

If the payment initiatives will involve multiple organizations of providers that are not already integrated — either separate groups of physicians or collaborations between unaffiliated physician groups and hospitals — it also will be crucial to have a clear governance structure in place both to monitor progress and address issues as they arise during implementation.

Another key element will be aligning the incentives within provider organizations — that is, aligning how the doctors are paid and not just how the practices are paid. Even if their incentives are aligned, it will still be important for participating physicians to be “on board” with the changes that are involved and to take advantage of new opportunities to improve quality and efficiency; in other words, followership needs to accompany leadership.

Concerns about readiness were reflected in our Harris Interactive survey of physicians. Only 28 percent of doctors said that practices in their community were well prepared or adequately prepared to assume greater responsibility for managing their patients' care (another 44 percent thought that practices were somewhat prepared). And only 12 percent said that practices were well prepared or adequately prepared to assume greater financial risk for managing that care, while 50 percent said they were not prepared (see Figure 8.1).

For their part, health plans also will need to assess their readiness to enter into new payment arrangements — in particular, regarding the use of claims processing and payment platforms. Here, too, the degree of difficulty depends on the extent of the change involved; bonuses tied to fee-for-service payments may be relatively easy to implement, but greater operational challenges arise for fixed payments per patient or per episode. For episode-based bundled payments, both payers and providers also will have to develop comfort that the appropriate

distinctions are drawn between services encompassed within the bundled payment and services that will be paid for separately, including any additional payments for high-cost “outlier” cases. For shared-saving and shared-risk models, methods also will have to be developed to reliably calculate both total spending and target spending in order to estimate whether and to what extent savings have actually been generated.

### **Providing support and developing infrastructure**

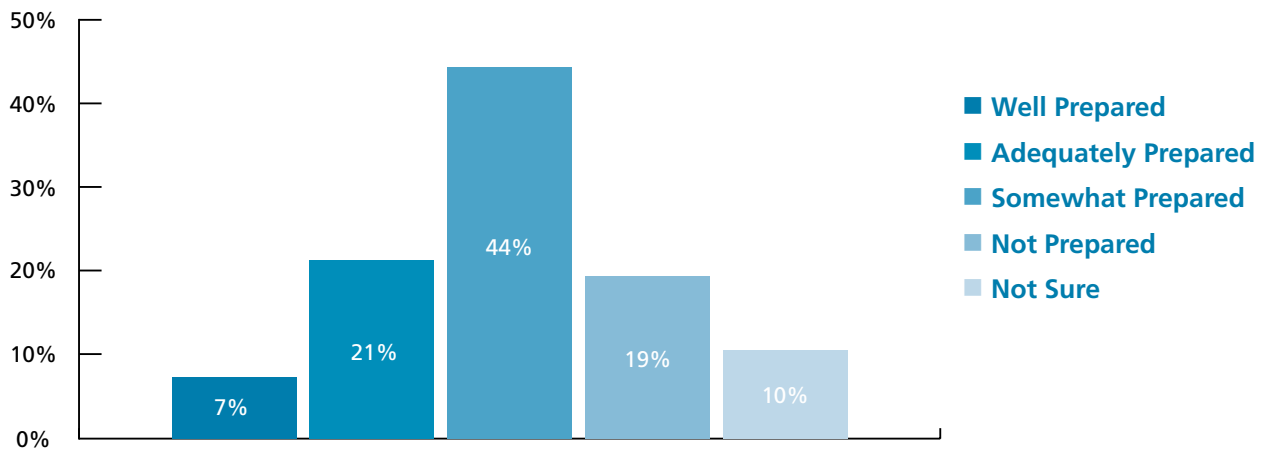
Although hospitals, physician practices, and other groups of providers need to have certain capabilities in order to adopt new payment models, they cannot be expected to do everything themselves. A recent review of several private-sector ACO initiatives found that many providers “do not currently have the infrastructure required to take on and manage risk successfully, though some payers are providing infrastructure and other support” in an effort to fill that gap.<sup>75</sup> In particular, they will need certain types of analytic and technical support that other organizations — including health plans — are best positioned to provide. Continued federal efforts to improve the informational infrastructure of the health care system also would foster progress.

One particular type of support that providers will need is data both about their own patients' care and about how their practice patterns compare to those of similar providers — information that doctors and hospitals are unlikely to have in their own information systems. And what they really need is not just raw data, but also analysis of those patterns that generates actionable information. Examples of the data and analytics that providers will need under new payment models include the following:

- Feedback about the treatment of their patients, summarizing their performance in delivering evidence-based care and highlighting recommended services that their patients may not have received, problematic test results, sub-par prescription compliance rates, or other gaps in care.
- Prompt notification to doctors about their patients' use of hospital services, including timely reports on emergency room visits and inpatient admissions — both to address avoidable visits and to help plan necessary follow-up care.

## Physicians do not yet feel prepared to assume greater responsibility or greater financial risk for managing patient care

How prepared to take greater responsibility for managing care?



How prepared to take greater financial risk in managing care?

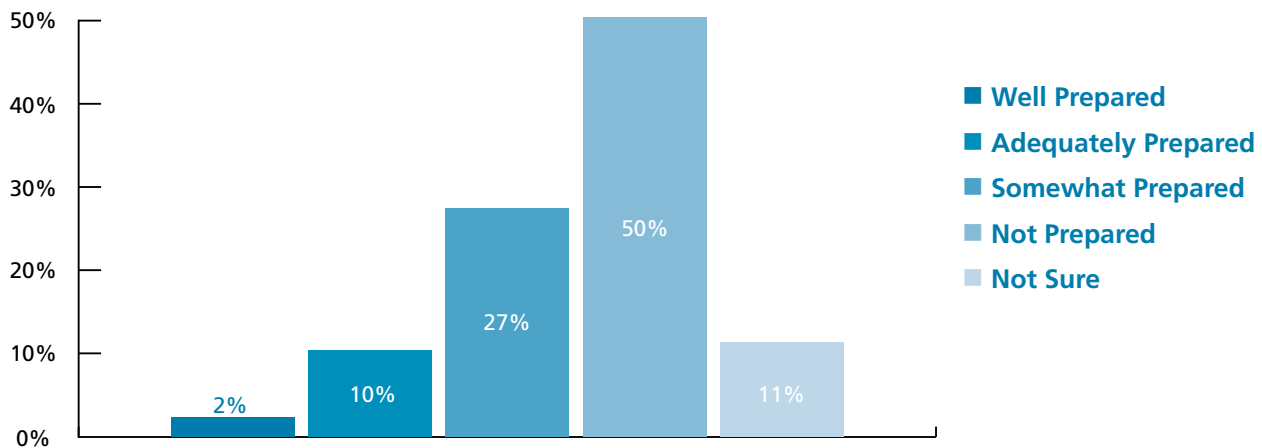


Figure 8.1; Source: UnitedHealth Center for Health Reform & Modernization / Harris Interactive survey of physicians, June 2012

- Application of predictive modeling software and models to identify patients at high risk for developing complications or needing expensive care that could be avoided through timely interventions.

Once opportunities to improve care have been identified through data analysis, providers also could use help from third parties in adopting steps to pursue those opportunities. Those steps will include the use of effective disease management and case management programs, wellness initiatives, and other interventions. Rather than having each medical group design and

implement those measures one by one, it would be more efficient for health plans or other organizations to develop and deploy such programs (which can still be tailored to the needs of specific practices and their patient panels).

Working with doctors' offices to ensure that these programs can be incorporated smoothly into care protocols will be an important element of the support that those offices receive. A prominent example of such support is Optum's eSync Platform (see Box 8.1 on the next page).

## Box 8.1: Optum's eSync platform

A core characteristic of high-quality care is providing the right care at the right time to the right patient. To help achieve that goal, Optum has created the eSync Platform. This technology helps build a detailed health portrait of each patient and then delivers customized health care management tools to individuals directly and via their care providers. By combining a wide range of health data, such as medical claims, health and lifestyle choices, and demographic factors in a manner compliant with privacy laws, eSync can turn this information into personalized plans of care based on a member's own health care needs. Through a combination of outreach by Optum's nurses, direct mail, and mobile applications, members receive information about an upcoming medical procedure, or a reminder to schedule an annual exam, or tips on starting an exercise plan, all based on their personal needs. Optum's eSync Platform can also reach out to high-risk customers proactively and offer them opportunities to participate in programs specifically designed to help them reduce their health risks. For nurses, physicians, and other professionals, the eSync Platform also provides enhanced visibility into a patient's medical history and a real-time medical profile, which can result in better health management and potentially significant savings for individuals, their employers, and the health care system as a whole.

Electronic health records (EHRs) are another area of technology where third-party support could help providers deploy the tools they need to succeed under new payment models. Adoption of EHRs has increased considerably in recent years, and a recent study found that in 2011 "more than half of all office-based physicians were using electronic health records system."<sup>76</sup> Even so, only about one-third of those physicians had systems with key features of a basic EHR, such as the ability to "view laboratory and imaging results, maintain problem lists, compile clinical notes, or manage computerized prescription ordering." In other words, many of these systems are passive in the sense that they do not prompt doctors to provide preventive care or highlight opportunities for care coordination. The study found much higher adoption rates — over 80 percent for any system and 60 percent for a "basic" EHR — for practices that have 10 or more physicians, but such practices accounted for only about one-sixth of office-based doctors.

As for hospitals, another recent study found that the share with any electronic health record system increased from 15 percent in 2010 to 27 percent in 2011, but the share with a comprehensive system that covers all of the hospital's major clinical units rose from only 4 percent to 9 percent.<sup>77</sup> That study did find that another one-third of hospitals had EHRs with a substantial majority of key functions operating in at least one clinical unit. A recent

report by the Optum Institute for Sustainable Health found higher rates of adoption in a survey of hospital executives. However, it also concluded that "technology gaps remain, genuine interoperability remains elusive, and as a result, hospitals report still being some way off full readiness for the challenges headed their way in terms of managing greater population health and financial risk."<sup>78</sup>

Private sector partners are positioned to help doctors and hospitals address these challenges. For example, as part of the Tucson ACO initiative (discussed in Chapter 6), Optum developed a health information exchange platform that was specifically designed to connect the differing EMR systems of the participating hospitals and physician groups. At the same time, these statistics on adoption highlight that even as new payment models are rolled out, patients will likely receive some of their care from providers that are not participating in the initiative and may not have electronic health records — yet the services delivered may still be encompassed by an episode-based payment or counted toward a spending target. Consequently, rapid sharing of claims data by health plans (in Tucson and elsewhere) will continue to play an important role in filling the information gap created by uneven adoption and connectivity of EMRs.

Encouraging greater adoption of EMRs also is an area where the federal government can play a crucial role in helping pave the way for new payment methods — by

fostering development of the necessary infrastructure. Since at least 2004, when the Office of the National Coordinator for Health Information Technology was created, the Department of Health and Human Services (HHS) has been instrumental in establishing agreed-upon standards for EMR systems. More recently, federal legislation has put into place financial incentives for both doctors and hospitals to adopt those systems — initially in the form of payment bonuses under Medicare and Medicaid for adoption and meaningful use, but later converting to payment penalties under Medicare for failing to adopt and effectively use EHRs.

The federal government could also support payment reforms by making more data available about the performance of doctors, hospitals, and other providers in delivering care to Medicare and Medicaid enrollees. In general, a given health plan's data will represent a limited share of the services provided by a given doctor — but combining private sector and public sector data has the potential to generate a richer and more accurate picture. HHS has recently developed an initiative under which Medicare data may be combined with private sector claims data to assess physician performance. Those efforts may focus first on measuring care quality, but should progress as quickly as feasible to consider broader measures of performance including cost efficiency to help ensure that patients get care that is both high-quality and affordable.

### Considering multi-payer reform initiatives

Health plans can often take the lead in designing and deployment new payment models, “blazing a trail” that others can follow — as illustrated by the examples in previous chapters of UnitedHealthcare's role as a catalyst for payment reforms. Yet in some cases, payment reforms may be easier to implement and more likely to succeed if multiple health plans participate.

Multi-payer approaches have two advantages. First, any rewards and penalties that are built into the new payment arrangements would constitute a larger share of a practice's revenue if multiple payers are involved. Even the fee-for-service Medicare program, the country's largest payer, accounts for less than 25 percent of payments for physician and clinical services nationwide, and the share for any single private health plan will generally be lower (although those shares will obviously

vary from practice to practice). The stronger financial incentives stemming from a multi-payer initiative are more likely to provide both the impetus and support that doctors and other providers need to make changes in their practice patterns, treatment protocols, and other key processes.

Second, requiring physicians to respond to a wide variety of disparate measures of their performance at the same time could cause inefficiency and dilute the impact of the payment reforms. Although some tailoring to the specific payment and data systems of each payer is feasible, using the same key metrics and adopting similarly structured payment incentives would simplify implementation and give doctors a consistent set of signals and objectives. For example, the pilots for primary care medical homes that UnitedHealthcare has launched in conjunction with other payers all involve the same basic payment structure: continued fee-for-service payment for incurred claims, plus a monthly case management fee per patient and a performance-based bonus. This does not mean that the exact same intervention design must be used across all practices. On the contrary, some variation in the models tested is desirable in order to learn which designs work best — but for a given group of doctors, the same or very similar approaches should generally be applied.

At the same time, multi-payer initiatives have some drawbacks, which must be considered carefully. Developing a consensus among the parties involved can be time-consuming and may result in a “lowest common denominator” approach that is less effective at fostering needed changes in care delivery. Moreover, competition among health plans should include competition on the dimension of developing and successfully implementing better payment models, which could be diluted through significant standardization of approaches. It is difficult to determine in advance whether the advantages or disadvantages of multi-payer approaches will predominate, but these questions are important — and are likely to yield different answers for different communities, groups of providers, and health plans.

**Local and regional initiatives.** The coordination challenges involved in a multi-payer approach can be considerable, but one way to foster multi-payer initiatives is to work through local or regional organizations. Such organizations can convene key stakeholders —

including both health plans and providers — to develop common approaches to payment reforms. The Network for Regional Healthcare Improvement (NRHI) serves as an umbrella group for various local collaborative organizations, which “can serve as catalysts for payment and delivery system reforms, as neutral planning and problem-solving forums where . . . multi-payer, multi-provider payment and delivery reforms can be designed, and as sources of both leadership and technical assistance in implementing needed reforms.”<sup>79</sup> Specific examples of such efforts include:

- The Integrated Healthcare Association (IHA), which brings together several health plans and physician groups in California. Recently, the IHA launched a multi-payer and multi-hospital pilot project to test the use of episode-based payments for knee and hip replacements; a number of physician groups (including Monarch HealthCare) are also actively involved.
- The Pittsburgh Regional Healthcare Initiative, which was recently awarded a \$10 million grant by CMS to expand a pilot program that reduced readmissions for patients with Chronic Obstructive Pulmonary Disease.
- The Maine Health Management Coalition, which is serving as the facilitator for several partnerships between large employers and major health systems in Maine in their efforts to transition payment and delivery systems toward more accountable care.

According to the NRHI, such regional organizations currently cover 13 states (including California, New York, and Illinois) plus about a dozen cities and regions in other states. Though that constitutes an important start, applying this approach to payment reform will require further development of such collaborative organizations or the use of other mechanisms.

**Federally-led efforts.** The federal government also can play a key role in defining the main features of a payment model — in particular, through the Medicare program — with providers, private health plans, and other stakeholders providing input through that process. For example, Medicare recently expanded the bundled payment approach for kidney dialysis treatments to encompass more of the drugs and other services that are

provided, and UnitedHealthcare and other payers have followed suit. Similarly, the Medicare program’s efforts to establish accountable care organizations (ACOs) likely will open up opportunities for private health plans to pursue similar initiatives with the same provider groups. The Comprehensive Primary Care Initiative — a multi-payer effort led by CMS and involving UnitedHealthcare — is another example (see Box 4.3 for additional discussion).

Relying on federal programs for leadership, however, also has some potential limitations. For one, such federal initiatives may require changes in legislation, which can be difficult to secure; that was true of Medicare’s prospective payment system for hospitals, its fee schedule system for physicians, and the expansion of the payment bundle for dialysis treatments. Further, efforts led by Medicare can sometimes lack flexibility, whether because of statutory requirements or other pressures to have a high degree of consistency in its methods across differing areas of the country with different degrees of provider organization.

### Managing implementation costs

Another important consideration for providers and health plans is managing the costs involved both in implementing new payment models and in making associated changes in processes and methods of care delivery. If those costs exceed the near-term savings generated by a particular reform initiative, then that would clearly present an important barrier to progress. Fees for care coordination and case management that have been incorporated into most pilots for Patient-Centered Medical Homes are intended to support the initial investments in infrastructure that primary care practices need to make in order to succeed under that model. Over time, however, those direct payments may be phased out or replaced with shared-savings arrangements that practices can use to fund their ongoing implementation costs.

Similar issues arise with ACOs. Even if those initiatives are expected to generate savings relatively quickly, providers may not be in a position to finance the initial costs involved. Recognizing that possibility, Medicare put forward an “advance payment model” as an option under its main ACO program, under which participating provider groups can receive some of their expected savings up front — and several participants have



taken advantage of that option. As for episode-based payments, the administrative costs of developing an agreed scope of the services involved, allocating claims into episodes, and reconciling total payments against target levels could present an important obstacle to testing such models and implementing them on a broad scale.

### Engaging patients and aligning benefits

Coordination between payers and providers is clearly central to the success of payment reform initiatives. For those initiatives to have the greatest impact on the quality and efficiency of health care, however, patients also will have to be engaged in the process — both to align their incentives and address concerns they might have. In particular, health plan members will need timely and user-friendly information to help them choose among doctors and can also be encouraged to seek efficient doctors — and to make wise choices about their own health and health care — through cost sharing and premium differentials.

As discussed in Chapter 2, one step that UnitedHealthcare has taken to help consumers make wise choices is to give them information about physician performance when they are selecting a doctor. Specifically, consumers can see whether a given doctor received a star rating for quality and efficiency of care, or if there was insufficient data with which to evaluate that doctor.

More recently, UnitedHealthcare launched an **enhanced treatment cost estimator** through which patients can compare the range of expenses they might expect to incur for a wide variety of common treatments. That information can affect their choice of a treatment plan and also helps them choose among physicians and facilities by comparing expected costs for the same treatment plan. The analysis can also take into account the cost-sharing provisions of their health insurance coverage — including their year-to-date progress toward reaching plan deductibles and out-of-pocket limits — and generate a real-time estimate of their out-of-pocket expenses. The new version, which was launched in March for 46 markets and will be deployed more broadly throughout 2013, allows patients to compare their options using physician-specific price figures. In

the future, the program also will provide integrated appointment scheduling — making it easier for members to act on the information they receive.

Giving consumers actionable information about the costs and quality of their health care should encourage them to be prudent in their use of services. In order to have their maximum effect, however, consumer incentives will probably need to be aligned more closely with the payment arrangements for providers. At a minimum, health plans could establish tiered networks of care providers, and the tier with the lowest cost-sharing requirements could consist of providers that are participating in a PCMH, ACO, episode-based payment, or similar payment initiative; other in-network providers could be in a second tier that has standard cost-sharing requirements. Alternatively, consumers could be given a choice between a conventional plan design and a plan with a narrow network of providers who are all working within a reformed payment structure; in that case, the incentive to enroll could come in the form of a lower premium to reflect the lower costs of the narrow network plan.

### Avoiding risks and pitfalls

Going forward, one risk is that new payment models might be adopted or standardized too quickly. Even though many provider groups may be eager to participate in new payment models, a measured approach to the adoption and spread of those models — one that is aggressive, but not overly aggressive — is warranted.

A related risk is that, in the eagerness to proceed quickly and claim success in “bending the curve” of health care costs, payment initiatives will not be properly evaluated. Although setting up extensive trials with randomly assigned treatment and control groups — like what’s done to test new drugs — is often infeasible, evaluation efforts do need to involve careful thinking about what spending and care quality would have been in the absence of the initiative. In particular, setting the target against which savings are measured can be challenging, if only because the provider groups choosing to participate in a payment initiative may already have succeeded in providing higher quality and less expensive care. Finding appropriate control groups for purposes



of comparing performance and evaluating pilots is important. Another important consideration is whether high-performing groups might be inadvertently rewarded or penalized.

A separate set of risks involves what may be broadly classified as unintended consequences. One risk that has been widely noted is that the greater integration among hospitals and physician groups that may occur in order to coordinate care more effectively could also strengthen providers' negotiating leverage over payment rates. As has been well documented, providers with more market power are able to secure higher private payment rates.<sup>80</sup> To address that concern, the proposed regulations related to ACOs would generally require scrutiny of any anti-trust implications if the provider groups participating in an ACO have more than a 30 percent market share. Similar issues are raised by recent reports that hospitals have been buying physician groups in an extensive way.<sup>81</sup> Although such consolidations can sometimes improve the care that patients receive, regulators must carefully balance those potential benefits against the costs of reduced competition in the markets for hospital and physician services.

Overall, the key will be for stakeholders to work together to find the right balance as they implement initiatives to provide better information, reform payments, and make related changes to care delivery.

## Chapter 9: Conclusions and outlook

Having established the key features of — and major implementation challenges for — different payment reforms, how should we move forward? Here we identify some specific steps that should be taken by each of the major stakeholders in our health care system:

**Doctors and hospitals** and the organizations and specialty societies that represent them — as well as respected authorities like the NCQA and NQF — need to help develop and validate more and better measures of care quality. The share of medical conditions that have a robust and valid set of evidence-based measures of care quality needs to grow, and the emphasis in quality measurement needs to continue shifting from processes of care to outcomes. No system of performance measurement and assessment will be perfect, but we must not let the perfect become the enemy of the good.

To aid in the effort to improve measurement, all stakeholders will need to work together in order to develop foundational capabilities and infrastructure — particularly electronic medical records (EMRs) and data exchanges. While adoption rates of electronic systems have grown rapidly in recent years, survey results indicate that existing systems may lack the key features that provide the connectivity and timely intelligence that providers will need to deliver the right care at the right time in an affordable way. Using clinical data from EMRs (while protecting patient privacy) will be an important step toward measuring care quality using outcomes rather than processes of care. **Health services companies** can particularly help with the deployment and integration of new systems, while the federal government should continue to spur adoption and meaningful use through an appropriate combination of bonuses and penalties.

**Health plans** have played a leadership role in helping to develop and implement new payment models. But to facilitate further progress, they must continue their work to develop scalable models that can be implemented as seamlessly as possible. They should also continue to develop and deploy “tool kits” that providers can use to help them succeed under those models — including user-friendly data and feedback that, rather than adding complexity to their work, makes it easier for busy

providers to deliver high-quality care. Health plans should also pursue opportunities to appropriately pool their data — and combine it with data from Medicare and Medicaid — to facilitate analyses of health cost drivers and to permit more granular assessments of providers’ performance. Opportunities to establish multi-payer reform initiatives should be given serious consideration, though health plans should also continue to compete vigorously to provide the best value to their customers.

**Employers** play a critical role in the health care system because they are the primary source of health insurance coverage in this country — covering 156 million non-elderly people, according to one recent estimate.<sup>82</sup> For about 60 percent of those enrollees, employers are “self-insured,” meaning that they largely bear the financial risk of providing coverage to their workers (with health plans often providing the underlying administrative services). As a result, employers must continue to be important catalysts for testing new payment models, to include developing more complex financial arrangements that allow doctors and hospitals to share in the savings produced by reforms so they have incentives to generate those savings in the first place. Employers also need to continue exploring value-based benefit designs and deploying new employee incentive programs that are aligned with payment reforms and reward workers for making wise choices about their health and health care.

**Consumers** must also play an active role in efforts to make the health care system work better, because it is their care and their health that is ultimately at stake. While consumers need transparent information about providers’ performance and should embrace value-based benefit designs, they also must be aided by online tools, mobile applications, and other sources of support that make it much easier for them to take control of their own health and care.

**Federal and state governments** play several roles in the current system and can take several steps to help payment reform initiatives succeed. In their roles as purchasers of health care and health insurance, they should obviously continue their efforts to develop and test new payment models and work with private health plans to coordinate those efforts as appropriate.

Medicare officials in particular should continue to innovate and should resist pressures to develop “lowest common denominator” approaches to payment simply for the sake of consistency. States should continue to serve as laboratories for testing and deploying new approaches, as they are often best suited to tailor initiatives to local conditions.

In their role as regulators of health plans, federal and state governments also need to rethink regulatory barriers that might hinder efforts to reform payment methods and improve the quality and efficiency of health care. For example:

- Many payment reform models involve making bonus payments to or sharing savings with providers in order to align their incentives. Yet many state insurance regulators do not recognize those payments as medical costs, even though their purpose is to facilitate cost-saving efforts. Particularly in light of new restrictions on health plans’ administrative costs, such regulatory barriers could inhibit the adoption of successful payment models.
- Some states tightly restrict the degree of financial risk that provider groups can bear. While efforts to maintain adequate financial protections are understandable, overly strict limits could impede the development and spread of payment models that would benefit all stakeholders in the system.
- Aligning consumers’ incentives with the goals of payment reforms is a key component of their success, but some regulatory restrictions could unduly impede such efforts. In Medicare, health plans should be given sufficient flexibility to vary patients’ cost-sharing requirements so that they are encouraged to and rewarded for using doctors and facilities that are delivering high-quality and efficient care.

Even with the best efforts and intentions of all involved, a number of challenges and tradeoffs will need to be addressed to make payment reforms succeed — and three in particular stand out.

The first issue is whether providers will bear some financial risk when their patients develop new health problems or require hospitalization for acute incidents

(sometimes called “insurance risk”) or if instead they will primarily face risk for treating those problems or responding to those incidents in an efficient way (sometimes called “performance risk”). An argument for episode-based payments is that they focus on performance risk and thus on costs that may be easier for providers to control, but a concern about that approach is that providers would not have incentives to promote population health or to prevent episodes from occurring in the first place. Whether the solution is to combine episode-based payment to specialists with primary care medical home arrangements that emphasize population health, or instead to start with shared-savings arrangements around total costs in order to limit providers’ initial risk and then shift toward shared-risk or capitation arrangements over time — or to develop other solutions and combinations of approaches — will probably be answered differently in different communities.

As these models develop and mature, a second key challenge will be maintaining incentives to control costs and encourage value while also translating the savings that are generated from payment reforms into lower premiums and costs for those who finance insurance coverage — that is, for consumers, employers, Medicare and Medicaid, and the taxpayers who fund those programs. Arrangements in which providers retain a large share of savings give them a strong incentive to generate those savings, but might not reduce total spending on health care very much. But if savings are passed on to consumers and other purchasers immediately, that could weaken the incentives for providers to generate savings in the first place. This too is a balance that may be struck differently depending on local circumstances and will evolve over time.

A third key issue is whether the benefits of greater clinical integration can be achieved without further increases in providers’ market power. Provider groups can generally manage the insurance risk that comes with capitation payments only when they have a patient panel that is large enough that the law of averages limits their financial exposure — 5,000 patients or more, depending on the specific circumstances. But as recent studies have found, large provider groups often are in a position to demand higher payments, even under capitated

financing, limiting the savings on health care that can be achieved from such arrangements. Partly for that reason, it is not clear whether the optimal outcome will always be capitation, or if instead mixed payment systems that avoid the problems of pure fee-for-service and pure capitation will prove more effective at delivering high-quality and affordable care.

Whatever the ultimate outcome may be, there is little doubt about the general direction that payment reforms need to take: away from fee-for-service arrangements and toward methods that provide greater accountability and encourage the delivery of high-quality and efficient care. Without such payment reforms it will be hard to “move the needle,” but payment changes alone will not do the job. Those reforms must not only be tailored to the capabilities of different groups of providers and different communities, but also matched by improvements over time in those capabilities. In doing so, UnitedHealth Group is committed to exercising leadership and working with other stakeholders to make payment reform a reality.

## Key Steps to Make Payment Reform Work in the “Real World”

Stakeholders	Opportunities and Challenges	Recommendations and Next Steps
<b>Physicians and Hospitals</b>	<ul style="list-style-type: none"> <li>• Varied readiness for payment reforms and for managing patients’ care and total costs</li> <li>• Limited number of validated quality measures, particularly ones that assess outcomes</li> <li>• Challenges in adoption and use of electronic medical records, particularly regarding system connectivity</li> </ul>	<ul style="list-style-type: none"> <li>• Work with health plans to assess readiness and available support, and then test or adopt appropriate reform models</li> <li>• Help develop and validate better measures of care quality, with a greater emphasis on outcomes rather than processes</li> <li>• Continue to deploy health information technology, with specific features designed to support connectivity, practice improvement, and quality measurement</li> </ul>
<b>Health Plans</b>	<ul style="list-style-type: none"> <li>• Shifting payments away from volume-based to value-based models is vital but complex</li> <li>• Challenges arise in tailoring models to local circumstances while implementing at scale</li> <li>• May be difficult to assess performance of all providers using claims data for any one plan</li> <li>• Opportunities for public-private and multi-payer approaches to share data and implement payment reforms</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to test and deploy innovative payment models and address issues of scalability</li> <li>• Continue to develop and deploy toolkits that give providers the data /feedback they need under new payment models</li> <li>• Pursue opportunities to pool private data and combine with Medicare and Medicaid data to assess cost drivers and provider performance</li> <li>• Explore public-private and multi-payer reform initiatives under appropriate auspices</li> </ul>
<b>Employers</b>	<ul style="list-style-type: none"> <li>• Engaging effectively with stakeholders to support payment reform and incorporating new models into existing payment systems</li> <li>• Continuing to develop and deploy wellness programs and incentives for employees to improve health and avoid waste</li> </ul>	<ul style="list-style-type: none"> <li>• Serve as catalyst for new payment models, involving more complex financial arrangements that allow doctors and hospitals to share in the savings generated by reforms</li> <li>• Continue exploring value-based benefit designs and deploying new employee incentive programs that are aligned with payment reforms</li> </ul>
<b>Consumers</b>	<ul style="list-style-type: none"> <li>• Need help and support to make the best choices about their health</li> <li>• Need user-friendly information and tools to help them choose the best providers of care</li> </ul>	<ul style="list-style-type: none"> <li>• Engage more actively to improve health, supported by doctors, hospitals, health plans, and other stakeholders</li> <li>• Understand, engage, and support value-based benefit designs and information on providers’ performance</li> </ul>
<b>Federal and State Governments</b>	<ul style="list-style-type: none"> <li>• Slow or limited adoption of health information technology (HIT) system-wide</li> <li>• As major purchasers of health care and health insurance, payment initiatives can exert an outsized influence on providers</li> <li>• Need to strike the right balance between local adaptation versus national uniformity, particularly in public programs</li> <li>• Regulatory barriers can hamper innovation and impede implementation of payment reform and quality improvement initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Spur adoption and meaningful use of HIT through appropriate mix of incentives and penalties for providers</li> <li>• Continue efforts to develop and test new payment models and work with private health plans to coordinate efforts, particularly in the Medicare program</li> <li>• Maintain a lead role for states in testing and deploying new payment models, tailored to local market conditions</li> <li>• Pursue alternative regulatory approaches to eliminate barriers that might hinder payment reform and quality/efficiency improvement</li> </ul>

## APPENDIX A: REVIEW OF KEY STUDIES REGARDING FEE-FOR-SERVICE PAYMENT

Although a comprehensive review of the literature about fee-for-service payment is beyond the scope of this Working Paper, here we summarize the key findings of selected studies. Those studies have examined the effects of fee-for-service payment on the level and growth rate of spending for health care, the degree of geographic variation in spending that has arisen under fee-for-service reimbursement, and the variations in and shortcomings of care quality observed under that payment system.

### Effects on spending

While disagreements can arise about the reasons why spending on health care in this country is high and rising, those costs clearly represent a significant financial burden. Total spending in the U.S. is projected to be \$2.8 trillion in 2012 or roughly \$8,950 per person; that spending has risen from about 10 percent of GDP in 1985 to about 18 percent today, with the share expected to reach nearly 20 percent by 2021. Even assuming some slowdown in the rate of cost growth, and taking into account the effects of recent health reforms, the Congressional Budget Office projects that national spending on health care will reach about 25 percent of GDP in 2037.<sup>83</sup> Identifying the factors contributing to high levels of spending and rapid cost growth — and then designing appropriate measures to address them — is thus a high priority for the nation.

**Spending levels and spending growth.** What effects has fee-for-service payment had on spending? Evidence about those effects dates at least to the RAND health insurance experiment, which was conducted between 1974 and 1982. That historic experiment focused on the impact of cost-sharing requirements, but also compared the results of fee-for-service care to those of a staff-model Health Maintenance Organization (HMO).<sup>84</sup> The HMO was paid a fixed amount per enrollee and its doctors were paid by salary, so they had no financial incentive to provide marginal services. (Of course, not all HMOs use that approach.) In the study, enrollees were

randomly assigned to the HMO and to a fee-for-service plan, and in both cases they faced no cost sharing, allowing for an “apples-to-apples” comparison.

The RAND study found that spending per enrollee in the staff-model HMO plan was about 30 percent lower than spending in the fee-for-service plan, with no discernable differences in the resulting health of enrollees.<sup>85</sup> While some of that difference in spending might be attributable to other factors, such as the organizational culture of the HMO that was studied, the payment method certainly seems to have supported that culture — providing compelling evidence that unmanaged fee-for-service payment arrangements can contribute to a substantially higher level of spending on health care. More recently, Dr. Mark Chassin — who now heads The Joint Commission, a national non-profit organization that accredits hospitals and other health care organizations — concluded that the available evidence “clearly implicates payment incentives as an important cause of increased utilization.”<sup>86</sup> Other recent analyses have also highlighted the high quality and lower costs of care provided by some prominent hospitals whose doctors are paid on a salary rather than a fee-for-service basis.<sup>87</sup>

What role fee-for-service payment methods have played in the growth of health care spending is less clear, however, because there is evidence on both sides of the argument. On the one hand, fee-for-service payment has been a prominent feature of the U.S. system for many years, and thus could have induced higher levels of spending in all years without necessarily affecting the growth rate of spending. Some support for this conclusion can be found in comparisons of health care spending growth across countries; although the U.S. has consistently higher levels of spending on health care compared to other countries — some which use fee-for-service payment and some of which do not — growth rates of spending have been more comparable across countries, with the U.S. often in the middle of the pack

(see Table A1.1). Studies comparing rates of cost growth between HMO and fee-for-service health plans have also failed to find significant differences.<sup>88</sup>

On the other hand, there are reasons to suspect that fee-for-service reimbursement helps foster the adoption and spread of expensive new medical treatments and technologies — even in cases where the incremental medical benefits may be small — which contributes to spending growth. For example, a recent study examined use of intensity-modulated radiation therapy for the treatment of prostate cancer and raised important concerns about the role of fee-for-service payment in its rapid diffusion.<sup>89</sup> Higher payments may also have contributed to the increased use of cardiac stents rather than medical management to treat stable coronary angina, even though a large-scale trial found little difference in health benefits between those treatments at the time.<sup>90</sup>

**Geographic variations in utilization and spending.**

Other studies have focused on whether and to what extent higher spending and higher service utilization have been medically beneficial by examining regional variations both in the uses of treatments and in spending levels (or growth rates) for seemingly similar sets of

patients — variations which, if not caused by fee-for-service payment, are certainly accommodated by them. The most extensive analyses of geographic variations have been conducted by researchers affiliated with Dartmouth College. They have focused on the fee-for-service Medicare program, partly because of the relative ease of getting data about that program, and have typically divided the country into about 300 “hospital referral regions” (HRRs) — areas that tend to use the same sets of hospitals and thus can be considered a geographic market for health care. Among their key findings are the following:

- Rates of surgical procedures often vary widely for reasons that are hard to discern. The share of Medicare beneficiaries receiving a coronary artery bypass graft, for example, varied roughly fourfold across HRRs, from a low of about 2 per thousand enrollees in areas near San Francisco to a high of about 7 to 8 per thousand in parts of Louisiana and Texas.<sup>91</sup> Undoubtedly, some of those differences reflect underlying disparities in the health of enrollees — but notable differences in rates of specific surgeries persisted even after the researchers sought to focus on groups of patients with similar health status.

**Comparative growth of health care spending per capita**

Country	Initial Spending (1998)	Final Spending		Average Annual Growth
		Amount	Year	
United Kingdom	\$1,559	\$3,129	2008	7.2%
Netherlands	\$2,054	\$4,063	2008	7.1%
New Zealand	\$1,451	\$2,683	2008	6.3%
Australia	\$1,939	\$3,353	2007	6.3%
Canada	\$2,310	\$4,406	2009	6.0%
United States	\$4,236	\$7,538	2008	5.9%
Japan	\$1,747	\$2,729	2007	5.1%
Switzerland	\$2,981	\$4,810	2009	4.4%
France	\$2,313	\$3,696	2009	4.4%
Italy	\$1,833	\$2,886	2009	4.2%
Germany	\$2,480	\$3,737	2008	4.2%

Table A1.1; Source: UnitedHealth Group analysis of data from the Organization for Economic Cooperation and Development, 2010. Note: Spending figures converted to U.S. dollars using exchange rates based on purchasing power parity.



- Medicare spending per enrollee differs sharply in different parts of the country, even after adjustments are made to account for differences in the age, sex, and race of enrollees in different areas. In 2006, for example, spending in the 25 most populous HRRs varied from a low of about \$6,700 in Minneapolis to a high of about \$12,000 in New York City. Looking across all HRRs, the overall variation in spending was about three-to-one, driven by remarkably high costs in Miami (over \$16,000 per enrollee).<sup>92</sup>
- The same study also found substantial differences in rates of cost growth across HRRs over an extended period; between 1992 and 2006, average annual growth in costs per enrollee in the fee-for-service Medicare program varied among the 25 largest HRRs from a low of 2.3 percent in Atlanta and Pittsburgh to a high of 5.3 percent in Dallas.
- Some of the differences in spending reflect varying rates of illness as well as differences in the prices that Medicare pays for the same service. According to the Dartmouth researchers, however, differences in illness rates account for less than 30 percent of the variation in Medicare spending, and price differences can explain perhaps another 10 percent — meaning that more than 60 percent of the variation results from other factors.<sup>93</sup>

On the basis of that analysis, some of the Dartmouth researchers have concluded that “perhaps 30 percent of U.S. health care spending ... does not appear to improve our health” and thus could potentially be saved.<sup>94</sup> Other observers have generated similar estimates, including a recent study by the Institute of Medicine.<sup>95</sup> But other studies have raised questions about how broadly applicable the Dartmouth results are — and whether its findings provide direct evidence of wasteful spending or primarily constitute circumstantial evidence. For example, one study looked at differences in hospital spending in Florida and found that areas with higher spending had lower mortality rates among Medicare patients who went to the emergency room for a heart attack.<sup>96</sup> Another, broader study examined survey data on Medicare enrollees over a 10-year period and found that enrollees in higher-spending regions had fewer health and activity limitations and a 1.5 percent greater probability of survival.<sup>97</sup>

Another limitation of the Dartmouth analysis is that price variation plays a rather limited role in Medicare under its administered pricing systems, but may be more important for non-elderly patients. One recent study compared utilization and spending for enrollees in the fee-for-service Medicare program and workers with employer-sponsored insurance, focusing on patients with a history of heart disease.<sup>98</sup> It found that utilization varied much more widely in Medicare than in private insurance — about three to four times more, depending on the measure — but also found that variation in spending was comparable between publicly and privately insured patients, owing to the greater variation in the prices paid by private insurers. Another recent study compared per capita spending in Medicare and commercial plans for large employers and found a weak correlation across HRRs, which suggests that different factors are determining spending.<sup>99</sup> Analysis by the newly formed Health Care Cost Institute also has highlighted the key role of unit price inflation in driving recent increases in health care spending for privately insured patients (even as the utilization and intensity of services has grown relatively slowly or fallen).<sup>100</sup>

Perhaps more importantly, attributing all of the geographic differences in utilization and spending to the use of fee-for-service payment would not be accurate because the resulting incentives are similar nationwide — so differences in spending must reflect, at least in part, varying responses to those incentives (as well as variations in the actual levels of fee-for-service payments relative to providers’ costs). One study examined the impact of recent reductions in Medicare’s payment rates for chemotherapy drugs but could not explain “why oncologists in Minnesota responded by increasing chemotherapy rates much more than those in California or why oncologists in New Hampshire and Connecticut responded by substantially increasing chemotherapy rates, while those in Rhode Island responded by increasing them only slightly and those in Massachusetts responded by decreasing them, albeit slightly.”<sup>101</sup>

At a minimum, however, fee-for-service payment allows for wide variations in practice patterns. Higher spending might be warranted if it reflected higher quality care or led to better outcomes — but as discussed in the next section, that connection is far from clear. Paying by the

service without linking those payments to care quality also has allowed substantial gaps to develop between current care delivery and identified best practices.

### Problems of quality

Although studies sometimes disagree about the exact causes, a consensus exists that the health care provided in this country often involves overuse, underuse, and misuse — three manifestations of problems with care quality that are at a minimum accommodated by fee-for-service payment. And in at least some cases, fee-for-service payment actively discourages efforts to improve care quality.

**Variations in quality.** Focusing again on Medicare, the Dartmouth researchers found that quality of care in higher-spending regions was no better on most measures and was worse for several preventive care measures — in particular, patients in higher-spending regions were somewhat less likely to receive several recommended steps following a heart attack.<sup>102</sup> Those researchers also found that higher-spending regions did not, on average, have lower mortality rates than lower-spending regions, even after adjustments were made to control for differing illness rates among patients and regions.<sup>103</sup>

Some of the Dartmouth research also suggests that the degree of geographic variation in treatment patterns is greater when less of a consensus exists within the medical community about the best treatment to use — reinforcing concerns that some services are being paid for that may contribute little to health. If an elderly patient has fractured his or her hip, for example, the need for hospitalization is plain and there is relatively little variation in admission rates for Medicare beneficiaries with that diagnosis. For other hip replacements and for knee replacements, however, more discretion is involved, and the variation in surgery rates is about four or five times larger than for hip fractures. There appears to be even more variation in the rates of back surgery — about seven times as much, compared to the variation in hip fracture surgeries — which may reflect even greater disagreements about when such surgery is warranted.<sup>104</sup>

### Prevalence of overuse, underuse, and misuse.

Problems with care quality have been more evident in studies that have taken a more targeted approach — focusing on the overuse, underuse, and misuse of health

care. Overuse of care probably reflects, at least in part, the incentives in a fee-for-service system to provide more services and more expensive ones, whereas underuse and misuse are more indicative of a lack of sufficient incentives in pure fee-for-service systems to provide coordinated or high-quality care.

Analysis of overuse has sought to identify cases when a procedure was performed even though its risk of harm exceeded its potential benefit — that is, when the procedure was not warranted on medical grounds. Such studies generally rely on after-the-fact reviews of patients' charts by medical professionals. A summary of those studies compiled by RAND found that rates of inappropriate use varied depending on the procedure involved, from a low of about 2 to 12 percent for heart bypass operations to a high of 32 percent for carotid endarterectomies (in which plaque is surgically removed from the carotid artery).<sup>105</sup> The RAND studies also found that certain surgeries were often performed in cases when the medical value was deemed “equivocal” — that is, the procedure was not inappropriate, but its expected health benefits did not exceed its risks by a substantial margin. A more recent study, using data for 2009 – 10, found that one out of every seven patients having a non-emergency angioplasty to clear a clogged artery in the heart didn't meet criteria for needing the procedure; according to that study, it was uncertain whether the stent-inserting surgery was appropriate in another one-half of patients.<sup>106</sup>

Even as overuse of some treatments and procedures occurs, several recent studies have found underuse of other services — with individuals often failing to receive care that is recommended or deemed appropriate, even when they have insurance coverage. One study examined whether Medicare beneficiaries received 22 services that have been proven effective in helping to prevent or treat a range of common and important diseases — including breast cancer, diabetes, heart attacks, pneumonia, and strokes — and found that, on average, those patients received appropriate care about 73 percent of the time during the years 1998 – 2001.<sup>107</sup> Another widely cited study by Beth McGlynn and others looked at a broader sample of adults and examined a much wider range of recommended treatments over the period 1998 – 2000 — and found that those treatments were provided only

about 55 percent of the time.<sup>108</sup> The odds of receiving recommended care were about the same for preventive services, treatments for acute health problems, and treatments for chronic health conditions. Some federal reports have found steady but slow improvements in care quality since then, with patients receiving recommended disease management for chronic conditions and appropriate acute care about three-quarters of the time in 2010.<sup>109</sup> But another federal report recently found that adults received recommended preventive care only about half the time during the period from 2007 to 2010, suggesting that progress has been more limited.<sup>110</sup>

A third type of problem in health care quality is the misuse of care, which includes incorrect diagnoses as well as medical errors and other sources of avoidable complications — such as infections that patients acquire during a hospital stay and avoidable readmissions to the hospital. Recently, UnitedHealth Group analyzed its own commercial claims to determine the extent of readmissions. That analysis found an 8 percent rate when using the all-cause, 30-day rate that is endorsed by the National Quality Forum (a widely respected non-profit organization that helps develop consensus standards for measuring and publicly reporting on performance). That rate is somewhat lower than the 9 percent readmission rate that has been estimated by the federal Agency for Health Care Research and Quality (AHRQ) for privately insured patients nationwide. Among enrollees in UnitedHealthcare's Medicare Advantage plans, the readmission rate was about 14 percent — lower than the 19 to 20 percent rate that has been observed for enrollees in the traditional Medicare fee-for-service program, a difference which partly reflects various steps UnitedHealthcare has taken to reduce readmission rates.

**Effects of fee-for-service payments.** As noted above, it may be easy to imagine how fee-for-service payments could encourage the overuse of health care (depending on the level of the payments). The finding of underuse may be more surprising but probably reflects a combination of shortcomings in fee-for-service payments: relatively low payments for primary care services (which are a key source of recommended care), lack of explicit payments for care coordination efforts that might help to ensure that patients receive recommended care from an appropriate specialist, and a failure to tie payments to

the provision of recommended care. With misuse, fee-for-service payments may not provide an inducement — indeed, hospitals receiving a fixed payment per admission would seemingly have a financial incentive to prevent hospital-acquired infections — but may simply lack sufficient incentives for high-quality care.

In some cases, however, fee-for-service payment can hinder improvements in care quality by penalizing success. Such a problem arose at the Virginia Mason Medical Center in Seattle, which undertook an initiative to address lower back pain that sharply reduced the use of Magnetic Resonance Images (MRIs) — and also reduced the Center's financial margins because MRIs were a high-margin service. Those issues also arose when Virginia Mason sought to encourage the use of less expensive but equally effective tests for treating cardiac arrhythmias.<sup>111</sup> Similarly, the Intermountain Health Care system in Utah took steps to standardize lung care for premature babies and reduced the use of ventilators and other forms of intensive care — and lost money as a result.<sup>112</sup>

## APPENDIX B: PHYSICIAN SURVEY METHODOLOGY

The UnitedHealth Center for Health Reform Modernization commissioned Harris Interactive to conduct nationally representative surveys of primary care and specialty physicians in October 2011 and again in June 2012. In both surveys, physicians were asked a broad range of questions regarding their current methods of payment and compensation, their views about and interest in new payment models, and their use of various tools such as electronic medical records. In some cases, surveyed physicians were given definitions of key terms such as “episode-based” payment or “medical home.”

The online surveys consisted of 400 U.S.-based primary care physicians (PCPs) and 600 U.S.-based specialists, roughly reflecting the division between PCPs and specialists observed nationally. Surveyed PCPs included those in family practice, general practice, internal medicine, pediatric medicine, or obstetrics. Physician responses from each specialty and geographical region were weighted to reflect their respective populations using weights derived from the American Medical Association’s Physician Masterfile for 2010. Tests for statistical differences between survey responses were conducted using a 95 percent confidence level. Because different physicians participated in them, differences in responses to similar questions across the two surveys may not be indicative of underlying trends.

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## About the UnitedHealth Center for Health Reform & Modernization

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- Reducing health disparities, particularly in underserved communities
- Modernizing the care delivery system, including strengthening primary care
- Payment reform strategies that better support physicians, hospitals and other providers in delivering high quality patient-centered care
- Modernizing Medicare, including chronic disease management
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