

Flattening the Trajectory of Health Care Spending

Foster Efficient and Accountable Providers



KEY FINDINGS

- Providers drive health care spending through the guidance they provide to patients about needed diagnostic tests, treatments, hospitalizations, and referrals, as well as through their own fees.
- Providers can dramatically improve American health care by focusing on “value” instead of “volume,” eliminating wasteful and inappropriate care, applying the best available evidence to their practices, and enhancing patient safety.
- Strengthening primary care promises to be a good investment, but the existing pipeline for primary care physicians is insufficient to meet future demand.

The Policy Challenge

Physician payments represent the second largest category of health care spending in the United States. In addition, although patients are the ultimate consumers of health care services, physicians influence many of the purchase decisions. This is because once patients make the decision to engage the health care system, they generally are guided in their decisions about needed tests, treatments, hospitalizations, and specialist referrals by their physicians. For all of these reasons, providers drive the bulk of health care spending in the United States.

The general upward trajectory of health care spending masks striking regional, state, and specialty-level variability in patterns of practice and growth of professional charges.^{1, 2, 3, 4} Repeated congressional “patches” to cover growth of Medicare physician fees in excess of the sustainable growth rate (SGR) without changing the underlying formula mean that America’s doctors are facing a 26.5-percent across-the-board cut in their rate of Medicare reimbursement when Congress reconvenes

in January 2013. While there is widespread agreement that the SGR should be replaced, there is little agreement on how to replace it.

For more than four decades, RAND has studied provider decisionmaking. Although much of this work has focused on measuring and enhancing quality of care, it has important implications for health care spending as well. This brief highlights key findings from RAND research, broadly organized around four ways that providers can deliver better care and reduce spending and a fifth and related policy option—to strengthen the nation’s primary care infrastructure.

Focus on “Value” Instead of “Volume”

We know from decades of research that how providers are paid strongly influences their approach to clinical practice.⁵ Because the fee-for-service system pays physicians based on the number of exams, tests, and treatments they provide, it gives providers a strong incentive to supply as many services as possible, particularly if unaccompanied by other measures to limit spending, such as adoption of a global budget.⁶ At the same time, some important types of services, such as care coordination activities, are not typically reimbursed under fee-for-service payment systems.

Ironically, ordering lots of tests and treatments does not ensure that patients receive the care they need. A 2003 RAND study,⁷ conducted in 12 communities nationwide, determined that adult patients were receiving recommended care only 55 percent of the time.⁸ Other studies found similar outcomes for the elderly and for children.^{9, 10} Although we spend more money on health care than any other nation on earth, our rate of premature mortality from readily treatable medical conditions is worse than that of 15 other industrialized countries.^{11, 12}

Prospective Payment. The most effective way to convince providers to alter their approach to practice is to change the way they are paid. The first major effort to do this took place in the early 1980s, when the federal government dramatically revised how Medicare pays hospitals for treating elderly patients. The federal Health Care Financing Administration (now the Centers for Medicare & Medicaid Services [CMS]) switched from a fee-for-service system to a prospective payment system (PPS). Under PPS, hospitals receive a fixed amount for treating patients diagnosed with a given illness, regardless of the length of hospital stay or the type of care received. Subsequently, Medicare implemented PPS for most types of providers.

Hospital PPS proved effective at curbing cost growth. However, because it contained incentives for hospitals to shorten stays and to choose the least expensive methods of care, PPS raised concerns about possible declines in the quality of care for hospitalized Medicare patients.

A major study conducted jointly by RAND and the University of California, Los Angeles, examined the question of how the PPS reform affected the quality of hospital care for Medicare patients.¹³ It found that, overall, PPS had no negative effect on patient outcomes and did not alter an already existing trend toward improved processes of care. However, Medicare patients were more likely to be discharged in unstable condition, which was associated with a higher rate of mortality, even though overall mortality fell. The potential for unintended adverse consequences remains a concern in all financial arrangements that shift some financial risks onto providers.

Further evidence of the effects of PPS came from the RAND Health Insurance Experiment (HIE).¹⁴ One part of the HIE assigned patients to a staff-model health maintenance organization (HMO), in which the HMO was paid prospectively and doctors were paid a salary rather than reimbursed on a fee-for-service basis. Costs for the HIE patients assigned to the HMO were reduced by 28 percent (mostly through lower rates of hospital admissions) without adversely affecting health or quality of care.¹⁵

Pay for Performance. In the late 1990s, private sector purchasers and payers began to test alternative payment models designed to pay providers for how well they performed rather than how much they performed. The intent was to encourage providers to deliver recommended care in an effort to close the national quality gap. One of the first models tested was pay for performance (P4P), in which health plans hold a portion of a provider’s pay at risk for performance on a set of measures. Providers receive the incentive payment based on either their attainment against a benchmark or improvement over their prior year’s performance. Initially, the performance measures focused on clinical quality, patient safety, and the patient’s experience with receiving care. As of 2010, there were more than 40 hospitals and more than 100 physician and medical group P4P programs in place in the private sector in the United States.^{16, 17} CMS, during this same time period, began to experiment with P4P, with its Premier Hospital Quality Incentive Demonstration (PHQID) and with pay-for-reporting programs that incentivized providers to submit quality information that

CMS would then release to the public on its Medicare Hospital Compare website.¹⁸ More recently, incentive programs are beginning to include cost or resource use measures, which seek to move beyond P4P to value-based purchasing (VBP) by holding providers accountable for both cost and quality.

The Affordable Care Act (ACA) contains numerous VBP provisions to be implemented and tested in a variety of health care settings to drive improvements in the care delivered to Medicare beneficiaries. Largely based on work that RAND conducted in 2007 to help CMS design a VBP program for hospitals,¹⁹ CMS has started implementing a Hospital Value-Based Purchasing Program, as called for under the ACA. Starting in 2012, Medicare began rating hospitals on their performance on clinical quality and patient experience measures and tying incentive payments to performance. In 2015, CMS will take a significant step forward in implementing VBP, this time through the Medicare physician value-based payment modifier, which will differentially reward physician groups and individual physicians based on their performance on measures of quality and resource use.

While there have been a variety of P4P and VBP experiments in the public and private sector, initial experiments showed modest effects of P4P in driving performance improvements.²⁰ One possible explanation is that the incentives in these early efforts were not sufficiently large to engage providers.²¹ This is just one of many design issues that the sponsors of P4P and VBP programs face as they try to design an incentive structure that will increase the likelihood of achieving the desired goals—namely, higher quality and lower resource use. RAND researchers have examined the use of P4P (also referred to as performance-based accountability systems) in multiple sectors and optimum circumstances for implementing P4P (see sidebar). The designers of the P4P and VBP programs face three important design issues: (1) determining whose behavior they seek to change (i.e., identifying individuals or organizations to target), (2) deciding on the type and size of incentives, and (3) measuring performance. For example, the selection of measures is important, as it dictates the things on which providers will focus and what they might choose to ignore or neglect (i.e., a potential unintended consequence). Additionally, how performance is measured (relative, absolute, or year-over-year improvement) can affect provider behavior in terms of whether they will try to improve (less likely if the provider is far away from the target), whether high achievers will strive for further

Key Design Elements for a Performance-Based Accountability System

- Are incentives sufficiently large to induce behavior changes?
- Is the design sufficiently simple so that providers have a clear line of sight from their behaviors to rewards?
- In VBP, overly narrow market definitions risk rewarding relatively high cost providers:
 - Will the program punish providers who serve more challenging populations, and how can those effects be moderated either at the front end (risk adjustment) or at the back end (stratification)?
 - Do providers know their relative cost positions (in comparison with each other)?

SOURCE: Adapted from Stecher B et al., 2010.²²

improvements, or whether providers at the top will continue to dedicate resources to areas that have low value when their performance is already high relative to most providers. Despite the fact that such design elements merit careful consideration, existing studies have provided little information about how they affect program success or failure.^{23, 24, 25}

One explanation for the limited success of P4P in driving substantial improvements in quality to date may be that P4P program designs do not currently reflect what is known about how people respond to incentives. The behavioral economics literature suggests some lessons that could strengthen the programs. For example, recent RAND work highlights the need to simplify incentive plans to make them less complex, so physicians readily understand what actions they need to take to achieve the incentive (i.e., a “clear line of sight”). Plans should establish a fixed benchmark in advance, so providers know what level they must achieve to receive a reward. Reducing the time between a desired action and the reward also helps, as does providing a series of small incentives instead of one large incentive.²⁶

Accountable Care Organizations. Whereas P4P programs reward performance on selected targets, public and private purchasers are also testing models that reward providers for more coordinated and comprehensive management of care for a defined population of patients. One prominent model is accountable care organizations (ACOs), which were created in the private sector but have been introduced into Medicare by the ACA.

An ACO is a coordinated network of health care providers (for example, a hospital or hospitals, physician organization or organizations, and other providers, such as home health agencies) that assume responsibility for the care of a defined group of patients. A variety of payment methods may be used (shared savings, capitation, fee-for-service, bundled payment). In some arrangements with payers, if costs for assigned patients are below a target, the ACO receives bonus payments. Under other arrangements, the ACO is also responsible for a portion of incurred costs above the target. In order to qualify for bonus payments, an ACO must meet specific quality benchmarks, including focusing on prevention and managing patients with chronic diseases.²⁷

ACOs are proliferating across the country, not only for Medicare beneficiaries but for patients with private insurance as well. In May 2012, the number of ACOs was estimated to

exceed 220.²⁸ However, the spread of ACOs has outpaced the empirical evidence to support them. To date, we have very little information or experience on how best to structure these new financing and delivery systems, and, therefore, policymakers have little guidance on how ACOs may affect the future performance and cost of our health care system.

Pilots, such as the grant program funded by Blue Shield of California, which has given \$20 million to 18 provider organizations to develop health information technology infrastructure and clinical delivery systems for supporting ACO implementation, will begin to build the experience base needed to assess how well ACOs achieve their twin goals of quality improvement and cost containment. RAND is evaluating this pilot, but it is too early for results.

Bundled Payment. Bundled payment, another type of payment reform, provides a single payment for “bundles” of related services during an episode of care—for example, a heart operation or a hip replacement—rather than paying the hospital, physicians, and other medical providers for each unit of service they provide. The expectation is that this approach will encourage providers to work together to provide care more efficiently and to eliminate duplicative and ineffective treatment.²⁹

RAND researchers recently completed several studies that examined this strategy. They found that although the concept of bundled payments is appealing, it is difficult to implement in practice. For example:

- A RAND systematic review of bundled payment interventions, commissioned by the Agency for Healthcare Research and Quality (AHRQ), found weak but consistent evidence that bundled payment programs have been effective in containing costs without major effects on quality.³⁰ However, there was insufficient evidence to identify design or contextual factors of bundled payment systems that were related to program effectiveness.
- RAND reported the results of the first (and, to date, only) contemporaneous evaluation of bundled payment implementation in the private sector—evaluating the PROMETHEUS Payment model.³¹ None of the pilot projects had a bundled payment system in place after three years of implementation—nor had they executed contracts between payers and providers. Challenges faced by the pilot sites included those related to defining the “bundles,” defining the payment method, determining accountability, implementing quality measure-

ment, engaging providers, and delivery redesign. One reason for the lengthy delays may be that the payment model is extremely complex and is built on already-complicated fee-for-service payment models. This study suggests that benefits from bundled payment may take considerable time and effort to materialize.³²

Eliminate Wasteful and Inappropriate Care

Irrespective of existing financial incentives, physicians and other health care providers should strive to reduce wasteful and inappropriate care as a matter of good medicine.^{33, 34} For more than four decades, RAND researchers have sought to improve the quality of medical care by developing techniques to measure health care quality.

The RAND/UCLA Appropriateness Method, developed more than 20 years ago by Robert Brook and colleagues, uses a structured process to integrate findings from the scientific literature with expert clinical judgment to produce criteria for determining the appropriateness of clinical procedures.^{35, 36, 37, 38} The criteria are used to determine if the care is “necessary” (produces substantially more benefit than harm), “appropriate” (produces more good than harm by a sufficiently wide margin to justify use), “equivocal” (potential benefits and harms are about equal), or “inappropriate” (risks are likely to exceed benefits). (See table.) In the years since the method was developed, it has been used by researchers in England, Canada, Switzerland, the Netherlands, and Israel to judge the appropriateness of a wide range of procedures, including bariatric surgery, coronary artery bypass graft surgery, angioplasty, colonoscopy, endoscopy, hysterectomy, prostatectomy, and tympanostomy (ear tubes in children).

These and other studies have determined that up to half of some procedures were neither necessary nor appropriate.^{40, 41, 42, 43, 44, 45, 46, 47} An Institute of Medicine (IOM) committee recently estimated that about 30 percent of U.S. health spending in 2009—roughly \$750 billion—was wasted on unnecessary services, excessive administrative costs, fraud, and missed opportunities for prevention.⁴⁸

Today, aggregate levels of health spending are far higher than when the appropriateness method was first devised. Also, substantial new evidence has been generated on the effectiveness of various clinical procedures. Specialty groups are now

The RAND/UCLA Appropriateness Method

Ranking of Procedure	Definition
Necessary	Produces substantially more health benefit than harm and is preferred over other available options
Appropriate	Produces more good than harm by a sufficiently wide margin to justify the use of the procedure
Equivocal	Potential health benefits and harms are about equal.
Inappropriate	Health risks are likely to exceed health benefits.
SOURCE: Fitch K et al., 2001. ³⁹	

considering adoption of the technique.⁴⁹ A major challenge going forward will be reconciling the competing interests of different provider groups who overlap in the treatment of specific conditions, as well as the inherent conflict of asking providers who financially benefit from performing certain procedures to determine the guidelines for what is appropriate.

Nevertheless, the appropriateness method, which is designed to combine the best available scientific evidence with professional judgment, may afford the most practical path to reducing wasteful and inappropriate treatment. Sharing the resulting recommendations with patients and their physicians could allow them to jointly determine the best course of action for particular conditions.⁵⁰

Identify and Apply the Best Available Evidence

In a surprising number of instances, the evidence to support a particular course of clinical action is insufficient. In order to build a more robust evidence base of what works and what does not in different circumstances, RAND and four organizational partners joined to form the Southern California Evidence-Based Practice Center, part of a national network of centers that compare published scientific evidence on the effectiveness of various tests and treatments.⁵¹ The Southern California Evidence-Based Practice Center has assembled and assessed the research on a wide range of topics, including coronary artery bypass surgery, prevention of falls in hospitals, use of atypical antipsychotics, psychosocial treatment of autism in children, food allergies, and surgical and pharmacological treatment for obesity.⁵² The center, along with others like it around the country, helps to translate evidence reports and technology assessments into practical guidelines, performance measures, and quality-improvement tools for providers.

Each year, the U.S. government invests more than \$30 billion in taxpayer funds to support biomedical and health services research. The private sector spends substantially more. Recently, RAND examined the lengthy, complex, and uncertain sequence of steps involved in bringing a new scientific discovery from the laboratory to the bedside. The complexity of this knowledge translation process can affect care delivered to patients. RAND found that patients in community settings—especially older patients—often receive care that significantly deviates from recommended standards based on clinical studies in specialty

settings.⁵³ This underscores the need to determine if treatments supported by publicly funded research can be used in community settings where there are diverse groups of patients, not just the younger, carefully selected patients who usually volunteer for research studies.

Another RAND team recently examined how well, or how poorly, findings from comparative effectiveness research (CER) influence clinical practice.⁵⁴ The study identified why CER often fails to change clinical practice. The top three reasons were (1) financial incentives that favor clinging to the status quo, (2) study designs that failed to address the needs of clinicians, and (3) ambiguous results that did not provide clinicians with a compelling reason to change.

CER of the sort carried out by the Patient-Centered Outcomes Research Institute (PCORI), established by the ACA, is critical to generate the type of information required by providers and patients to make the best choice from a wide range of options. To increase the odds that important research findings will be swiftly and properly applied to benefit patients, RAND's team recommended several changes to facilitate translation of new evidence into clinical practice.

Enhance Patient Safety

Thirteen years after publication of the landmark IOM report *To Err is Human*, providers continue to struggle with the challenge of reducing medical error. Dramatically improving patient safety would reduce health care cost growth by preventing needless complications, injuries, and deaths.⁵⁵ It might also decrease the number of malpractice liability claims. A RAND study found that reducing the number of preventable patient injuries in California hospitals from 2001 to 2005 was positively and significantly associated with decreases in the volume of malpractice claims, as captured by records from four of the largest malpractice insurers in the state.⁵⁶

Because the elderly use a disproportionate amount of medical care and are particularly susceptible to the adverse effects of substandard treatment, improving the quality and safety of care provided to vulnerable and frail elders is particularly important. To improve the quality of medical care received by senior citizens, RAND developed the Assessing Care of Vulnerable Elders (ACOVE) indicators.⁵⁷ ACOVE has been used to improve treatment of elders in a number of clinical areas, including dementia, end-of-life care, urinary incontinence, and falls.

Appropriate tools can enhance quality improvement efforts. Recently, with the support of AHRQ, RAND developed a toolkit to help hospitals strengthen their quality improvement capabilities.^{58, 59} Subsequent field testing confirmed that the toolkit is a useful adjunct to other hospital performance improvement activities.⁶⁰

Strengthen Primary Care

Strengthening primary care promises to be a good investment. Regions of the United States with a large number of primary care physicians and general practitioners tend to have lower levels of Medicare spending than regions predominantly served by specialist providers.⁶¹ Chronic disease clinics staffed by a mix of primary care physicians and nonphysician providers have been shown to improve outcomes at lower cost.⁶² Communities with stronger access to primary care have fewer costly emergency room visits for nonurgent, emergent/primary care–treatable, and emergent/primary care–preventable problems.⁶³

Because the ACA will dramatically boost the number of Americans with health insurance, it is expected to substantially increase demand for primary care. To meet this need, the ACA has set aside funds for primary care residencies and training. Unfortunately, the pipeline for primary care physicians is insufficient to meet demand, and the number of medical school graduates opting for a career in primary care is in decline.⁶⁴ One reason is that primary care physicians have substantially lower lifetime earnings than most specialists, a significant concern when many U.S. medical school graduates are entering the workforce with enormous educational debts.^{65, 66, 67, 68, 69, 70}

Policymakers have several options to meet this challenge. Reforming Medicare payment policy to reduce the payment differential could attract more medical students into primary care. Moreover, evidence suggests that paying for high-value

primary care services, such as care coordination and maintaining stable patient-doctor relationships, would reorient the U.S. health care system toward keeping patients out of the hospital, effectively lowering costs.⁷¹ Shifting the locus of primary care training from hospitals to community health centers might make primary care training more relevant to future practice and more personally rewarding for trainees than basing the predominance of training in hospital settings. Bringing resident physicians into community health centers would also expand their capacity to meet rising demand.⁷²

Reforms like these should help, but efforts to boost the supply of primary care physicians will not be sufficient to close the widening primary care gap. Past innovations may point the way. For example, when a team of RAND researchers examined physician supply in Massachusetts after the state implemented comprehensive health care reform in 2007, they found that rather than recruiting additional physicians and nurses, health care organizations began using larger numbers of clerical and other medical support personnel to extend the work of their health care professionals.⁷³ Looking forward, alternate models of health care delivery, such as retail clinics, nurse practitioners, physician assistants, and other types of physician extenders, could be used to expand the availability of primary care.

Conclusion

Given the central role that providers play in health care spending, it will be impossible to address the challenge of rising health care spending without involving providers in a significant way. Providers can dramatically improve American health care by focusing on “value” instead of “volume,” eliminating wasteful and inappropriate care, applying the best available evidence to practice, enhancing patient safety, and strengthening primary care.

Notes

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