

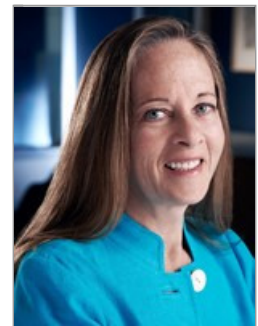


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Compliance And The Transition To Value-Based Care

By **Deborah Gersh, Timothy McCrystal and Jennifer Romig** (May 31, 2017, 11:58 AM EDT)

The U.S. health care system is in the midst of a fundamental shift, away from traditional “fee-for-service” models that reward providers for the quantity of services provided to patients, toward value-based models designed to reward the quality and efficiency of care provided to patients. This move to value-based care affects most sectors of the health care industry, including payors, providers, biopharma and medical device companies, and other partner and support organizations, such as health information technology (HIT) companies, population health management experts and other consultants. In order to effectively transition payment and care delivery systems, many of these organizations are rapidly developing, acquiring and partnering together to obtain the expertise necessary to participate in value-based care initiatives.



Deborah Gersh

In a short time, value-based care initiatives have evolved from a set of initial programs sponsored by the Center for Medicare and Medicaid Innovation (CMMI) to innovative payment and service delivery models that involve private payors and other entities bearing risk for the provision of health care services. With this evolution, providers and others have had to grapple with a regulatory framework that is not inherently well-suited to value-based payment arrangements. Further, traditional compliance programs are often not structured or prepared to manage the regulatory risks presented by new value-based initiatives. While the secretary of the U.S. Department of Health and Human Services issued waivers of fraud and abuse laws applicable to CMMI initiative participants, no such waivers exist for commercial value-based care initiatives. As a result, companies seeking to create or participate in value-based care initiatives must be aware of potential regulatory challenges, and should structure both their compliance programs and the initiatives themselves to mitigate these risks. We discuss below key regulatory challenges and mitigation strategies for consideration during the transition to value-based care.



Timothy McCrystal



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Anti-Kickback Statute: Fraud and abuse laws, and the Anti-Kickback Statute (AKS) in particular, often present the greatest challenge when structuring value-based care arrangements. The AKS prohibits the knowing and willful solicitation, receipt, offer or payment of any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, in return for either referrals of federal health care program patients or the arranging,

recommending, leasing or ordering of any item or service reimbursed by a federal health care program.[1] Traditionally, providers, manufacturers and others have sought to structure arrangements to fit within one of the AKS safe harbors. This is often not possible with value-based care initiatives, in which some portion of the fees paid for services are "at risk" based upon a combination of cost savings, improved clinical quality, patient outcomes and/or patient satisfaction. In the absence of safe harbor protection, each value-based model is subject to a facts and circumstances analysis to determine whether the relevant sources of remuneration are intended to induce or reward referrals (and thus prohibited) or are intended solely to serve legitimate, "nonabusive" business interests (and thus permitted).[2]

As a result, companies must carefully structure value-based arrangements to meet a facts and circumstances analysis — historically, by satisfying as many of the elements of an applicable AKS safe harbor as possible, with particular attention to ensuring the totality of the arrangement is at fair market value. Further, companies must implement safeguards sufficient to mitigate AKS risks posed by the risk-sharing portion of the value-based care initiative. There is limited subregulatory guidance available regarding the adequacy of safeguards in value-based care arrangements. Office of Inspector General Advisory Opinion 12-22,[3] which articulates OIG's position on risk-based arrangements outside of formalized CMS risk-sharing programs, highlights certain safeguards that may mitigate risk in value-based care arrangements. Such safeguards include, among other things, ensuring that: (1) cost-savings and quality measures are objective and verifiable, clearly and separately identified, and transparent; (2) any risk-sharing program does not incentivize inappropriate reductions or limitations in services; and (3) the organization conducts periodic reviews to protect against any inappropriate results, such as reductions or limitations in services. Though this 2013 advisory opinion provides helpful insight, many in the industry desire further guidance to ensure that the private sector has the ability to develop compliant value-based care arrangements.

Civil Monetary Penalties Law and Stark Law: The Civil Monetary Penalties (CMP) Law and Stark Law may be implicated by value-based care arrangements, particularly those involving "gainsharing" initiatives (i.e., hospital-based efficiency initiatives under which hospitals pay physicians a share of cost reductions attributable to physicians' initiation and/or implementation of cost-savings measures), on the theory that such arrangements could lead to a reduction in the provision of medically necessary services to individuals and inappropriately reward referral of federal health care program business.[4]

The "Gainsharing CMP" prohibits hospitals from making, and physicians from receiving, direct or indirect payments as an "inducement to reduce or limit medically necessary services" to Medicare patients,[5] while the Stark Law prohibits a physician from referring Medicare beneficiaries for the furnishing of "designated health services," or DHS, to any entity with which the physician (or an immediate family member) has a financial relationship, unless the relationship meets the strict requirements of one or more of the exceptions enumerated in the statute or regulations.[6] Over time, government agencies such as OIG and Centers for Medicare and Medicaid Services have acknowledged that appropriately structured gainsharing arrangements may reduce hospital costs without causing inappropriate reductions in patient services or rewarding referrals of federal health care program patients.[7]

Though companies seeking to structure or utilize gainsharing components in value-based arrangements may see this as an opportunity, any such arrangement must still comply with the Gainsharing CMP and Stark Law, and should adhere as closely as possible to subregulatory guidance issued by OIG regarding gainsharing. The most useful guidance on gainsharing is derived from over a dozen OIG advisory opinions on gainsharing issued from 2000 to 2012.[8] As with OIG Advisory Opinion 12-22, these advisory opinions contain safeguards that may mitigate risk in gainsharing arrangements. Such safeguards include, among other things, utilizing objective historical and clinical measures to establish

gainsharing arrangements, and ensuring that physicians have access to the same selection of items, supplies and devices as available before the gainsharing arrangement.

Data Sharing: Providers and payors are often “covered entities” under the Health Insurance Portability and Accountability Act of 1996, as amended, and are subject to privacy and security rules and requirements that limit their ability to share patient data with third parties. Other entities involved in value-based care initiatives (such as those performing data analysis, HIT or population management services) may be “business associates” under HIPAA subject to similar constraints regarding the use and disclosure of patient data. These constraints can be difficult to manage for any organization, but may prove onerous for organizations that also provide other health care products or services, particularly when such products or services may benefit from use of data collected when providing value-based care services.

For example, a medical device company that acquires a population health management business may find itself in possession of patient data that it must protect in accordance with HIPAA. To do so, the medical device company typically must ensure that only those within the population health management business who require access to patient data receive such information, and ensure that the HIPAA-protected population health management business patient data does not become intermingled with the medical device business patient data. This requires careful initial structuring of the acquisition (e.g., considering whether to maintain the population health management organization as a separate legal entity), as well as ongoing training, auditing and monitoring to ensure that the population health management organization’s patient data is maintained separately from data collected in the ordinary course by the device company business and cannot be accessed by the device company personnel.

This situation may be further complicated by any shared services between the medical device and population health management businesses (e.g., information technology, human resources, billing) as well as the interest the sales force and others may have in intertwining the device and population health management businesses, despite restrictions established by HIPAA and other laws designed to protect the privacy and security of patient information.

Laws Regarding Risk Assumption: Some states have insurance regulations that may apply to entities that bear risk under value-based care arrangements. In addition, certain states have begun to regulate providers that accept financial risk under value-based care models and to scrutinize network development that consolidates health care markets in a way that impacts health care prices. Although payors are accustomed to compliance with insurance and similar regulations, many organizations that are not ordinarily classified as risk-bearing entities may be required to comply with these state laws. Compliance requirements would vary but may include, for example, adherence to a minimum capital requirement for the risk-sharing business.

Conflicts of Interest: With the expansion of value-based care, many organizations are providing, or seeking to provide, services outside their usual scope. While this necessarily requires an operational adjustment period, it also requires organizations to consider perceived or actual conflicts of interest in their traditional and new roles. For example, a post-acute care provider that manages a hospital palliative care department must consider how to manage the conflict of interest inherent in the manager’s evaluation and recommendation of post-acute care providers to hospital patients.

The list above is not intended as an exhaustive survey of all applicable regulatory issues related to value-based care arrangements. The initiation and revision of any value-based care arrangement requires consideration of these and other potential regulatory hurdles, including those related to antitrust, corporate practice of medicine and fee-splitting laws, and tax issues.

Any organization seeking to implement value-based care initiatives should, as an initial matter, develop or advance its health care regulatory and compliance program to focus on risks inherent in value-based care arrangements. The organization's compliance department should be involved in the conception and structuring of any value-based care arrangement. The compliance department should focus on ensuring that, for each value-based arrangement, the company has established sufficient safeguards and has maintained documentation around the various components of the program. The compliance department should also monitor and audit each value-based care arrangement to ensure that it is continuing to operate consistent with applicable laws and legal guidance. An organization's effective development and deployment of its compliance program when structuring and monitoring value-based care initiatives will assist the organization in a smooth transition from a fee-for-service environment to one focused on value-based care.

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[1] 42 U.S.C. § 1320a-7b(b).

[2] Cf. generally 56 Fed. Reg. 35,952, 35,958 (July 29, 1991) (describing the statutory exceptions and AKS safe harbors as intended "to limit the reach of the statute somewhat by permitting certain non-abusive arrangements, while encouraging beneficial or innocuous arrangements").

[3] OIG Advisory Opinion No. 12-22.

[4] U.S. Government Accountability Office, Physician Incentive Payments by Hospitals Could Lead to Abuse, GAO/HRD-86-103 (July 1986), available at: <http://www.gao.gov/assets/150/144561.pdf>; OIG Special Advisory Bulletin, Gainsharing Arrangements and CMPs for Hospital Payments to Physicians to Reduce or Limit Services to Beneficiaries (July 1999), available at: <https://oig.hhs.gov/fraud/docs/alertsandbulletins/gainsh.htm>.

[5] Soc. Sec. Act Sec. 1128A(b); Medicare Access and CHIP Reauthorization Act of 2015, Pub. L. No. 114-10 (2015).

[6] See 42 U.S.C. § 1395nn(a)(1); 42 C.F.R. § 411.353.

[7] See Testimony of Lewis Morris, Chief Counsel to the OIG (Oct. 7, 2005), available at: <https://oig.hhs.gov/testimony/docs/2005/Gainsharing10-07-05.pdf>; series of favorable OIG advisory opinions issued between 1999 and 2012; changes to the Gainsharing CMP through the Medicare Access and CHIP Reauthorization Act of 2015 ("MACRA").

[8] Gainsharing Arrangements and CMPs for Medical Center Payments to Physicians to Reduce or Limit Services to Beneficiaries" (July 1999); OIG Advisory Opinion No. 00-02 dated April 4, 2000; OIG Advisory Opinion No. 01-1 dated Jan. 11, 2001; OIG Advisory Opinion No. 05-01 dated Jan. 28, 2005; OIG Advisory Opinion No. 05-02 dated Feb. 10, 2005; OIG Advisory Opinion No. 05-03 dated Feb. 10, 2005; OIG Advisory Opinion No. 05-

04 dated Feb. 10, 2005; OIG Advisory Opinion No. 05-05 dated Feb. 18, 2005; OIG Advisory Opinion No. 05-06 dated Feb. 18, 2005; OIG Advisory Opinion No. 06-22 dated Nov. 9, 2006; OIG Advisory Opinion No. 07-21 dated Dec. 28, 2007; OIG Advisory Opinion No. 07-22 dated Dec. 28, 2007; OIG Advisory Opinion No. 08-09 dated July 31, 2008; OIG Advisory Opinion No. 08-15 issued Oct. 6, 2008; OIG Advisory Opinion No. 08-21 issued Nov. 25, 2008; OIG Advisory Opinion No. 09-06.



ECONOMICS & SOCIETY

How to Pay for Health Care

by Michael E. Porter and Robert S. Kaplan

FROM THE JULY–AUGUST 2016 ISSUE

The United States stands at a crossroads as it struggles with how to pay for health care. The fee-for-service system, the dominant payment model in the U.S. and many other countries, is now widely recognized as perhaps the single biggest obstacle to improving health care delivery.

Fixing Health Care



Editor's Note: [The United States is about to radically](#)

Fee for service rewards the quantity but not the quality or efficiency of medical care. The most common alternative payment system today—fixed annual budgets for

change how it pays for health care. Experts agree that the prevailing method—fee for service—fuels waste and does not promote high-quality care. The big question is: What should replace it?

In our Fixing Health Care package, we look at the two leading models. In this article, Michael E. Porter and Robert S. Kaplan argue for bundled payments, which they believe generates the kind of competition among providers that improves the value of health care. In the accompanying piece, Brent C. James and Gregory P. Poulsen make the case for capitated payment. They say that approach is the only one that would encourage health care providers to attack all types of waste.

providers—is not much better, since the budgets are disconnected from the actual patient needs that arise during the year. Fixed budgets inevitably lead to long waits for nonemergency care and create pressure to increase budgets each year.

We need a better way to pay for health care, one that rewards providers for delivering superior value to patients: that is, for achieving better health outcomes at lower cost. The move toward “value-based reimbursement” is accelerating, which is an encouraging trend. And the Centers for Medicare & Medicaid Services (CMS), to its credit, is leading the charge in the United States.

That doesn’t mean, however, that health care is converging on a solution. The broad phrase “value-based reimbursement” encompasses two radically different payment approaches: capitation and bundled payments. In capitation, the health care organization receives a fixed payment per year per covered life and must meet all the needs of a broad patient population. In a bundled payment system, by contrast, providers are paid for the care of a patient’s medical condition across the entire care cycle—that is, all the services, procedures, tests, drugs, and devices used to treat a

patient with, say, heart failure, an arthritic hip that needs replacement, or diabetes. If this sounds familiar, it's because it is the way we usually pay for other products and services we purchase.

We need a way to pay for health care that fosters the delivery of superior value to patients.



A battle is raging, largely unbeknownst to the general public, between advocates of these two approaches. The stakes are high, and the outcome will define the shape of the health care system for many years to come, for better or for worse. While we recognize that capitation can achieve modest savings in the short run, we believe that it is not the right solution. It threatens patient choice and competition and will fail to fundamentally change the trajectory of a broken system. A bundled payment system, however, would truly transform the way we deliver care and finally put health care on the right path.

The Small Step: Capitation

Capitation, or population-based payment, is not a new idea. It was introduced in the United States with some fanfare in the 1990s but quickly ran into widespread criticism and was scaled back significantly. Today, a number of transitional approaches, including accountable care organizations (ACOs), shared savings plans, and alternative quality contracts, have been introduced as steps toward capitation. In the ACO model, the care organization earns bonuses or penalties on the basis of how the total fee-for-service charges for all the population's treatments during the year compare with historical charges. In full capitation, the care organization absorbs the difference between the sum of capitation payments and its actual cost.

FURTHER READING**The Strategy That Will Fix Health Care****ASSESSING PERFORMANCE FEATURE** by Michael E. Porter and Thomas H. Lee, MD

The days of business as usual are over.

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Under capitation, unlike in the FFS model, the payer (insurer) no longer reimburses various providers for each service delivered. Rather, it makes a single payment for each subscriber (usually per patient per month) to a single delivery organization. The approach rewards providers for lowering the overall cost of

treating the population, which is a step forward. However, under this system cost reduction gravitates toward population-level approaches targeting generic high-cost areas, such as limiting the use of expensive tests and drugs, reducing readmissions, shortening lengths of stay, and discharging patients to their homes rather than to higher-cost rehabilitation facilities. As a response to the failed experience with capitation in the 1990s, current capitation approaches include some provider accountability for quality. However, “quality” is measured by broad population-level metrics, such as patient satisfaction, process compliance, and overall outcomes such as complication and readmission rates.

This all seems good at first blush. The trouble is that, like the failed FFS payment system, capitation creates competition at the wrong level and on the wrong things, rather than on what really matters to patients and to the health care system overall.

Providers are not accountable for patient-level value.

Capitation and its variants reward improvement at the population level, but patients don’t care about population outcomes such as overall infection rates; they care about the treatments they receive to address their particular needs. Outcomes that matter to breast cancer patients are different from those that are important to patients with heart failure. Even for primary and preventive care, which the concept of population health rightly emphasizes, appropriate care depends heavily on each patient’s

circumstances—health status, comorbidities, disability, and so on. And managing the overall health of a diverse population with high turnover (as ACOs do) is extremely difficult.

Thus, capitated payments are not aligned with better or efficient care for each patient’s particular condition. Instead, capitation puts the focus on limiting the overall amount of care delivered without tying the outcomes back to individual patients or providers. The wrong incentives are created, just as is the case for fee for service, which reimburses for the volume of services but not the value.

Providers bear the wrong risks.

Because capitation pays providers a fee per person covered, it shifts the risk for the cost of the population’s actual mix of medical needs—over which they have only limited control—to providers. Some large private insurers favor capitation for just this reason. But bearing the actuarial risk of a population’s medical needs is what insurers should do, since they cover a far larger and more diverse patient population over which to spread this risk. Providers should bear only the risks related to the actual care they deliver, which they can directly affect.

How Fee for Service Destroys Value for Patients

Fee-for-service reimbursement, the dominant method used to pay for health care in the United States and elsewhere, has held back improvements in the quality of care and led to escalating costs.

Overturing the status quo is not easy, but here’s why doing so is essential.

A more fundamental problem is that capitation payments are extremely difficult to adjust to reflect each patient’s overall health risk, not to mention to correctly adjust for this risk across a large, diverse population. Risks are much better understood and managed for a particular medical condition—for example, the probable effects of age or comorbidities on

Rewards Poor Outcomes: Because FFS reimburses providers on the basis of volume of care, providers are rewarded not just for performing unnecessary services but for poor outcomes. Complications, revisions, and recurrences all result in the need for additional services, for which providers get reimbursed again.

Fosters duplication and lack of coordination. FFS makes payments for individual procedures and services, rather than for the treatment of a patient's condition over the entire care cycle. In response, providers have organized around functional specialties (such as radiology). Today, multiple independent providers are involved in each patient's treatment, resulting in poorly coordinated care, duplicated services, and no accountability for health outcomes.

Perpetuates inefficiency. Today's FFS payments reflect historical reimbursements with arbitrary inflation adjustments, not true costs. Reimbursement levels vary widely, causing cross-subsidization across specialties and particular services. The misalignment means that inefficient providers can survive, and even thrive, despite high costs and poor outcomes.

the costs and outcomes for joint replacement—as is the case in bundled payments.

Because population-level risk factors are so complex, health systems under capitation have an incentive to claim as many comorbidities as possible to bolster their revenue and profitability. A whole segment of health care IT providers has emerged to help providers “upcode” patients into higher-risk categories. Such gaming of risk adjustment first became a problem during the era of managed-care capitation in the 1990s, and it remains one today.

Patient choice is limited, and competition is threatened.

Capitation creates strong incentives for a health system to deliver all the care within its system, because contracting for outside services reduces net revenue and results in underutilization of existing internal capacity. There is even a term for this in health care—“avoiding leakage”—and many systems explicitly monitor and control it. Capitated health systems encourage or require patients (and their referring doctors) to use in-house

Reduces focus. FFS motivates providers to offer full services for all types of conditions to grow overall revenue, even as internal fragmentation causes patients to be handed off from one specialty to another. By attempting to cater to a diverse population of patients, providers fail to develop the specialized capabilities and experience in any one condition necessary for the delivery of excellent care.

providers (the ultimate narrow network). Patients are often penalized with extra fees when they don't use services within the system, even if outside providers have greater experience and get better results for treating the patient's particular condition. Capitation creates, in essence, a monopoly provider for all the patients in the population. Consumers cannot choose the best provider for their particular needs.



Since providers now bear actuarial risk, they also have a strong incentive to amass the largest possible population. This will accelerate the recent trend of providers' buying up other hospitals and physician practices and merging systems, which reduces competition. To offset health systems' rising bargaining power, insurers will feel pressure to merge. The two dynamics will reinforce each other as provider consolidation begets even more insurer consolidation.

FURTHER READING

How to Solve the Cost Crisis in Health Care

COSTS FEATURE by Robert S. Kaplan and Michael E. Porter

A new way to measure costs and compare them with outcomes.

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The end result will be the emergence of a few dominant systems—or even only one—in each region. This would be bad for patients. No one organization can have all the skills and technologies needed to be the best in treating everything. We need multiple providers in each region to ensure enough choice and drive innovation in care delivery.

The bottom line is that capitation is the wrong way to pay for health care. It is a top-down approach that achieves some cost savings by targeting low-hanging fruit such as readmission rates, expensive drugs, and better management of post-acute care. But it does not really change health care delivery, nor does it hold providers accountable for efficiency and outcomes where they matter to patients—in the treatment of their particular condition. Capitation’s savings also come at the high cost of restricting patient choice and inhibiting provider competition.

Let’s consider the alternative.

Paying for Value: Bundled Payments

For virtually all types of products and services, customers pay a single price for the whole package that meets their needs. When purchasing a car, for example, consumers don’t buy the motor from one supplier, the brakes from another, and so on; they buy the complete product from a single entity. It makes just as little sense for patients to buy their diagnostic tests from one provider, surgical services from another, and post-acute care from yet another. Bundled payments may sound complicated, but in setting a single price for all the care required to treat a patient’s particular medical condition, they actually draw on the approach long used in virtually every other industry.

Bundled payments have existed in health care for some time in isolated fields such as organ transplantation. They are also common for services that patients pay for directly, such as Lasik eye surgery, plastic surgery, and in vitro fertilization.

To maximize value for the patient, a bundled payment must meet five conditions:

Payment covers the overall care required to treat a condition.

The bundled payment should cover the full cost of treating a patient over the entire care cycle for a given condition or over time for chronic conditions or primary care. The scope of care should be defined from the patient’s perspective (“Delivering a healthy child”). Care should include all needed services, including managing common comorbidities and related complications. In primary and preventive care, bundled payments should include all the needed care for each defined patient segment (such as healthy adults or low-income elderly).

Payment is contingent on delivering good outcomes.

Bundled payments should be tied to achieving the outcomes that matter to patients for each condition and primary care patient segment. Important outcomes include maintaining or returning to normal function, reducing pain, and avoiding and reducing complications or recurrences.

Payment is adjusted for risk.

Differences in patients’ age and health status affect the complexity, outcomes, and cost of treating a particular condition, as do their social and living circumstances. These risk factors should be reflected in the bundled payment and in expectations for outcomes to reward providers for taking on hard cases.

Payment provides a fair profit for effective and efficient care.

A bundled payment should cover the full costs of the necessary care, plus a margin, for providers that use effective and efficient clinical and administrative processes. It should not cover unnecessary services or inefficient care.

Providers are not responsible for unrelated care or catastrophic cases.

Providers should be responsible only for care related to the condition—not for care such as emergency treatment after an accident or an unrelated cardiac event. The limits of provider responsibility should be specified in advance and subject to adjudication if disputes arise. Bundled payments should also include a “stop loss”

provision to limit providers' exposure to unusually high costs from catastrophic or outlier cases. This reduces the need for providers to build such costs into the price for every patient (unlike in capitation).

How Bundled Payments Will Transform Patient Care

Decades of incremental efforts to cut costs in health care and impose practice guidelines on clinicians have failed. Bundled payments directly reward providers for delivering better value for the patient's condition and will unlock the restructuring of health care delivery in three crucial ways that capitation cannot.

Integrated, multidisciplinary care.

Specialty silos have historically led to fragmented, uncoordinated, and inefficient care. With bundled payments, providers with overall responsibility for the full care cycle for a condition will be empowered and motivated to coordinate and integrate all the specialists and facilities involved in care. Clinical teams (the experts) have the freedom to decide how to spend the fixed bundled payment, rather than being required to deliver the services that are reimbursed by legacy FFS payments in order to receive revenue. Teams can choose to add services that are not currently covered by FFS but that provide value for patients.

Bundled payments are triggering a whole new level of care innovation. For example, hospital-based physicians are remaining involved in care after patients are discharged. Hospitalists are added to teams to coordinate all the inpatient specialists involved in the care cycle. Nurses make sure patients fill their prescriptions, take medications correctly, and actually see their primary care physician. (A recent study showed that 50% of readmitted patients did not see their primary care doctor in the first 30 days after discharge.) And navigators accompany patients through all phases of their care and act as first responders in quickly resolving problems. Bundled payments are also spurring innovation in the creation of tailored facilities, such as

those of Twin Cities Orthopedics (Minneapolis), which performs joint-replacement care in outpatient surgery centers and nearby recovery centers, rather than in a traditional hospital.

Bundled payments will empower providers to coordinate and integrate care.

Bundled payments will accelerate the formation of integrated practice units (IPUs), such as MD Anderson’s Head and Neck Center and the Joslin Diabetes Center. IPUs combine all the relevant clinicians and support personnel in one team, working in dedicated facilities. Joslin, for example, brings together all the specialists (endocrinologists, nephrologists, internists, neurologists, ophthalmologists, and psychiatrists) and all the support personnel (nurses, educators, dieticians, and exercise physiologists) required to provide high-value diabetes care. IPUs concentrate volume of patients with a given condition in one place, allowing diagnosis and treatment by a highly experienced team. Numerous studies show that this approach leads to better outcomes and greater efficiency (including less wait time and fewer visits). Bundled payments also encourage the formation of “virtual” IPUs, where even separate practices and organizations actively collaborate across inpatient and outpatient settings to coordinate and integrate care—something that rarely happens today.

Accountability for outcomes.

By definition, a bundled payment holds the entire provider team accountable for achieving the outcomes that matter to patients for their condition—unlike capitation, which involves only loose accountability for patient satisfaction or population-level quality targets.

Because bundled payments are adjusted for risk, providers are rewarded for taking on difficult cases. With a fixed single payment, they are penalized if they overtreat patients or perform care in unnecessarily high-cost locations. And because providers are accountable for outcomes covering the entire care cycle, they will move quickly to add new services, more-expensive interventions, or better diagnostic tests if those will improve outcomes or lower the overall cost of care. Specialists operating under a bundled payment, for example, have added primary care physicians to their care teams to better manage the overall care cycle and deal with comorbidities.

Most important, the accountability built into bundled payments will finally bring to health care the systematic measurement of outcomes at the condition level, where it matters most. We know from every other field that measuring and being accountable for results is the most powerful driver of innovation and continuous improvement.

Cost reduction.

There have been repeated efforts to control health costs for decades without success, and top-down cost reduction initiatives have sometimes increased costs rather than reduced them. The core problem is that legacy payment models such as FFS have given providers no incentive to cut costs or even to understand what their costs are for treating a given condition. Bundled payments, by contrast, directly reward and motivate cost reduction from the bottom up, team by team. At the same time, they encourage accurate cost measurement not only to inform price setting but to enable true cost reduction.

FURTHER READING



Redefining Competition in Health Care

HEALTH MAGAZINE ARTICLE by Michael E. Porter and Elizabeth Teisberg

The wrong kinds of competition have made a mess of the American health care system. The

Bundled payments will be the catalyst that finally motivates provider teams to work together to understand the actual costs of each step in the entire care process, learn how to do things better, and get care right

right kinds of competition can straighten it out.

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the first time. By encouraging competition for the treatment of individual conditions on the basis of quality and price, bundled payments also reward providers for standardizing care pathways, eliminating services and therapies that fail to improve outcomes, better utilizing staff to the top of their skills, and providing care in the right facilities. If providers use ineffective or unnecessary therapies or services, they will bear the cost, making bundled payments a check against overtreatment.

The result will be not just a downward “bend” in the cost curve—that is, a slower increase—but actual cost reduction. Our research suggests that savings of 20% to 30% are feasible in many conditions. And, because bundled payments are contingent on good outcomes, the right kind of cost reduction will take place, not cost cutting at the expense of quality.

Overcoming the Transition Challenges

Despite the now proven benefits of well-designed bundled payments, many hospital systems, group purchasing organizations, private insurers, and some academics prefer capitation. Bundled payments, they argue, are too complicated to design, negotiate, and implement. (They ignore the fact that capitation models continue to rely on complex, expensive fee-for-service billing to pay clinicians and to set the baseline for calculating savings and penalties. Bundled payments are actually simpler to administer than the myriad of FFS payments for each patient over the care cycle.)

Skeptics raise a host of other objections: The scope of a condition and care cycle is hard to define; it is unrealistic to expect specialists to work together; the data on outcomes and costs needed to set prices are difficult to obtain; differences in risk across patients are hard to assess, which will lead to cherry-picking; and bundled payments won't rein in overtreatment.

If these objections represented serious barriers, we would expect to see little progress in implementing bundled payments and plenty of evidence that such programs were unsuccessful. To the contrary, bundled payments have a history of good results and are currently proliferating rapidly in a wide range of conditions, organizations, and countries.

A History of Success

Bundled payments are not a new idea or a passing fad. Successful pilots date back for decades and include initiatives spearheaded by the Centers for Medicare & Medicaid Services.

Consider the Heart Bypass Demonstration, an initiative that ran from 1991 to 1996. CMS offered a bundled payment for coronary artery bypass graft surgery that covered all services delivered in the hospital, along with 90 days of post-discharge services. The pilot yielded savings to Medicare of \$42.3 million, or roughly 10% of expected spending, at the seven participating hospitals. The inpatient mortality rate declined at all the hospitals, and patient satisfaction improved.

CMS also implemented the Acute Care Episode program (from 2009 to 2011), in which Medicare paid five participating organizations a flat fee to cover hospital and physician services for various cardiac conditions and orthopedic care. Over a total of 12,501 episodes, the initiative generated an average savings to Medicare of 3.1% of expected costs.

In 2007, for example, the Netherlands introduced a successful bundled payment model for treating patients with type 2 diabetes, and, later, for chronic obstructive pulmonary disease (COPD). In 2009, the County of Stockholm, Sweden, introduced bundled payments for hip and knee replacements in healthy patients, achieving a 17% reduction in cost and a 33% reduction in complications over two years. More recently, Stockholm introduced bundled payments for all major spine diagnoses requiring surgery, and extensions to other conditions are under way there.

In 2011, Medicare introduced the voluntary Bundled Payments for Care Improvement (BPCI) program, which currently includes more than 14,000 bundles in 24 medical and 24 surgical conditions. Numerous physician practices have embraced the BPCI model, a transitional bundled payment approach that covers acute-care episodes and often a post-acute period of up to 90 days to promote better management of post-discharge services. According to participating providers, BPCI bundles have achieved significant improvements and savings an order of magnitude greater than savings from ACOs. Building on that success, CMS launched a mandatory bundled payment program for joint replacements in 2016, which covers 800 hospitals in 67 U.S. metropolitan areas.

Bundled payment contracts involving private insurers are also finally beginning to proliferate. For example, Twin Cities Orthopedics offers a bundle for joint replacement with most of the region's major insurers at a price well below the traditional hospital models. The practice reports better outcomes and cost reductions of more than 30%.

The County of Stockholm's bundle for

joint replacement reduced costs by 17%.

To be sure, many existing bundled payment programs have yet to encompass all the components of an ideal structure. Most have made pragmatic compromises, such as covering only part of the care cycle, using important but incomplete risk adjustments, and incorporating limited outcome measures. But even these less-than-comprehensive efforts are resulting in major improvements, and the obstacles to bundled payments are being overcome.

Let's consider some of the main criticisms of bundled payments in more depth:

Only some conditions can be covered.

Critics have suggested that bundled payments apply only to elective surgical care and other well-defined acute conditions, and not to nonsurgical conditions, chronic disease, or primary care. But this claim is inconsistent with actual experience. Of the 48 conditions designated for BPCI, only half were surgical. The other half were for care episodes in nonsurgical conditions, such as heart disease, kidney disease, diabetes, and COPD. Time-based bundled payments for chronic care are emerging in other countries and with private payers. Bundled payments work well for chronic conditions because of the huge benefits that result from coordinated longitudinal care by a multidisciplinary team.

Bundled payment models are also beginning to emerge for primary and preventive care for well-defined segments of patients with similar needs. Each primary care segment—such as healthy children, healthy adults, adults at risk for developing chronic disease, and the elderly—will need a very different mix of clinical, educational, and administrative services, and the appropriate outcomes will differ as well. Bundled payments reward integrated and efficient delivery of the right mix of primary and preventive services for each patient group.

Primary care bundles need not cover the cost of treating complex, acute conditions, which are best paid for with bundled payments to IPUs covering those conditions. Instead, primary care teams should be held accountable for their performance in primary care and prevention for each patient segment: maintaining health status, avoiding disease progression, and preventing relapses.

Defining and implementing bundled payments is too complicated.

Critics argue that it will be hard to negotiate bundled payments across all conditions and to get agreement on the definition of a medical condition, the extent of the care cycle, and the included services. This objection is weak at best. A manageable number of conditions account for a large proportion of health care costs, and we can start there and expand over time. The care required for most medical conditions is well established, and experience in defining bundles is rapidly accumulating.

Methodologies and commercial tools, such as the use of comprehensive claims data sets, are in widespread use. Service companies that help providers define conditions, form teams, and manage payments are emerging, as are software tools that handle billing and claims processing for bundles.

Initially, bundled payments may cover less than the full care cycle, focus on simpler patient groups with a given condition, and require adjudication mechanisms for gray areas that arise. This is already happening. As experience grows, bundled payments will become more comprehensive and inclusive. And a large body of evidence shows that the effort involved in understanding full care cycles and moving to multidisciplinary care is well worth it.

Providers won't work together.

Critics argue that bundled payments hold providers accountable for care by other providers that they don't control; skeptics also claim that it will be hard to divide up a single payment to fairly recognize each party's contribution. This is one reason many hospital systems have been slow to embrace the new payment model. We are selling

doctors short. Many physician groups have enthusiastically embraced bundles, because they see how the model rewards great care, motivates collaboration, and brings clinicians together. As physicians form condition-based IPUs and develop mechanisms for sharing accountability, formulas for dividing revenues and risk are emerging that reflect each provider's role, rather than flawed legacy fee structures.

Why DRGs Are Not Bundled Payments

Critics of bundled payments point to Medicare's experience with a superficially similar approach: the diagnosis-related group, or DRG, payment model. DRGs, which date back to 1984 and were adopted in many countries, were a step forward, but they did not trigger the hoped-for innovations in care delivery.

Why have DRGs failed to bring about greater change? DRGs make a single payment for a set of services provided at a given location; however, the payment does not cover the full care cycle for treating the patient's condition. By continuing to make separate payments to each specialist physician, hospital, and post-acute care site involved in a patient's care, DRGs perpetuate a system of uncoordinated care.

Moreover, DRG payments are not contingent on achieving good patient outcomes. Indeed, many DRGs fail to cover many support services crucial to good outcomes and overall value, such as patient education and counseling, behavioral health, and systematic follow-up. Under the DRG system, therefore, specialty silos in health care delivery have remained largely intact. And providers continue to have no incentive to innovate to improve patient outcomes.

At UCLA's kidney transplant program, for example, a bundled payment was first negotiated with several insurers more than 20 years ago. An IPU was formed and has become one of the premier U.S. kidney transplantation programs with superior outcomes. To divide the bundled price, urologists and nephrologists—the specialists who have the greatest impact on care—pay negotiated fees to other specialists involved in care (such as anesthesiology) and bear the residual financial risk and share the gain. This structure has reinforced collaboration, not complicated it.

Another example is physician-owned OrthoCarolina's 2014 contract with Blue Cross and Blue Shield of North Carolina for bundled payment for joint replacement. OrthoCarolina provides care in several area hospitals and has negotiated a fixed payment with each of them for all the required inpatient care. Each participating hospital now has a designated team, including members of the nursing, quality, and administrative departments, that collaborates with OrthoCarolina surgeons in a virtual IPU. This ensures that everyone involved with the patient and the family fully understands the care pathway and expectations. The initial group of 220 patients in the plan experienced 0% readmissions, 0% reoperations, 0.45% deep venous thrombosis (versus 1% to 1.5% nationally), and substantial improvements in patient-reported quality-of-life outcomes. Average length of stay dropped from 2.4 days to 1.5 days, with 100% of patients discharged to their homes rather than a rehabilitation center. The cost per patient, as reported by Blue Cross and Blue Shield of North Carolina, fell an average of 20%.

Outcomes are difficult to measure.

Critics claim that the outcome data at the medical condition level, an essential component of value-based bundled payments, doesn't exist or is too difficult and expensive to collect. While this may have been true a decade ago, today outcome measurement is rapidly expanding, including patient-reported outcomes covering functional results crucial to patients. Many providers are already systematically measuring outcomes. Martini-Klinik, a high-volume IPU for prostate cancer in Hamburg, Germany, has been measuring a broad set of outcomes since its founding, in 1994. This has enabled it to achieve complication rates for impotence and incontinence that are far lower than average for Germany. In congenital heart disease care, Texas Children's tracks not only risk-adjusted surgical and intensive care mortality rates but also metrics of patients' neurodevelopmental status and, increasingly, ongoing quality of life.

Advances in information technology are making outcome measurement better, easier, less costly, and more reliable. Greater standardization of the set of outcomes to measure by condition will also make measurement more efficient and improve benchmarking. The International Consortium for Health Outcomes Measurement (ICHOM) has published global standard sets of outcomes and risk factors for 21 medical conditions that represent a significant portion of the disease burden, and the number is growing. Early bundled payment programs are already achieving significant outcome improvement. As provider experience grows, bundled payments will expand accountability and lead to even greater improvements.

Current cost information is inadequate.

Critics argue that bundled payments require an understanding of costs that most providers lack, which puts them at unfair financial risk. Yet numerous bundled payment programs are already in place, using prices based on modest discounts from the sum of historical fee-for-service payments. New service companies are assisting providers in aggregating past charges and in reducing costs. Providers will learn to measure their actual costs, as organizations such as Mayo Clinic, MD Anderson, and the University of Utah are already doing. This will inform better price negotiations and accelerate cost reduction.

The failure of care delivery organizations to properly measure and manage costs is a crucial weakness in health care globally. Bundled payments will finally motivate providers to master proper costing and use cost data to drive efficiencies without sacrificing good patient outcomes.

Providers will cherry-pick patients.

Critics charge that bundled payments will encourage providers to treat only the easiest and healthiest patients. But as we have already noted, proper bundled payments are risk-stratified or risk-adjusted. Even today's imperfect bundled payment contracts incorporate risk adjustments that are often better than those used

in current FFS payment and beyond the crude risk adjustment used in capitation. Innovators are developing pragmatic approaches that adjust for risk, such as restricting initial bundles to groups of patients with similar risk profiles for a condition. The County of Stockholm did this with joint replacements. Its initial bundle covered the 60% to 70% of patients classified as ASA 1 (normally healthy) or 2 (mild systemic disease); more-complex patients remained in the old reimbursement system. Careful tracking showed no evidence of bias in the selection of patients. The county plans to extend the bundle to more-complex joint replacement patients as better data becomes available.

Bundled payments will motivate providers to master proper costing practices.

Recently, the county introduced bundled payments for nine spine diagnoses requiring surgery, with far more sophisticated risk adjustment. The bundled payment includes a base payment, a payment covering expected complications, and a performance payment based on pain reduction. All three elements are adjusted for multiple patient risk factors. Risk adjustment will only improve as experience with it grows.

Bundled payments will encourage overtreatment.

Critics raise concerns that bundled payments, like FFS, will lead to overtreatment because payment is tied to performing care, incenting providers to manufacture demand. Note that capitation plans, which have limited accountability for individual patient outcomes, have the opposite incentive: motivating providers to deny or delay the treatments patients need.

While definitive results are not yet available, our conversations with payers and government authorities in the United States, Sweden, and elsewhere have revealed no evidence that bundled payments have resulted in unnecessary surgeries or other treatments. Bundled payments are risk-adjusted and introduce transparency on outcomes, and the fixed payment will discourage unnecessary procedures, tests, and other services. Bundled payments (and all care) should incorporate appropriate use criteria (AUC), which use scientific evidence to define qualifications for particular treatments.

Price competition will trigger a race to the bottom.

Finally, some providers worry that bundled payments will result in excessive price competition, as payers demand discounts and low-quality providers emerge offering cheap prices. This concern is common among hospitals, which are wary of greater competition and want to sustain existing reimbursement levels. We believe this fear is overblown. Bundled payments include clear accountability for outcomes and will penalize poor-quality providers. At the root of all these objections to bundled payments are critical failures that have held back health care for decades. Bundled payments will finally address these problems in ways that capitation cannot.

How Bundled Payments Will Transform Competition

As our multiple examples reveal, bundled payments are already transforming the way care is delivered. They unleash a new kind of competition that improves value for patients, informs and expands patient choice, lowers system cost, reshapes provider strategy, and alters industry structure for the better.

With bundled payments, patients are no longer locked into a single health system and can choose the provider that best meets their particular needs. Choice will expand dramatically as patients (and physicians) gain visibility into outcomes and prices of the providers that treat their condition. In a transparent bundled-payment world,

patients will be able to decide whether to go to the hospital next door, travel across town, or venture even farther to a regional center of excellence for the care they need. This kind of choice, long overdue in health care, is what customers have in every other industry.

At the same time, the prices should fall. A bundled payment will usually be lower than the sum of current FFS reimbursements in today's inefficient and fragmented system. For conditions where legacy FFS payments failed to cover essential costs to achieve good outcomes, such as in mental health care or diagnostics that enable more targeted and successful treatments, prices may initially rise to support better care. But even these prices will fall as providers become more efficient.

In a world of bundled payments, market forces will determine provider prices and profitability, as they should. In today's system, FFS pricing allows inefficient or ineffective providers to be viable. With bundled payments, only providers that are effective and efficient will grow, earn attractive margins, and expand regionally and even nationally. The rest will see their margins decline, and those with poor outcomes will lose patients and bear the extra costs of dealing with avoidable complications, infections, readmissions, and repeat treatments.

Providers will target conditions where they can achieve good outcomes at low cost.

Given today's hyperfragmentation of care, bundled payments should reduce the absolute number of providers treating each condition. But those that remain will be far stronger. And unlike the consolidation that would result from capitation, this winnowing of providers will create more-effective competition and greater accountability for results.

Providers will stop trying to do a little bit of everything and instead will target conditions where they can achieve good outcomes at low costs. Where they cannot, they will partner with more-effective providers or exit those service lines. The net result will be significantly better overall outcomes by condition and significantly lower average costs. No other payment model can produce such a transformation.

The shift to bundled payments will also spill over to drive positive change in pharmaceuticals, medical devices, diagnostic testing, imaging, and other suppliers. Today, suppliers compete to get on approved lists, curry favor with prescribing specialists through consulting and research payments, and advertise directly to patients so that they will ask their doctor for particular treatments. As a result, many patients receive therapies that are not the best option, deliver little benefit, or are unnecessary. With bundled payments, suppliers will have to demonstrate that their particular drug, device, diagnostic test, or imaging method actually improves outcomes, lowers the overall cost, or both. Suppliers that can demonstrate value will command fair prices and gain market share, and there will be substantial cost reduction in the system overall. Competition on value is the best way to control the costs of expensive drugs and therapies, not today's approach of restricting access or attacking high prices as unethical or evil regardless of the value products offer.

The Time Is Now

The biggest beneficiary of bundled payments will be patients, who will receive better care and have access to more choice. The best providers will also prosper. Many already recognize that bundled payments enable them to compete on value, transform care, and put the health care system on a sustainable path for the long run. Those already organized into IPUs for specific medical conditions are particularly well-positioned to move aggressively. Physician groups in particular have often moved the fastest.

Many health systems, however, have been reluctant to get behind bundled payments. They seem to believe that capitation better preserves the status quo—a top-down approach that leverages their clout and scale. They also see it as encouraging industry consolidation, which will ease reimbursement pressure and reduce competition. However, leading health systems are embracing bundled payments and the shift in competition to what really matters to patients.

Health systems with their own insurance plans, or those that self-insure care for their employees, can begin immediately to introduce bundled payments internally. Health systems that have adopted ACOs or other capitated models can also use condition-based bundled payments to pay internal units. Doing so will accelerate learning while motivating clinical units to improve outcomes and reduce costs in a way that existing departmental budgets or FFS can never match. Adopting bundles internally will be a stepping stone to contracting this way with payers and directly with employers.

Payers will reap huge benefits from bundled payments. Single-payer systems, such as those in Canada, Sweden, and the U.S. Veterans Administration, are well-positioned to transition to bundled payments for a growing number of medical conditions. Indeed, this is already happening in some countries and regions, with CMS leading the way in the United States.

But many private insurers, which have prospered under the status quo, have been disappointingly slow in moving to bundled payments. Many seem to favor capitation as less of a change; they believe it preserves payment infrastructure while shifting risk to providers. As an excuse, they cite their inability to process claims for bundled payments, even though bundled claims processing is inherently far simpler.

Improving the way they pay for health care, however, is the only means by which insurers can offer greater value to its customers. Insurers must do so, or they will have a diminished role in the system. We challenge the industry to shift from being the obstacle to bundled payment to becoming the driver. Recently, we've been heartened to see more private insurers moving toward bundled payments.

Employers, which actually pay for much of health insurance in the United States, should step up to lead the move to bundled payments. This will improve outcomes for their employees, bring down prices, and increase competition. Self-insured employer health plans need to direct their plan administrators to roll out bundles, starting with costly conditions for which employees experience uneven outcomes.

Should their insurers fail to move toward bundles, large employers have the clout to go directly to providers. Lowe's, Boeing, and Walmart are contracting directly with providers such as Mayo Clinic, Cleveland Clinic, Virginia Mason, and Geisinger on bundled payments for orthopedics and complex cardiac care. The Health Transformation Alliance, consisting of 20 large employers that account for 4 million lives, is pooling data and purchasing power to accelerate the implementation of bundled payments.

The time has come to change the way we pay for health care, in the United States and around the world. Capitation is not the solution. It entrenches large existing systems, eliminates patient choice, promotes more consolidation, limits competition, and perpetuates the lack of provider accountability for outcomes. It will fail again to drive true innovation in health care delivery.

Capitation will also fail to stem the tide of the ever-rising costs of health care. ACOs, despite their strong advocates, have produced minimal cost savings (0.1%). By contrast, even the simplified bundled payment contracts under way today are

achieving better results. Medicare is expected to save at least 2% (\$250 million) in its program's first full year of operation. And experience in the United States and elsewhere shows that the savings can be far larger.

Capitation might seem simple, but given highly heterogeneous populations and continual turnover of patients and physicians, it is actually harder to implement, risk-adjust, and manage to deliver improved care. Bundled payments, in contrast, are a direct and intuitive way to pay clinical teams for delivering value, condition by condition. They put accountability where it should be—on outcomes that matter to patients. This way to pay for health care is working, and expanding rapidly.

Much remains to be done to put bundled payments into widespread practice, but the barriers are rapidly being overcome. Bundled payments are the only true value-based payment model for health care. The time is now.

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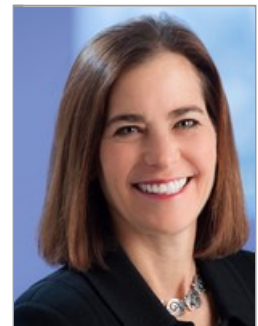
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Future MACRA Concerns For Hospitals And Health Systems

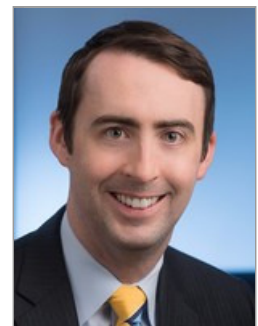
By **Deborah Kantar Gardner and Peter Holman Jr.** (November 22, 2017, 11:09 AM EST)

The passage of the Medicare Access and CHIP Reauthorization Act of 2015[1] (MACRA), and implementing regulations promulgated in 2016,[2] focused on reforming physician Medicare reimbursement with an eye towards incentivizing quality and cost savings. In the process, however, Congress and the Centers for Medicare & Medicaid Services have created an interesting juncture in the health care landscape, as one of the real and lasting impacts of MACRA may well be the formation of new alignments between physicians and hospitals and health systems.

Under MACRA, a portion of physician payments is tied to goals such as reduced costs and improved quality, meaning that physician incentives now more closely track imperatives faced by hospitals and health systems in their march toward value-based health care (VBC). This new alignment could prove beneficial to physicians and hospitals and health systems alike, and may result in new partnerships through joint ventures, affiliations or employment opportunities. But what do hospitals and health systems need to know about MACRA and what should they be mindful of before acquiring or affiliating with physician practices? This article provides a basic overview of MACRA and discusses factors hospitals and health systems might consider in evaluating potential physician practice partners.



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What is MACRA?

MACRA, enacted in 2015 with broad bipartisan support, repealed the unpopular sustainable growth rate formula for setting the Medicare Part B physician fee schedule.[3] In its place, there will be modest annual increases of 0.5 percent in the fee schedule through 2019, no change from 2020 through 2025, and then another modest annual increase of 0.25 percent or 0.75 percent beginning in 2026 based on physician participation in one of two tracks in the new CMS Quality Payment Program (QPP). The two QPP tracks are the merit-based incentive payment system (MIPS) and the advanced alternative payment model (Advanced APM), described further below:[4]

MIPS: MIPS is the “default” track under MACRA. Under MIPS, Medicare Part B payments are based on physician performance in four domains: quality (replaces the physician quality reporting system (PQRS)), advancing care information (replaces meaningful use), cost (replaces the value-based modifier program), and improvement activities (a new domain that considers activities which support aims within health care like improving

delivery, care coordination, engaging beneficiaries, population management, and health equity)[5]. Physicians may report their performance individually or as part of a group. Depending on performance, which is tied to a weighted average in these four domains, MIPS physicians will be subject to payment adjustments of up to 4 percent (positive or negative) from the baseline Medicare Part B fee schedule in calendar year 2019 based on performance in CY 2017.[6] The payment adjustment threshold will be increased (positive or negative) to 5 percent in 2020, 7 percent for 2021, and 9 percent for 2022 and the following years.[7]

In other words, beginning in 2022, the potential spread in payment between the lowest-performing physicians and the highest-performing physicians could be up to 18 percent. An additional 10 percent bonus may be available to clinicians with exceptional performance, [8] though CMS has indicated that payout of that bonus is unlikely.[9]

Not all physicians are required to participate in MIPS. Physicians who are in their first year as a Medicare Part B participant are exempt, as are physicians reporting individually who have \$90,000 or less in allowed Part B charges or 200 or fewer Medicare patients, or who are reporting as a group and who collectively satisfy these same low-volume thresholds. [10] [11] CMS projects that with these thresholds, approximately 622,000 Medicare Part B clinicians, or 39 percent of Medicare Part B clinicians, will be required to participate in MIPS.[12]

Advanced APMs: Advanced APMs are special alternative payment models designated by CMS that (1) require participants to use certified electronic health record (eHR) technology; (2) provide payment based on quality measures comparable to MIPS quality metrics; and (3) qualify as a medical home model under CMS Innovation Center authority or require participating APM entities to bear more than a nominal amount of financial risk for monetary losses. Physicians who elect to participate in an advanced APM forego MIPS reporting and reimbursement. Instead, such physicians are subject to the reporting, performance, and payment mechanisms underlying the specific advanced APM in which they participate, and additionally receive an annual lump sum bonus of 5 percent of their Medicare Part B payments in 2019 to 2024.[13]

CMS has recently estimated that between 185,000 and 250,000 physicians will participate in qualifying APMs.[14] Although this figure is nearly double the number that CMS projected in 2016 — due to the inclusion of the Medicare Shared Savings Program Track 1 as an advanced APM for performance year 2018 and the reopening of applications for the Next Generation ACO Model and Comprehensive Primary Care Plus (CPC+) program — this still represents between just 12 percent and 16 percent of all Medicare Part B physicians. [15]

Why will MACRA drive physicians to join hospitals and health systems?

Hospitals and health systems offer physician practices resources such as information technology and administrative support. They also offer potentially more stable compensation as well as the opportunity to earn additional incentive payments that might be more challenging to obtain without hospital information systems, infrastructure support, access to advanced APMs and education.

Under MACRA, both MIPS and advanced APMs will require that physicians invest significant financial and administrative resources and time to track and report performance. As an initial matter, physicians must purchase and maintain costly information systems, including eHR, in order to participate in MACRA. Physicians also face administrative and time burdens in collecting and reporting data to CMS. According to a 2016 survey of physicians, 74 percent said that performance reporting is burdensome, suggesting a window where hospitals and health systems could provide particular value to physician practices.[16]

Beyond financial and administrative considerations, MACRA is vastly complicated, requiring sophisticated analysis, education and training. Reporting on measures, in particular under MIPS, is not a one-size-fits-all approach. Different physicians or physician groups could choose to report on widely different metrics, and there is an element of strategy in selecting those metrics that will help a physician or practice stand out amongst its peers. In that regard, hospitals and health systems can offer to physicians the sophisticated data analytics that can help optimize reimbursement.

Joining a hospital or health system will also give physicians a certain level of predictability in compensation that they may not have as independent practitioners. Most obviously, physicians employed by hospitals and health systems typically enjoy a base pay, which provides them with a minimal amount that they can expect to take home each year.

However, even those physicians who merely affiliate with a hospital or health system will be attracted to the "risk pooling" that comes with reporting as part of a group and can help limit potential year-to-year fluctuations in Medicare reimbursement. Smaller physician practices in particular may be daunted by the potential downside risks associated with MIPS and with most advanced APM models; employment by or affiliation with a hospital or health system can provide more financial certainty for physicians who are wary of the potential risks of practicing alone.

Finally, joining a hospital or health system may provide physicians with opportunities to receive gainsharing payments, particularly under certain advanced APM arrangements. In addition to the revisions MACRA made to physician payments, MACRA also notably loosened gainsharing rules under the civil monetary penalties (CMP) law by specifying that only payments to physicians that induce reductions in medically necessary services are prohibited by the CMP law.[17]

The amendment to the CMP law provides important relief to hospitals and health systems that have been trying to implement gainsharing arrangements that are aligned with the goals of VBC, but have been wary of potential violations of existing law. This is another way in which MACRA may subtly drive physicians to join hospitals and health systems, as they seek out additional incentive payments that have been opened up by the CMP changes.

In sum, hospitals and health systems offer the value of support and stability to physicians who may be risk averse and may be unprepared to handle the challenges of MACRA alone. Although some physicians may succeed by forming larger groups, and others may be tempted to form "virtual" groups as outlined by CMS in its final November 2017 rule,[18] neither of these are likely to offer the certainty of compensation, resources and the investment of time that hospitals and health systems can provide.

Why will MACRA drive hospitals and health systems to acquire or affiliate with physician practices?

MACRA's alignment of physician and hospital and health system economic incentives means that physicians can bring value to hospitals and health systems by supporting their VBC initiatives. Physicians, as well as hospitals and health systems, will be focused on the VBC "triple aims" of cost, quality and population health, driving both parties to engage in strategies that support these goals.

For example, physicians participating in MACRA will likely be more invested in care management, following patients through the full continuum of care to ensure patients adhere to treatment protocols aimed at improving health outcomes and reducing costs. Physicians also may be more focused on ensuring that patients are treated in the most appropriate setting, managing low-acuity cases themselves, and referring to hospitals and health systems only when the patients' conditions require the more complex care that

hospitals and health systems are better positioned to provide.

Additionally, aligned physicians will further hospital and health system goals associated with episode and population-based health. Hospitals and health systems will benefit from an expanded network of providers who are more focused on preventive care and care management, and who will be incentivized to refer patients to the most appropriate care setting.

What qualities will hospitals and health systems look for when acquiring or affiliating with physician practices?

Although many physician practices may be interested in joining hospitals and health systems in the coming years, certain practices will be more attractive targets than others. Fundamentally, hospitals and health systems should consider how committed potential physicians are to the triple aims, as those physicians that embrace such goals will be better positioned to succeed under MACRA and to advance institutional goals under VBC. The following additional factors also may be significant in evaluating physician practices:

- **Practices with care managers:** These will be attractive targets, because they will be drivers of preventive care and care coordination that can help meet quality and cost savings targets. Primary care physicians are an obvious choice, but many other types of physicians will have experience in care management as well.
- **Large patient bases:** Hospitals and health systems will increasingly seek to manage higher-acuity cases, leaving less severe cases to be managed by physicians in an outpatient setting. Thus, a physician practice with a larger patient base will have a larger pool of potential patients for treatment in the hospital and health system setting, and will bring more beneficiaries to participate in population health models.
- **Practices that already incorporate eHR:** Practices that already have eHR or have familiarity with VBC models and reimbursement may be able to integrate with the acquirer's systems more efficiently. They also may have a better understanding of good documentation and reporting practices and the importance of documentation in supporting claims and claim validation audits.
- **Average age of practice:** Practices with more providers nearing retirement are less likely to have incentives to embrace new systems or invest in eHR. Paradoxically, to the extent that such practices have younger physicians, they also may be some of the best targets: Younger physicians in the same practice will have much more need to embrace VBC over the long run, and may be eager to align with a hospital or health system that can contribute the capital and administrative management that MACRA requires.
- **Social determinants of health:** Hospitals and health systems might at first be wary of engaging physicians who support populations disproportionately challenged by social determinants of health, given the fact that multiple factors outside of a physician's control may bear on cost and quality outcomes. However, hospitals and health systems should take comfort in the fact that CMS has indicated that in future years, it plans to adjust performance scores for physicians based on the impacts of social determinants of health.[19] In the interim, CMS has proposed a bonus in the 2018 performance year for physicians who treat complex patients, in recognition of the particular challenges in caring for certain populations.[20] In sum, hospitals and health systems that may be concerned about patient case mix should not be deterred, given that CMS has identified this as a priority and is working on fixes to help level the playing field.

What performance objectives are most critical for physician success under MACRA?

The majority of physicians who are required to participate in the Quality Payment Program will join the MIPS track. As discussed above, under MIPS, physician compensation will be tied to a weighted score in four domains: quality, improvement activities, cost and advancing care. The weighting shifts over time, but over the long run cost and quality together make up the greatest impact, collectively representing 60 percent of the weighted score.[21]

With respect to quality, a hospital or health system conducting diligence on a physician group may assess its historic performance on quality measures through Medicare's "Physician Compare," which tracked physician quality reporting and performance under the physician quality reporting system. Previously, Medicare required that physicians report to PQRS to avoid a negative payment adjustment, but performance was not tied to payment. [22] Many of the PQRS measures, such as breast cancer and colorectal cancer screening, are included in the MIPS quality category, so historic performance in these categories may provide hospitals and health systems with a benchmark for potential future performance. [23] As of December 2016, approximately 175,000 individual clinicians have performance data collected through PQRS available for download.[24]

With respect to cost, a hospital or health system may review claims data to assess physician performance on the cost metric. CMS intends to provide scoring information during the 2017 transition year, even though cost is not yet a weighted component in the overall MIPS score.[25] Practices with high cost benchmarks may be attractive because they provide greater room for improvement. Conversely, they could signal risks of systemic underperformance within the practice. Hospitals and health systems will need to consider the reasons why a practice's cost benchmarks are so high, and whether the practice is in a position to improve under new management.

Although cost will not be a critical score in early years of MACRA, its weighting will increase in subsequent years. Hospitals and health systems should thus begin to address cost now by structuring employment or affiliations with appropriate incentives, such as gainsharing, to ensure that employed physicians remain mindful of costs on a go-forward basis.

Focusing on physician performance on quality and cost measures is helpful not only for physicians who continue under the MIPS track, but also for those physicians who ultimately shift to an advanced APM. Although the metrics for compensation under each advanced APM are unique, they all contain an element of performance tied to quality and cost. Accordingly, practices that have typically succeeded in these metrics may be good predictors for future success, regardless of MACRA track.

What other questions should hospitals and health systems be asking physician practices?

Although historic performance can be a good way to value a physician practice, perhaps more important is whether the practice is open and willing to collaborate with hospitals or health systems to improve performance in the future. Even a practice that historically did not fare well could improve, providing long-term value to the hospital or health system, if physicians are willing to adapt to the new world under MACRA. Hospitals and health systems should thus consider posing the following questions, which may be useful in assessing the value of physicians' practices:

1. How committed are physicians to working with the hospital or health system to achieve success under MACRA, including using electronic health records and

understanding documentation and reporting requirements?

2. Are physicians amenable to utilizing hospital or health system-developed care protocols?
3. Would physicians be willing to work with hospital or health system care coordinators to help triage cases as appropriate?
4. Have physicians participated in an APM and/or are they willing to join an APM or advanced APM in the future?
5. Are physicians prepared to engage in hospital or health system training and education on a regular basis?
6. How will physicians cooperate with the hospital or health system in identifying strategies to improve quality and reduce costs?
7. How will physicians assist in tracking patients and providing community-based care?

Conclusion

The advent of MACRA, along with other VBC initiatives, will spur more physicians to seek closer ties with hospitals and health systems, and vice versa. Success under these new alliances will be more achievable if hospitals and health systems work with practices that meet specific strategic needs and can support the shift to population health. For their part, physicians who join hospitals and health systems must be prepared to collaborate with health systems to ensure that their performance meets metrics under MACRA, which will ultimately bring value to physicians, as well as hospitals and health systems

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[1] Medicare Access and CHIP Reauthorization Act of 2015, Pub. L. No. 114-10, 129 Stat. 87.

[2] 81 Fed. Reg. at 77008 (Nov. 4, 2016).

[3] § 101, 129 Stat. at 89–90.

[4] *Id.* Beginning in 2026, clinicians are eligible for a 0.25 percent annual fee schedule increase if they are in the MIPS track, or a 0.75 percent increase if they are in the Advanced APM track.

[5] 81 Fed. Reg. at 77015.

[6] 42 C.F.R. § 414.1405 (2017).

[7] Id.

[8] Id. at § 414.1380. CMS's November 2017 Update to the Quality Payment Program final rule with comment period establishes a complex patient bonus and a small practice bonus. Under the rule, clinicians or groups that submit data on at least one performance category during the 2018 performance year may receive a complex patient bonus based on the average Hierarchical Condition Category risk scores of the clinicians' or groups' beneficiaries, and groups that submit data on at least one performance category during the 2018 performance year and consist of 15 or fewer clinicians may receive the small practice bonus. A group or clinician qualifying for either bonus would receive points towards the MIPS final score, which is used to determine the additional 10 percent bonus for exceptional performance. Medicare Program; CY 2018 Updates to the Quality Payment Program, 82 Fed. Reg. 30,010, 30,138–40, 30,253 (proposed June 30, 2017) (to be codified at 42 C.F.R. pt. 414); 82 Fed. Reg. 53704-05, 53773, 53787-94 (Nov. 16, 2017).

[9] The Centers for Medicare & Medicaid Services, "The Merit-Based Incentive Payment System (MIPS)," <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/Quality-Payment-Program-MIPS-NPRM-Slides.pdf> (last accessed November 20, 2017).

[10] 82 Fed. Reg. at 53590 (Nov. 16, 2017).

[11] Id.

[12] 82 Fed. Reg. at 30,010, 30,235 (June 30, 2017); 82 Fed. Reg. at 53927, 53930.

[13] 42 C.F.R. § 414.1450.

[14] 82 Fed. Reg. at 53571-74, 53928.

[15] 82 Fed. Reg. at 53272, 53939. CMS has not announced the list of advanced APMs for performance year 2018, but the projections made in the final rule include the Medicare Shared Savings Program Track 1 model as an advanced APM.

[16] Deloitte, "MACRA: Disrupting the health care system at every level," <https://www2.deloitte.com/us/en/pages/life-sciences-and-health-care/articles/macra.html> (last accessed Nov. 20, 2017).

[17] § 512(a), 129 Stat. at 170.

[18] 82 Fed. Reg. at 30,027–33; 82 Fed. Reg. 53575.

[19] 81 Fed. Reg. at 77,131.

[20] 82 Fed. Reg. at 30,135.

[21] Quality accounts for 60 percent of the overall score in performance year 2017, 50 percent in 2018, and 30 percent in 2019; cost makes up 0 percent of score in 2017, 10 percent in 2018, and 30 percent for 2019. 81 Fed. Reg. at 77,541–44. In subsequent years, each of quality and cost will account for 30 percent. 82 Fed. Reg. at 53779.

[22] CMS.gov, "Physician Quality Reporting System: Analysis and Payment," <https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/pqrs/analysisandpayment.html> (last accessed Nov. 20, 2017).

[23] 81 Fed. Reg. at 77,104, 77,158.

[24] CMS.gov, "2015 Individual Clinician Measures Publicly Reported on Physician Compare in December 2016," <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/physician-compare-initiative/Downloads/PC-2015-Clinician-Measures.pdf> (last accessed Nov. 8, 2017).

[25] 81 Fed. Reg. at 77,166.

Measuring Success in Health Care Value-Based Purchasing Programs

Findings from an Environmental Scan, Literature Review, and Expert Panel Discussions

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Abstract

Value-based purchasing (VBP) refers to a broad set of performance-based payment strategies that link financial incentives to health care providers' performance on a set of defined measures in an effort to achieve better value. The U.S. Department of Health and Human Services is advancing the implementation of VBP across an array of health care settings in the Medicare program in response to requirements in the 2010 Patient Protection and Affordable Care Act, and policymakers are grappling with many decisions about how best to design and implement VBP programs so that they are successful in achieving stated goals.

This article summarizes the current state of knowledge about VBP based on a review of the published literature, a review of publicly available documentation from VBP programs, and discussions with an expert panel composed of VBP program sponsors, health care providers and health systems, and academic researchers with VBP evaluation expertise. Three types of VBP models were the focus of the review: (1) pay-for-performance programs, (2) accountable care organizations, and (3) bundled payment programs. The authors report on VBP program goals and what constitutes success; the evidence on the impact of these programs; factors that characterize high- and low-performing providers in VBP programs; the measures, incentive structures, and benchmarks used by VBP programs; evidence on spillover effects and unintended consequences; and gaps in the knowledge base.

Value-based purchasing (VBP) refers to a broad set of performance-based payment strategies that link financial incentives to providers' performance on a set of defined measures. Both public and private payers are using VBP strategies in an effort to drive improvements in quality and to slow the growth in health care spending. Nearly ten years ago, the Department of Health and Human Services (HHS) and the Centers for Medicare and Medicaid Services (CMS) began testing VBP models with their hospital pay-for-performance (P4P) demonstrations, known as the Premier Hospital Quality Incentive Demonstration (HQID) and the Physician Group Practice (PGP) Demonstration, which provided financial incentives to physician groups that performed well on quality and cost metrics. The use of financial incentives as a strategy to drive improvements in care dates back even further among private payers^[2] and Medicaid programs, with limited experimentation occurring in the early 1990s; more widespread use of P4P began to pick up steam in the late 1990s and early 2000s.

Although the published evidence from P4P programs implemented by private-sector payers between 2000 and 2010 showed mostly modest results in improving performance,^[3–10] public and private payers have

continued to experiment with the use of financial incentives as a policy lever to drive improvements in care. Many of the early P4P program designs have evolved over time to include a larger and broader set of measures, including resource use and cost metrics, in an effort to reward providers for delivering value,^{*} and many programs are deploying a wider range of incentives. Additionally, other VBP models have since emerged and are currently being tested, including accountable care organizations (ACOs) and bundled payment programs that include both quality and cost design features. VBP models are relatively new to the health system, and they represent a work in progress in terms of understanding how best to design these programs to achieve desired goals, the optimal conditions that support successful implementation, and provider response to the incentives.

Policy Context and Study Purpose

The Medicare program has gradually been moving toward implementing VBP across various care settings, starting with pay-for-reporting programs (e.g., the Hospital Inpatient Quality Reporting program and the Physician Quality Reporting Initiative) and P4P demonstrations to gain experience. The 2010 Patient Protection and Affordable Care Act^[11] significantly expands VBP by requiring the Medicare program to implement, develop plans for, and test in the context of demonstrations the use of VBP across a broad set of providers and settings of care.

As HHS actively considers the federal government's near- and long-term strategy for how to design and implement VBP programs within the Medicare program, the department is seeking to apply the best available evidence to guide policymaking. Because of the substantial investments that HHS is making regarding VBP, it is an opportune moment to reflect on what has been learned from the past decade of experimentation that could guide current and future federal efforts. It is also a good time to consider the type of monitoring and systematic evaluation work that is needed to generate the information that policymakers require to fine-tune VBP program designs and to understand the impact these programs are having related to stated goals.

In 2012, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) in HHS asked RAND to review what has been learned about VBP over the past decade that might help inform policymaking. The goal of the review was to understand whether VBP programs have been successful, what the elements of successful programs are, and the gaps in the knowledge base that need to be addressed to improve the design and functioning of VBP programs moving forward. This article summarizes the findings from RAND's review. We direct readers to the companion document to this summary report, *Measuring Success in Health Care Value-Based Purchasing Programs: Summary and Recommendations*.

Conceptual Framework for Assessing the Effects of Value-Based Purchasing Programs

To help us consider the research questions that ASPE asked RAND to address, we developed a conceptual framework for VBP. The model is adapted from a conceptual model by Dudley et al.^[12] and includes three core elements that interplay and affect the response to VBP:

- **Program design features** (i.e., measures, incentive structure, target of incentive, and quality improvement support/resources)
- **Characteristics of the providers and the settings in which they practice** that may predispose them to a response
- **External factors** (e.g., other payment policies, other quality initiatives, regulatory changes) that can

enable or hinder provider response to the incentive.

The conceptual framework offers a foundation for considering the design features of the incentive program, as well as other mediating factors that influence whether and how providers may respond to the incentives and whether programs are successful in reaching stated goals. Largely, VBP programs are natural experiments, and the associated research is observational in nature. [Dudley \(2005\)](#) underscores that, as a result, it is critical that evaluators select theory-driven hypotheses about how incentives affect behavior to identify potential confounding factors that could explain observed effects.[\[13\]](#) Policymakers and researchers could use this framework to develop theory-driven hypotheses.

Study Approach

We defined VBP programs as private or public programs that link financial reimbursement to performance on measures of quality (i.e., structure, process, outcomes, access, and patient experience) and cost or resource use. We focused our review on three types of VBP models: (1) P4P, which includes both “pay for quality” and “pay for quality and resource use, efficiency, or costs”; (2) shared savings models that typically, but not exclusively, are being deployed in the context of ACOs; and (3) bundled payments for episodes of care (only when paired with holding providers accountable for performance on quality measures). We excluded from review pay-for-reporting and demand-side programs (e.g., tiered networks and consumer incentives).

We define each of the three broad types of VBP models as follows:

- **Pay-for-performance** refers to a payment arrangement in which providers are rewarded (bonuses) or penalized (reductions in payments) based on meeting pre-established targets or benchmarks for measures of quality and/or efficiency.
- **Accountable care organization** refers to a health care organization composed of doctors, hospitals, and other health care providers who voluntarily come together to provide coordinated care and agree to be held accountable for the overall costs and quality of care for an assigned population of patients. The payment model ties provider reimbursements to performance on quality measures and reductions in the total cost of care. Under an ACO arrangement, providers in the ACO agree to take financial risk and are eligible for a share of the savings achieved through improved care delivery provided they achieve quality and spending targets negotiated between the ACO and the payer.
- **Bundled payments^{**}** are a method in which payments to health care providers are based on the expected costs for a clinically defined episode or bundle of related health care services. The payment arrangement includes financial and quality performance accountability for the episode of care.

ASPE identified 16 research questions that were the focus of this review, organized by three broad areas of inquiry: (1) measuring the performance of VBP programs; (2) the results of performance in VBP programs; and (3) improving the performance of VBP programs. We used three approaches to gather information to address the questions:

- **Environmental scan of existing value-based purchasing programs:** We reviewed information that was publicly available for 129 VBP programs (91 P4P programs, 27 ACOs, and 11 bundled payment programs) sponsored by private health plans, regional collaboratives, Medicaid agencies or states, and the federal government. The VBP programs we reviewed do not represent the universe of all VBP programs in current operation in the United States, and the documentation for some programs we reviewed was not complete given the propriety nature of the information.

- **Review of the published evaluation literature on value-based purchasing:** We examined the peer-reviewed published literature for studies that evaluated the impact of P4P, ACO, or VBP-type bundled payment programs.
- **Input from a technical expert panel:** We convened a technical expert panel (TEP), composed of VBP program sponsors, providers from health systems who have been the target of VBP programs, and health services researchers with expertise in examining the effects of VBP programs, to help address many of the study questions where the literature was void of information. We provided the TEP with the findings from the environmental scan and the literature review as background information for the panel's discussions.[\[14\]](#)

Summary of Findings

We summarize the findings from the environmental scan of existing programs, the literature review, and our discussions with the TEP in an integrated manner. The findings are organized by the topic areas we were asked to address in the scope of work for this project. We direct readers of this summary to its companion report, *Measuring Success in Health Care Value-Based Purchasing Programs: Summary and Recommendations*, which provides a set of recommendations that emerged from our review and TEP discussions.

Goals of Value-Based Purchasing Programs

Based on our review of VBP programs in operation, VBP program sponsors tend to identify multiple high-level goals that focus on improving clinical quality (75 percent of the programs we reviewed) and cost/affordability (53 percent of the programs we reviewed). Less commonly reported were goals related to improving patient outcomes (34 percent) and patient experience (17 percent). There was some variation in goals among VBP program type, with goals focused on coordination of care and patient experience more prevalent in ACO and bundled payment programs as compared with P4P programs.

In most cases, the goals specified by VBP program sponsors were not quantified or measurable (e.g., “breakthrough improvement in quality” or “bend the cost curve”). In a handful of cases (five of the 129 programs we reviewed), we found quantified goals related to desired cost savings (e.g., “keep 2010 health care premium costs flat” and “reduce the annual increase in cost of care by two percentage points”). Our inability to find the specific performance goals for many of the VBP programs, particularly programs sponsored by private-sector payers, is likely a function of the proprietary nature of this information. Performance measures and thresholds are embedded within the contracts negotiated between providers (i.e., physicians, physician organizations, hospitals) and payers.

The absence of quantifiable goals for many programs makes it difficult to determine whether programs have been successful in meeting their goals; instead, evaluators and program sponsors typically examine whether performance on the incentivized measures improved over time. Given this difficulty, the TEP recommended that individual VBP program sponsors establish well-defined, measurable intermediate goals (i.e., program performance targets) derived from external benchmarks and use these to assess success.

Our discussions with the TEP also revealed support for VBP programs having broad goals, and panelists commented that beyond driving improvements in quality and costs, the larger goal of VBP is to transform the way care is delivered to enhance performance. TEP members outlined the following additional goals that they believed would be important to establish and potentially measure to assess VBP program success:

- **Stimulate organizational nimbleness to rapidly learn and improve in order to achieve a new performance target.** TEP members indicated that a key goal of VBP is improving the functional capacity of providers to learn and improve. Therefore, it is important to understand whether there is capacity in health systems and provider organizations to improve quality against a moving target, and whether performance levels can be maintained once targets are achieved. TEP members commented that VBP programs should affect providers' willingness to change, their measurement capacity to identify problems, and their ability to respond to correct quality defects.
- **Promote innovation.** The panelists commented that part of the value of VBP is the innovation that occurs to fix the fundamental problems leading to poor quality and outcomes within provider organizations and, ideally, across providers in response to the incentive scheme. Examples they cited were the creation of more integrated data systems to improve communication between providers, the development of care management protocols that span care settings to improve transitions in care between the hospitals and ambulatory settings, investments in registries that allow physicians to track and better manage high risk populations, the development and use of risk assessment tools, and provision of clinical decision support. There was interest among the TEP panelists in capturing whether and how VBP initiatives are stimulating innovation.

Although the TEP identified a desire to understand whether VBP is successful in helping to make providers “more nimble” and to “improve their functional capacity for learning and improvement,” it remains unclear at this stage what providers would need to demonstrate to prove that these aspirational goals had been met. To the extent that these are desired characteristics that VBP program sponsors want to encourage, work is required to define what is meant by these concepts so that VBP sponsors could determine whether this evolution has occurred.

The TEP also discussed whether success should be defined by levels (i.e., absolute performance achieved) or by the counterfactual (i.e., the extent of improvement in performance compared with what it would have been absent the VBP program). A VBP program sponsor may consider a program successful if a certain level of performance is met, whereas researchers would consider a program successful if greater improvements in performance occurred for those providers exposed to VBP as compared with those who were not (i.e., the comparison group). The latter perspective is important because quality may be improving broadly over time as a function of a variety of factors, such as quality improvement interventions and infrastructure improvements distinct from actions undertaken in response to the VBP program, so providers may reach the stated goals in the absence of a VBP program. This discussion highlighted important differences in what program sponsors, policymakers, and researchers are interested in evaluating and what defines success.

The VBP program sponsors on the TEP felt that study designs need to be adapted to fit with the needs for making policy change, such as more rapid but less rigorous initial evaluation cycles to guide decisions about fine-tuning program design. They cited the initial Premier HQID design, which was changed based on less rigorous evidence; the changes were needed to restructure the incentives to achieve more engagement from poorly performing hospitals.

Measures Included in Value-Based Purchasing Programs

Our review of public documents from VBP programs revealed there is a relatively narrow set of measures included in VBP programs that are used as the basis for differential payments. The measures vary somewhat by the health care settings in which they are being deployed as well as by the type of VBP model.^{***} Historically, P4P programs have focused on quality performance, while the newer VBP models

(ACOs and bundled payments) incentivize providers for both cost and quality; however, P4P programs have been evolving over time to include more cost and use measures. P4P programs typically include measures of clinical process and intermediate outcomes (e.g., Healthcare Effectiveness Data and Information Set [HEDIS] or Joint Commission measures), patient safety measures (e.g., surgical infection prevention), utilization (generic prescribing, emergency department use, length of stay, ambulatory care sensitive hospital admissions), patient experience (i.e., Consumer Assessment of Healthcare Providers and Systems survey, Hospital Consumer Assessment of Healthcare Providers and Systems survey), and, to a more limited degree, outcomes (e.g., readmissions, mortality, complications, total cost of care or cost per episode) and structural elements (e.g., HIT adoption or meaningful use of HIT requirements for CMS incentive payments, National Committee for Quality Assurance certification or patient-centered medical home certification, staffing, inspections). Clinical measures in the ambulatory setting focus heavily on preventive care and management of heart disease and diabetes, while in the hospital setting, the focus has been on heart attack, congestive heart failure (CHF), pneumonia, and surgical infection prevention.

The three ACO program models being tested by CMS use 33 measures, which include HEDIS clinical processes and intermediate outcomes; Consumer Assessment of Healthcare Providers and Systems survey questions on patient experience; all-cause hospital readmission; ambulatory sensitive care hospital admissions; patient safety; and electronic health record (EHR) functionality. Private-sector ACOs are using a similar set of measures, and again the clinical focus has been on three highly prevalent chronic conditions (i.e., heart disease, diabetes, and hypertension), cancer screening, and immunizations. The measures included in bundled payment programs tend to vary by the condition or procedure included in the episode as well as the setting(s) in which care is delivered. Cost measures are most commonly used. In the hospital setting, where most bundled payment programs occur, measures include clinical process, patient safety, readmissions, mortality, length of stay, and total cost of care. Some programs avoid tying physician compensation to outcome measures, so that physicians will not hesitate to treat patients who are more complicated. Little public information is available regarding the measures that are being used in ambulatory care bundled payment programs. Some of the VBP programs we reviewed are signaling that they intend to move to patient-reported outcomes in the next few years, but they are struggling to find market-ready measures that can be readily applied.

The discussions with the TEP highlighted problems with the narrow set of measures typically being used in VBP programs. The TEP estimated that only a small fraction (less than 20 percent) of all care that is delivered by providers is addressed by performance measures in VBP programs. An exception is “total cost of care” contracts (which as of late 2013 apply to only a small number of organizations) that hold providers accountable for the cost of all or most care delivered but which only measure quality performance for a fraction of all care delivered by providers. It was the panelists' opinion that the current, narrow set of measures tends to encourage providers to narrowly focus improvement efforts on the things that are measured (teaching to test) rather than wholesale improvement. The TEP also expressed concern that it is hard to demonstrate that VBP programs lead to performance improvements when the incentivized measures are the same set of measures that have been used for nearly a decade (i.e., Joint Commission measures, HEDIS); many of these measures have less room for improvement and, in some cases, have topped out. Panelists commented that shifting measurement focus to areas where performance is lagging^[15] would better address the question of whether VBP can improve the delivery of care in areas not previously the focus of reporting and incentives. With respect to what is measured, the TEP questioned whether VBP programs are addressing areas with the greatest impact on health. While medical care can influence health outcomes, the TEP observed that lifestyle behaviors (diet, exercise, smoking, etc.) contribute roughly 50 percent to determining health outcomes.

Another measurement challenge the TEP flagged was the inability to assess value because of the lack of an agreed-upon definition of value and that providers' lack of cost accounting systems that enable them to know the true cost of delivering care. Many organizations have struggled with how best to measure and convey value to providers and consumers, highlighting the need for measure development in this area. Although they did not offer a definition of value, the TEP members thought that a first step would be to achieve consensus on an overarching view of what value means; then VBP sponsors could develop value measures in the context of their own programs.

Many members of the TEP thought that a broad and more comprehensive set of measures in VBP programs would create incentives for providers to perform well across the board, rather than focus narrowly on a small number of areas, which promotes “teaching to the test”—that is, focusing only on improving areas that are measured and incentivized by the VBP program and ignoring clinically important areas that are not. However, neither the literature nor the TEP addressed how many measures are reasonable or practical to implement or when the data collection burden on providers becomes excessive. Expanding the set of measures included in VBP programs to more comprehensively assess care delivered and to include infrequently captured measure domains will require the development of new measures and new types of measures. Developing new measures is a time- and resource-intensive activity. Measurement concepts must be defined, specifications developed, data collection processes piloted, and data validated, among other steps. Recognizing this, the TEP recommended that it would be important to develop a framework to guide future directions about what to measure and, in turn, what measures need to be developed. They stated that the framework should address the multiple levels at which behavioral change needs to occur and where interventions should be directed (i.e., health system, institution, and individual provider).

The TEP identified several areas, discussed below, that should be the focus of future measure expansion work in the context of VBP.

Measuring Patient Outcomes and Functional Status The TEP members agreed that the ultimate objective of VBP is to hold providers accountable for and financially incentivize provider performance primarily based on measures of health outcomes. CMS expressed that is moving toward increased accountability for outcomes in its hospital and physician VBP programs, and is seeking to find a balance of structure, process, and outcome measures in its programs. An example of this transition to outcomes is illustrated in the hospital VBP program. In the first year of hospital VBP, 70 percent of the measures were process measures, whereas in the second year the percentage drops to 30 percent, as currently outlined in CMS's proposed Notice of Rule Making.^[16,17] Questions remain about the pace at which CMS should push toward outcomes measurement, the types of outcomes to use, and the consequences of those actions.

There was sentiment among the TEP members that functional status/health status is an important, feasible measure and that inclusion of these types of measures would shift VBP programs in the direction of incentivizing performance on outcomes. TEP members pointed to several health care settings and providers that are already measuring functional status on a regular basis: Medicare ACO programs are paid for reporting patient-reported functional limitations, and CMS collects health status information in nursing homes and home health agencies. The Dartmouth Institute is measuring quality-adjusted life years and has built functional status, which is considered a vital sign, into a provider order for life-sustaining care for patients who are at or near the end of life. Other provider representatives stated they are also measuring health status for some conditions. The TEP suggested that CMS could implement the Patient Reported Outcome Measures (PROMs), as the National Health Service in the United Kingdom has done, to measure the performance of hospitals regarding the functioning of patients undergoing selected procedures.

Measuring Appropriateness of Care TEP members were supportive of including measures of appropriateness (i.e., overuse) in VBP programs, but panelists recognized that additional work is required to develop the definitions and engage providers in using these measures. They cautioned that without an external impetus, providers have little incentive to use practice guidelines or protocols that might withhold care due to the current fee-for-service and malpractice systems, which instead provide an incentive to increase the use of diagnostics and procedures. The TEP commented that providers under risk-sharing arrangements (e.g., ACO and total cost of care contracts) will be more likely to implement appropriateness guidelines, because the financial incentives they face are aligned with focusing on reducing the overuse of services that are not deemed appropriate. Based on direct experience, members of the TEP observed that when implementing appropriateness criteria measures in a health system, it can take years to get providers to buy-in related to establishing the criteria and being held accountable for performance against the criteria. TEP members suggested that measurement of shared decisionmaking is one of the keys to implementing appropriateness of care. A TEP representative of one health system noted the provider is piloting a process of “patient appropriate order entry” where the specialist has to attest that he or she held a discussion with the patient about the appropriateness of the care being recommended. Another TEP member recognized the challenge that physicians could face if appropriateness of care metrics are in conflict with patient preferences.^[18]

Enhancing the Ability of Electronic Health Records to Support Performance Measurement and Improvement

There was widespread agreement among the TEP members that it is important to incentivize and help providers build the infrastructure for quality improvement. EHRs may facilitate measurement and improvement, but the TEP did not see this happening in the near term. Based on their experiences to date, the panelists expressed concern that most EHRs are far from including a comprehensive set of standardized data in data fields that can readily produce data needed to support the construction of performance measures, in part because providers who are the customers for EHRs are not demanding that EHRs be able to generate this type of information. Meaningful use requirements^{****} currently require that EHR vendors build functionalities in EHRs to support reporting from a select list of quality measures. This is very different than freeing up the EHR data for use by providers for their own performance monitoring, improvement, and broader performance measurement. For example, some delivery systems have EHRs and registries that give providers alerts at the point of care on the patients' status with respect to a given measure and/or that allow providers to benchmark their performance on measures against their peers. ASPE staff commented that ASPE is working with the Office of the National Coordination for Health Information Technology, which is the lead federal agency responsible for meaningful use requirements, to make EHRs function more effectively to facilitate automated capture and reporting of quality measures, but this will be a long process.

Types of Incentives

The review of public documents from program sponsors found that the types of financial incentives offered to providers have expanded beyond bonuses that have been commonly used in P4P programs, and which work at the margin, to a stronger set of incentives that more fundamentally alter payment arrangements. Examples include changes to fee schedules, shared savings arrangements (either alone or combined with bonuses or shared risk, in which the ACO loses money if targets for reducing patient costs are not met), and global budgets (i.e., overarching payment for all care delivered to a patient, similar to capitation). Most of the ACOs reviewed in our environmental scan have shared savings arrangements, and a few have shared risk. VBP programs often use combinations of financial incentives to drive change. The

Blue Cross Blue Shield of Massachusetts Alternative Quality Contract (AQC)—an ACO-type arrangement—allows for shared savings and shared risk and offers a bonus payment up to 10 percent above the global budget based on performance on quality measures. The majority of the bundled payment programs for which we were able to identify information are offering shared savings to providers, while others adjust the episode fee based on quality performance.

Although our review of the literature on VBP did not include a review of the use of consumer incentives, the TEP highlighted the importance of working to align incentives for consumers. Panelists commented that creating incentives to drive patients toward higher-performing providers could strengthen the impetus for providers to improve and might be more effective in shifting performance up than current P4P incentives that attempt to influence provider performance at the margin. CMS commented that it is already taking a number of actions in its VBP programs to affect consumer market behavior. For example, if a Medicare Advantage plan is consistently low-performing for three years, beneficiaries are not allowed to enroll online in that plan. Additionally, CMS sends letters to beneficiaries who are enrolled in low-performing Medicare Advantage plans and encourages them to shift to high-performing “five Star” plans; to facilitate plan switching, beneficiaries in low-performing contracts have the option of changing plans any time during the year. Panelists recommended that CMS continue to explore using tools like these to push quality improvement in a strategic way.

Type of Benchmarks/Thresholds

An important design element of any VBP program is the performance benchmarks or thresholds that are used to determine who will receive an incentive payment. In some cases, these are absolute, fixed benchmarks (e.g., provider must have at least 90 percent performance on mammography screening), while in other cases benchmarks are relative (e.g., the provider's performance must be in the top 20th percentile of performance), and as a result the absolute score required to reach the percentile cut-point changes year to year. Some VBP programs reward providers for attaining specific benchmarks, improving over time, or a combination of attainment and improvement.

We were only able to find information about the types of benchmarks used for a third of the VBP programs in our environmental scan. There was no publicly available information about the benchmarks being used by bundled payment programs. Among P4P programs, the most common benchmark used was an absolute threshold only, followed by relative thresholds only, which may be based on the performance of peers in the market, the state, or nationally. Other programs, such as the CMS Hospital VBP program, have two paths to earning incentives: attainment against an absolute threshold or showing improvement over time.

Very little information was publicly available about the types of benchmarks being used for ACO models, as these are developed in the context of private negotiations between payers and providers. The exception was the three CMS ACO demonstration models. In its shared savings programs, CMS is establishing the cost benchmark for each agreement period for each ACO using three-years-prior expenditure data. Quality benchmarks are based on national percentile rankings from the year prior, and points are assigned on a sliding scale based on the ACO's performance. For 2013, the Pioneer ACO program measures and rewards improvement on the quality measures. The Physician Group Practice demonstration, the precursor ACO demonstration that CMS ran, utilized absolute thresholds for quality measures.

The literature highlights some of the issues associated with use of different types of benchmarks. Providers report disliking relative thresholds,^[19, 20] for several reasons. First, providers do not know ahead of time what actual level of performance is required to obtain the incentive payment, creating much uncertainty about whether their performance is “good enough.” Second, when topped-out measures are included in the

VBP program, providers may have very high performance that does not meet the necessary threshold to receive the incentive, but yet is not meaningfully different from the performance of providers that do receive the incentive payment. For example, the initial design of the Premier HQID in Phase 1 of the program's implementation only paid hospitals that were in the top 20th percentile of performance. Performance rates for a large proportion of the hospitals hovered around 99 percent on a number of the measures, and which hospitals received the incentive payment was based on differences in performance at the second decimal point. In response to this problem, CMS changed the incentive structure in Phase 2 of the Premier HQID to reward above-average achievement and improvement.

A relative incentive structure can promote a “race to the top,” creating perverse incentives for providers to allocate resources to improvement on a measure that may not yield the greatest clinical benefit and which may lead to overtreatment of patients. Achieving 100 percent performance on a measure also may not be appropriate and may lead to overtreatment. No matter how well the performance measure is constructed, and despite attempts to exclude from the denominator patients who should be excluded, it is unlikely that any process measure will be applicable to 100 percent of the population. In practice, there are often sound reasons why some small percentage of patients does not receive recommended processes of care. These reasons include patient preferences regarding treatment, contraindications to recommended therapy (e.g., allergies or intolerance of medications), prior rare side effects, and the clinical challenges of balancing treatment of multiple clinical conditions and interactions between medications. Typically, the patients in the upper tail of the distribution differ from patients in the other 95 percent of the distribution in ways that performance measurement typically is not very good at systematically capturing through exclusion criteria. In these cases, not providing the recommended care is not an error in care. In the UK Quality Outcomes Framework P4P program, where providers are allowed to exclude patients from the measure calculation (i.e., exception reporting), a median of 5.3 percent of patients were excluded from performance measure calculations. Exception reporting occurred most often for performance measures related to providing treatments and achieving target levels of intermediate outcomes.^[21] U.S.-based VBP programs do not typically allow providers to exclude patients from reporting.

TEP members noted that while establishing absolute attainment thresholds is preferred by providers, some payers express concern that this approach removes the motivation for providers to continue to improve once the threshold has been attained. Paying all who achieve an absolute attainment target also creates budgeting challenges for payers, who will not be able to estimate how many providers they will need to pay; if the payer sets a fixed incentive pool, the more providers who succeed results in a smaller incentive payment per provider. Some VBP sponsors have set multiple absolute targets along a continuum to motivate improvement at all levels of performance and to continue to motivate improvement at the top end of the performance distribution.

Performance of Value-Based Purchasing Programs

VBP program sponsors and evaluators have primarily assessed whether improvements have occurred in the measures that were incentivized through VBP. Efforts to disentangle the VBP effect from other interventions designed to improve the delivery of health care locally and nationally (e.g., investments in HIT, enhanced quality improvement, and public reporting) have proven more challenging to study, because the natural experiments typically lack robust comparison groups. Furthermore, contextual factors and how they may contribute to any observed impacts are rarely considered.

The TEP highlighted some of the challenges with evaluations conducted over the past decade: (1) the measures included in a VBP program are often also included in national performance measurement and

public reporting programs (e.g., CMS) and the VBP programs by other private sponsors, making it difficult to tease out the effect of any individual VBP program; (2) the presence of other incentives (e.g., public reporting/transparency of performance results) make it difficult to isolate the effects on incentivized measures of the financial incentives; (3) there is usually no comparison population when a VBP program is implemented statewide or nationally; (4) the size of payment incentives is often small; (5) VBP programs typically have used the same core measures (i.e., HEDIS, Joint Commission measures) that have been used for more than a decade and are largely “topped out”; and (6) there is a substantial lag for the data required to assess impact, such as data on avoiding admissions and readmissions.

Clinical Quality

Pay-for-Performance We identified 49 studies that examined the effect of P4P on process and intermediate outcome measures: 37 studies examined the effect of P4P on process measures for physicians or physician groups; [5, 8, 10, 22–52] 11 studies examined the effect of P4P on process measures in the hospital setting; [53–60] and a single study examined the effect of P4P on process measures in other care settings. [61] The published studies have focused on assessing a few large P4P interventions (e.g., the Premier demonstration, the Physician Group Practice demonstration, the Integrated Healthcare Association P4P program, the Blue Cross Hawaii P4P program, the Massachusetts multi-plan P4P program, the UK Quality Outcomes Framework P4P program, and more recently the Blue Cross Blue Shield of Massachusetts AQC) and a number of very small-scale incentive experiments that were of short duration.

Overall, the results of the studies were mixed, and studies with stronger methodological designs were less likely to identify significant improvements associated with the P4P programs. Any identified effects were relatively small. Studies with weaker study designs mostly found that P4P was significantly associated with higher levels of quality, and many reported substantial effect sizes.

Accountable Care Organizations We identified six evaluations (of five distinct ACO programs) examining the effect on quality of care associated with implementing an ACO or ACO-like model (e.g., the Blue Cross Blue Shield of Massachusetts AQC, which is a global budget total cost of care contract, and the CMS Physician Group Practice demonstration, which was a precursor to the CMS ACO demonstrations). Five of the studies investigated the effect of the ACO on a small number of process-of-care measures [62–66] and showed greater improvements than controls on some but not all of the measures. In addition to these evaluations, CMS issued a press release on the early experiences of the Medicare Pioneer ACO on July 16, 2013. [67] In the first performance year, the Pioneer ACOs had higher performance overall than the Medicare fee-for-service beneficiary comparison population on the 15 quality of care measures reported, but it was not reported whether the Pioneer ACOs had greater improvements or just higher baseline performance. At this stage, it is difficult to discern the effects of ACOs on quality, given the newness of the ACO model and the short period of implementation.

Bundled Payments Of the three studies of bundled payments that include value-based payment design elements (cost and quality components), only one study examined the effect of bundled payments on process measures. The study found that adherence on 40 clinical process measures increased from 59 percent to 100 percent. [68] However, this study was conducted in a single integrated health system with unique characteristics that make generalizing the findings to other providers difficult. A recent systematic review of the bundled payment literature showed inconsistent effects on quality measures associated with implementing bundled payment arrangements. Most of the bundled payment programs reviewed in this study did not include quality elements as part of the incentive formula; in these instances, the evaluators sought to determine whether the application of bundled payments resulted in undesired effects on quality.

Outcomes We reviewed 21 studies that evaluated the effect of P4P on outcomes in physician groups (12), hospitals (6), and other settings (3). In the physician practice setting, the studies generally focused on a small number of intermediate diabetes outcomes and found mixed results. Of the studies we rated as fair- and poor-quality in terms of their design, three[29, 33, 46] found between 2 and 22 percent improvement in the percentage of patients with HbA1c control, while another studies found no effect.[27] There was only a single study rated as good-quality,[69] and it found that changes in diabetes intermediate outcome measures (e.g., percent of patients with HbA1c and lipid control) were not statistically significant from the comparison group. Four studies focused on other types of health outcome measures. One good-quality study[70] found that a P4P program focused on prenatal care for pregnant members of a union health plan led to a reduction in admissions to the neonatal intensive care unit (NICU), but no reduction in low birth weight. Three fair- and poor-quality studies[24, 39, 50] found no effect on mortality, readmission, or incident of major health events (e.g., stroke or heart attack), but did find a slight reduction in initial hospitalizations.

The studies in the hospital setting focused primarily on measuring the effects on mortality. Three of the studies that focused on outcomes were deemed to be of good methodological quality and found mixed results. Glickman[53] found no evidence that in-hospital mortality improvements were incrementally greater at P4P hospitals in the CMS Premier HQID program, while Ryan[71] found no evidence that the HQID had a significant effect on risk adjusted 30-day mortality acute myocardial infarction, CHF, pneumonia, or coronary artery bypass graft (CABG). Sutton et al.[72] found that risk-adjusted mortality for the conditions included in the P4P program decreased by 1.3 percent compared with controls in a study evaluating a program in the UK modeled after CMS HQID. Another study by Jha et al.,[73] which we deemed to be of fair quality, found no differences in a composite measure of 30-day mortality between hospitals in the HQID demonstration and hospitals exposed to pay-for-reporting. Mortality declined similarly across the two groups of hospitals (0.04 percent per quarter), and mortality rates were similar after six years of the pay-for-reporting demonstration. When considering the results from this study, it is important to note that hospitals exposed to the pay-for-reporting incentive increased their performance on the process measures similarly to pay-for-reporting hospitals, and both sets of hospitals topped out performance on these measures, so that there was no variation in performance to detect a differential effect.

One study,[74] which we rated as good, evaluated five states' Medicaid P4P programs in nursing homes and found that three of six outcome measures (the percentage of residents being physically restrained, in moderate to severe pain, and having developed pressure sores) improved a negligible amount, between 0.3 and 0.5 percent one year after P4P implementation. Performance on other targeted quality measures either did not change or worsened. Based on this study, it is unclear what the effects of P4P in the nursing home setting are. We also reviewed two studies that we deemed to be of fair quality. Hittle et al.[75] found that only two measures (improvement in pain interfering with activity and improvement in urinary incontinence), which were non-incentivized, showed significant differences between treatment and control home health agencies across one intervention year; otherwise, no differences were found in the incentivized measures. Shen[76] found that P4P was associated with a reduction in the proportion of clients in substance abuse clinics classified as most severely ill for three years post-intervention.

Among the studies evaluating ACOs, there is limited evidence that ACOs may reduce hospital readmission rates.[62, 63] Only one bundled payment study investigated the effect on health outcomes, and it found no effect.[68]

Costs

Pay-for-Performance Few studies have investigated the impact of P4P on costs. The studies with the strongest study designs report mixed effects on costs in the physician or physician group setting.[40, 70] Two studies with weak designs[3, 39] found evidence of significant cost savings and a positive return on investment. We found only two studies that specifically investigated changes in costs in the hospital setting. Both of these studies were based on the HQID, and neither found any significant effects on hospital costs, revenues, margins or Medicare payments.[77, 78]

Accountable Care Organizations All of the studies we reviewed attribute various degrees of cost savings for the shared savings payment model, but not all of the individual ACOs were able to generate statistically significant savings relative to controls.[65, 66, 62–64] CMS also reported that the costs for the Pioneer ACO beneficiaries increased 0.3 percent in 2012 compared with 0.8 percent growth for similar Medicare fee-for-service beneficiaries. While 13 of the 32 ACOs shared savings with CMS, two Pioneer ACOs had shared losses. Two Pioneer ACOs were leaving the ACO program, and an additional seven were switching to the Medicare Shared Savings Program, which involved less risk to providers. Because there were only six studies of four programs, the studies were of short duration, and several had poor or no comparison group, the evidence is insufficient to make conclusions about the impact of ACO payment structures on costs.

Bundled Payments Of the two studies investigating the impact of bundled payments, both identified reductions in costs. One found a reduction in hospital charges of around five percent,[68] while another found a reduction in costs per case of roughly \$2,000 over a two-year period.[79] The systematic review that documented the impact of implementation of 19 bundled payment programs[1] found that all programs showed declines of 10 percent or less in spending and utilization.

Unintended Effects We examined undesired behaviors (often referred to as unintended consequences) and spillover effects to assess any unintended effects from these programs. Undesired effects include provider gaming of the data used to generate scores, ignoring other clinically important areas that are not measured and incentivized by the P4P program, avoiding sicker or more challenging patients when providing care, providing care that is not clinically recommended, and overtreating patients. Other undesired effects are an increase in disparities in treatment or outcomes among patients and the VBP program having harmful effects on providers who serve more challenging patient populations. Spillover effects occur when changes made to improve areas measured by VBP programs extend to other areas not included in the VBP program. The literature was sparse related to undesired and spillover effects; few studies have looked at the main effects of VBP interventions, let alone their side effects.

Pay-for-Performance We identified 21 articles that examined undesired behaviors and spillover effects in P4P programs. Most of the published evidence regarding undesired effects related to application of P4P shows either small or no effects. However, recent studies in the Veteran's Administration found evidence of overtreatment of patients with hypertension and diabetes associated with use of intermediate outcome measures that use thresholds.[80–82] These authors have called for moving from the current class of dichotomous target measures (i.e., met or didn't meet a threshold such as HbA1c <7), where there is a push to get all patients to the threshold, to a set of improved performance measures that focus on giving providers credit for appropriate clinical actions taken (intensification of medications, being on maximal medications, contraindications to further treatment, etc.) and which account for individual risks and preferences. An improved set of performance measures could help reduce incentives to overtreat patients. In addition to the selection of appropriate performance measures, VBP program sponsors should conduct monitoring studies[83] to assess whether and how often patients may be receiving inappropriate treatment so that they can adjust the measures included in VBP programs to mitigate these effects. The lack of

evidence on observed negative effects in other P4P studies may be due to the fact that many of the P4P interventions studied were small in scale, of short duration, and did not have substantial amounts of revenue at risk that might encourage providers to engage in undesired behaviors.

Our review of the literature found a small number of studies (n=5) that examine whether P4P programs have spillover effects. The P4P studies have found mixed effects, with some finding no effects (either positive or negative) on measures that were non-incentivized,[[53](#), [84](#)] one finding negative effects,[[85](#)] and, in a few cases, evidence of improvement on non-incentivized measures within the same conditions that were the target of the incentives.[[42](#), [86](#)] The evaluation of the UK Quality Outcomes Framework P4P program found that both incentivized and non-incentivized measures improved between 2004 and 2005 for asthma, diabetes, and heart disease, but that the mean quality scores for aspects of care that were not linked to incentives (only for asthma and heart disease) declined between 2005 and 2007 while the mean scores for the incentivized measures continued to increase. Group practices participating in the CMS Physician Group Practice demonstration reported implementing a variety of quality improvement and care management programs, information technology, and patient registries, all of which have the potential to improve quality of care beyond the measures included in the demonstration; however, no spillover effects were measured.

Accountable Care Organizations Because these models are newly being implemented and have yet to gain experience, there are no studies that have examined unintended consequences in ACO models, and only one study that assessed spillover effects. A recent study by McWilliams et al.[[87](#)] found spillover effects to the Medicare population from implementation of the Blue Cross Blue Shield of Massachusetts's AQC, which targeted commercial HMO enrollees. This study examined changes associated with the AQC in spending and quality of care for traditional fee-for-service Medicare beneficiaries and found that the AQC was associated with lower spending for Medicare beneficiaries but not with consistently improved quality. The AQC evaluation research team also has examined the effect on quality measures not included in AQC, particularly for children with special needs; in this case, they observed more improvement for generic prescribing measures, but no effect on other measures that were not incentivized. Within the AQC practices, improvements were larger for ACQ members (HMO members), and there did not seem to be spillover effects to the Blue Cross Blue Shield of Massachusetts PPO members; by extension, the study team doubted there would be spillover improvements for PPO patients for other health plans. A TEP member who represented the AQC cited two possible reasons for the absence of spillover effects: (1) Blue Cross Blue Shield of Massachusetts has provided physician practices with better data on ACQ members than other plans' members, so a provider's behavior changes only for the AQC patients, since they have better data to manage those patients; and (2) the practices have used case managers and other resources for high-risk subgroups covered by the AQC, and these resources are not available for other high-risk patient populations they serve. Other TEP members agreed that this is a common occurrence, as health plans focus on providing resources for their members who are the focus of the VBP programs.

ACOs are expected to implement a variety of quality improvement and care management programs, information technology, and patient registries, which have the potential to improve quality of care more broadly and which could generate positive spillover effects. Some researchers and policymakers have expressed concerns that the formation of ACOs may lead to greater market concentration and have the adverse effect of raising prices; the TEP expressed similar concerns. One TEP member commented that in Massachusetts, a law was passed in 2012 that sets a maximum rate of growth in health care spending by providers and hospitals, which holds providers accountable. This law established guardrails and protects against the effects of excessive consolidation. The TEP suggested that a similar law in other states or

nationally could be a strong policy lever to guard against this type of behavior.

Bundled Payments We found no evidence of unintended effects or spillover effects from the three studies of bundled payments that included quality measures. The Hussey et al.[[1](#)] review of the broader bundled payment literature highlighted the types of undesired effects that it has been hypothesized might occur in the context of bundled payment arrangements: increasing the number of bundles (volume), underuse of appropriate care services that may lead to poorer outcomes for patients, selection of low-risk patients into the bundles and avoidance of high-risk (potentially more expensive) patients, upcoding to maximize payment for the bundle, and moving services in time or location to qualify for separate reimbursement. However, Hussey et al. found limited evidence on unbundling services and upcoding, but consistent evidence regarding shifting services to other settings of care (e.g., from inpatient to outpatient). There was little evidence that there were major effects on quality; rather, the findings were mixed, with some measures having improved while other worsened.

The TEP supported the need to monitor spillover effects in VBP programs. To assess spillover effects on quality requires access to data for other measures (within the same clinical condition or addressing other clinical conditions) that were not incentivized by the program, something that most programs do not routinely collect. The TEP also identified multiple possible unintended consequences, the occurrence of which should be monitored, including the loss of revenue for providers caring for disadvantaged populations, the excessive exclusion of patients when that is an option in the program, access barriers and patient turnover from practices related to providers avoiding more difficult patients, and market concentration and price effects in the context of ACOs.

Effect on Disparities Many P4P studies have commented about possible unintended effects for patients of low socioeconomic status (SES) and the providers that serve these populations (e.g., safety net clinics and hospitals). Examinations of whether VBP programs work to reduce or increase disparities are challenged by the lack of information at the patient level on race, ethnicity, education, SES, and other markers of vulnerable populations prone to disparities.

We found only five empirical studies that assessed the effects of P4P on disparities. Among the four studies that evaluated U.S. P4P programs, three found no effects related to increasing or decreasing racial/ethnic or SES disparities while one[[88](#)] poor-quality study found very small significant differences in baseline performance for hospitals with a high disproportionate share hospital (DSH) index comparing HQID P4P and pay-for-reporting hospitals (between -0.5 percent and -1.1 percent lower performance for high DSH-index hospitals versus non-high-DSH-index hospitals). Three years post-HQID-intervention based solely on attaining performance in the top 20th percentile of performance distribution, there were modestly greater gains (only a few significant) for the high-DSH-index hospitals compared with the non-high-DSH-index hospitals exposed to P4P (e.g., 0.6 percent to 1.2 percent higher), and no differences in performance were observed between high-DSH-index and non-high-DSH-index hospitals exposed to P4P. This study should be interpreted in light of the fact that differences at baseline were negligible, and nearly all hospitals in both the P4P and pay-for-reporting groups topped out their performance on the clinical process measures that were the focus of this study.

The 2010 Ryan study,[[89](#)] which had a strong design, found no negative access effects related to avoiding treating minority patients after introduction of the Premier HQID. A more recent (2012) study by Ryan et al.[[58](#)] found that changes to the HQID incentive structure between Phase I and II of the program resulted in a redistribution of available incentive payments, with a greater proportion going to hospitals with greater socioeconomic disadvantage (as measured by the DSH index). This effect was a function of

changes in the structure of the incentive and not due to lower-performing hospitals actually improving more.[90] This study found that disparities neither had worsened nor reduced. A study from the United Kingdom[91] showed a lessening of the disparities gap in performance among primary care practices, with measures largely topping out on performance; however, the results of this study are not generalizable to the United States due to substantial differences in the delivery system (national health system, national HIT platform in primary care practices) and design of the P4P program. There are currently no empirical studies on disparities for either ACO or bundled payment VBP models.

A TEP member from one large commercial health plan noted that a global-budget contract model with strong quality incentives had driven important gains in closing racial and ethnic disparities. This is because a few medical groups with a low-SES patient mix worked to innovate with their population and to get their doctors to improve quality. These provider groups with low-SES patient populations actually achieved some of the highest gains and absolute quality scores in the state. However, this was not a universal finding among all groups with low-SES patients.

While the TEP recognized the importance of monitoring the effects of VBP programs on disparities in care, panelists also noted that assessing the effect of VBP on disparities is difficult to monitor due to the lack of routinely collected data on the demographic and socioeconomic characteristics of patients. TEP members indicated that they had faced challenges in capturing this information, despite their interest in capturing self-reported language, health literacy, and indicators of patient vulnerability to help improve their ability to work with patients. However, several providers on the TEP stated they were making inroads in the data they capture to be able to examine disparities. For example, one delivery system has a mandatory data gathering protocol for zip code, race, and ethnicity.

Characteristics of High- and Low-Performing Providers There is limited evidence characterizing high- and low-performing providers under VBP. The few studies that do describe characteristics of high- and low-performing providers have been opportunistic in defining the characteristics based on the variables that were available to them (e.g., provider size and type), rather than considering a broad set of factors that might differentiate high and low performers. The TEP noted that the American Medical Group Association has developed a set of elements for what defines the characteristics of a high-performing health system; [92] however, it remains untested whether these elements differentiate high and low performers under VBP.

Most of the studies that looked at provider characteristics focused on physician or physician group P4P programs. The limited literature shows that higher-performing providers tend to be large provider organizations,[7, 43, 69] have a medical group rather than an independent practice association organizational structure, have more HIT infrastructure,[93–96] and have been historically high performers. Other studies find that high performers engage in more care management processes,[7] use order sets and clinical pathways for measured areas,[97] have nursing staff's support for quality indicators, have adequate human resources for initiatives to improve performance,[97] and engage in more external quality improvement initiatives.[7] High performers also served a smaller fraction of low-SES or Medicaid patients.[43, 88] Lower-performing providers under P4P programs tended to serve a lower-SES population (i.e., physician organizations with more Medicaid patients[43, 69, 98] or hospitals with a high DSH index[88]). Hospitals that achieved the largest improvements under P4P are characterized as being well financed, operating in less competitive markets,[56] having lower performance at baseline,[58, 59] and having a higher DSH index.[88]

Although associations have been found between patient population SES and provider performance, it is

important to note that some providers that serve low-SES populations are able to perform well. For example, Medicare has found that most hospitals with high proportions of Medicaid patients achieve readmission rates comparable to those with fewer Medicaid patients.[98]

The CMS Physician Group Practice demonstration evaluation highlighted organizational characteristics associated with performance. Physician groups characterized as being either affiliated with an academic medical center or a freestanding physician group practice were more able to achieve both quality and cost targets than groups with only non-academic hospital affiliations. It is unclear whether the results based on the 10 physician groups that self-selected into the Physician Group Practice demonstration would generalize more broadly. Case studies and commentaries suggest that strong physician leadership with a clear strategy and vision is necessary to change practice culture to one that is comfortable with sharing the risk of a predetermined patient population.[99–102] There have been no studies of VBP-type bundled payment models conducted that compare the features of high and low performers under these programs; implementation of these models has proven challenging, and there are few models that have been evaluated.

Features of Successful Value-Based Purchasing Programs There is very limited published literature to inform what structural and implementation features are associated with successful P4P programs. It is rare to find studies that examine the effects of alternative design features (e.g., the size or frequency of the incentive payment) to assess their impact on provider behavior; the studies that exist are typically small-scale, of short duration,[103] and in many cases the intervention being tested was not expected to be permanent, so providers would not have been expected to invest in practice redesign to improve outcomes and obtain rewards. Consequently, it is difficult to assess from these studies whether the programs have been successful and would be if scaled up to a larger number of providers (i.e., statewide or nationally), what would have happened if the intervention was sustained, and what can be generalized to implementing P4P in the same setting or other settings.

Based on the review of the published literature, there have been mixed findings on the effectiveness of VBP programs to meet its intended goals to improve quality and control costs. This may be because VBP programs are still a work in progress and sponsors are continuing to evolve these programs in response to what does and does not work when implemented. Despite the fact that many programs have been in operation for the past five to ten years, there is a substantial gap in the knowledge base about what has been learned regarding design and implementation in large P4P programs to inform what features promote success in VBP programs.

ACOs are new, and there has not been sufficient time to test ACOs to know whether they can succeed and what factors must be present to allow them to form and achieve desired goals. There is, as yet, little accumulated knowledge about their formation and, once formed, what types of performance results are accrued and what factors are associated with observed performance results. Evaluations of the private- and public-sector ACO experiments will hopefully generate knowledge to inform what factors need to be present for an ACO to succeed in meeting performance goals. Various challenges associated with implementing bundled payments have been identified,[104] and, similar to ACOs, these models are not well tested or in routine operation.

When we queried the TEP about the features of successful VBP programs based on their knowledge from having designed and operated these programs, most panelists agreed that the evidence is thin regarding successful programs and what features characterize these programs. Based on the panelists' anecdotal evidence and the limited literature, we identified six features that appear to influence the success of VBP

programs:

- **Sizable incentives:** A limited number of studies have shown that larger incentives were associated with a larger impact on performance.[\[42, 56\]](#) Incentives that were large enough to compensate providers for the effort required to obtain them was identified as one characteristic associated with more successful programs in a study of P4P in five Medicaid plans.[\[44\]](#) Researchers who have found limited effects associated with P4P programs have hypothesized that incentives were too small to garner the attention of providers, but there is uncertainty about how big incentives need to be to garner the desired response and investment for improvement by providers while also minimizing the likelihood of unintended consequences. Absolute incentive size is influenced by the size of the program's incentives (e.g., 1 or 2 percent of base payment), the size of the base payment (e.g., diagnostic-related group [DRG] payment amount) and the number of a provider's patients who are covered by the program, as incentives are often computed on a per capita basis. An important policy consideration regarding the size of the incentive relates to the fact that in U.S. VBP programs, payers fund the incentive payment in a budget-neutral fashion, meaning that the winnings of high-quality providers are financed by the loss of revenue from poor-quality providers. In this situation, increasing the size of the incentives could potentially lead to large redistributions of resources between providers and have the undesired effect of de-resourcing low-quality providers who may be most in need of resources to be able to improve quality.
- **Measure alignment:** A number of TEP members discussed the importance of measure alignment across VBP programs to give providers a clear signal of what is important. However, if different VBP programs cover different patient populations, then it is more important for measures to align with the population's conditions than with other VBP programs. If programs are measuring an area where established measures exist, they should use the measures as defined and not tweak the measures to promote alignment.
- **Provider engagement:** A few studies have identified the involvement of key stakeholders in the P4P system design and implementation as important.[\[4, 105\]](#) Similarly, a number of TEP members discussed the importance of provider engagement in design and implementation of VBP (e.g., providing input on the design of the program, participating in choosing performance measures and targets).
- **Performance targets:** TEP members discussed the importance of the methodology used to measure and reward performance. Members stressed the importance of rewarding both achievement and improvement (such as was used in the second phase of the Premier HQID) and that VBP programs should not be designed as a “tournament” wherein relative thresholds are used and providers are pitted against each other (which was how the incentive was structured in Phase 1 of the HQID and in many other P4P programs). Some TEP members recommended that the reward should be based on objective targets that are defined prior to the start of the measurement year in absolute terms; if a provider hits those targets, it should receive an incentive payment. Providers can then strive to achieve a number of targets along a continuum and compete against themselves rather than competing with other providers for a limited number of “winning positions” (e.g., top 20th percentile of performance). This approach provides motivation for all providers to move up the scale.
- **Data and other quality improvement support:** There was an extensive discussion among the TEP of the importance of support to help providers improve, particularly through the use of HIT and data registries. It was also noted that best practices for sharing, consultative support, health coaching, and other infrastructure building are important types of support to make available to providers

Dissemination of Best Practices from Highest-Performing Providers TEP members stated that the dissemination of best practices currently occurs through trade conferences and regional quality improvement activities. Although the information from these conferences is not published, several provider organization TEP members observed that they do provide vital information for organizational learning of best practices and improvement strategies. Panelists said that it would be useful to extract and compile lessons learned from providers about best practices they have implemented and to widely disseminate this information. Some panelists recommended that HHS should conduct case studies of high-performing providers to see what factors they identify as contributing to producing positive results; however, because high performers may be doing many of the same things as low performers, it is necessary to look at both high and low performers to see what differentiates them.

Alternative approaches to disseminating best practices were discussed by the TEP. Some TEP members felt that for dissemination to be effective, awareness is necessary of how low-performing organizations/providers with different resources and capabilities than the high performers will interpret and use the information that is being disseminated. Some providers may be more receptive to the information if the provider is “like them,” and benefit from peer-to-peer coaching by providers located in their own community who have similar characteristics to overcome resistance to adoption of certain practices. Other providers who are willing to innovate may look to other organizations for their “good ideas” as a way to continue to improve, regardless of where they are located or their characteristics, and will embrace best practices from dissimilar organizations or practices.

Monitoring and Evaluation of Value-Based Purchasing Programs

Qualitative Evaluation The TEP broadly agreed that there is a need for qualitative research to understand what has been learned by those who design and sponsor VBP programs and by the providers who are targets of the VBP programs. There has been a lot of iterative work by VBP program sponsors, and case studies could shed light on lessons learned that are not making their way into the published literature. Qualitative research focused on understanding what does and does not work regarding design and implementation would be useful to those designing VBP programs. For example, it would be useful to learn how providers have used performance benchmarking data provided by both public and private VBP programs to inform their quality improvement efforts and engage leadership in organizational infrastructure investments to support high-value care. One TEP member suggested Qualitative Comparative Analysis[[106](#), [107](#)] as one qualitative analytic methodology that might be a good fit for VBP evaluations, as it attempts to isolate key factors that are necessary conditions, versus those that are sufficient conditions, to achieve the outcome. This approach acknowledges that there are a number of possible paths or combinations of elements (e.g., alternative designs) that may lead to the desired outcome. The other area flagged by the TEP where qualitative work would be beneficial is understanding what changes providers are making in response to VBP programs. Although the TEP emphasized the need for qualitative evaluation work, there may be challenges in getting private VBP sponsors to share proprietary information, particularly in a competitive marketplace.

Quantitative Assessment of Impacts The TEP supported the need to evaluate the impact of VBP programs, and panelists felt that having a common set of variables that potentially influence outcomes, such as program characteristics (e.g., size and type of incentives), market characteristics (e.g., extent of monopoly power among providers in the market), provider characteristics, and other facilitators/enablers, would facilitate this work. They also noted the importance of having a comparison group, as reflected by one TEP member's comment: “We need to avoid marketing techniques that claim to achieve reduction in trends

when the trends were happening anyway.” A comparison group guards against this possibility.

Conclusions

Although the past decade has witnessed a fair amount of experimentation with performance-based payment models, primarily P4P programs, we still know very little about how best to design and implement VBP programs to achieve stated goals and what constitutes a successful program. The published evidence regarding improvements in performance from the P4P experiments of the past decade is mixed (i.e., positive and null effects); where observed, improvements were typically modest. Many of the published studies evaluating the impact of P4P programs suffer from methodological weaknesses that make it hard to determine whether the VBP intervention had an effect above and beyond other changes (e.g., investment in quality improvement support, public reporting, health information technology [HIT] investments and support) that were simultaneously occurring to improve quality and restrain spending.

VBP programs are natural experiments and inherently difficult to evaluate because program sponsors rarely withhold the VBP intervention from a matched group of providers to see what would have occurred absent the intervention. There are many weaknesses in the methods often used to evaluate P4P (and now the broader class of VBP programs), including reliance on pre-post comparisons without a comparison group that was not exposed to the intervention, comparisons with populations of providers that are substantially different from the treatment group, and failure to account for other factors that may be contributing to the observed results.

ACOs and bundled payment programs that embed clinical quality measures have only recently emerged and are just now being tested and evaluated. There is currently very limited evidence regarding the impact of these programs and whether they can be successfully implemented. Only a handful of ACO evaluation studies have been published, and these evaluations have been of relatively short duration (i.e., 1–2 years), making it difficult to know whether the results are real and can be sustained. These studies also suffer from similar methodological weaknesses as seen in the P4P literature. The published studies show some improvements in cost and quality; however, several of the ACO studies reported cost savings compared with expected year-over-year trend in spending as opposed to comparing the intervention providers' experience against a matched comparison group of providers. Bundled payment programs that incorporate a quality component are equally new, and there is virtually no evidence on whether they can be successfully implemented and what their effects are.

The paucity of publicly available information regarding what constitutes a successful VBP program—that is, what VBP design features and other factors (i.e., characteristics of the providers, the health care market where the VBP program is implemented, and policy/regulatory environment) facilitate success in VBP—presents challenges for policymakers who seek to design VBP programs. In practice, more is likely known about what does and does not work in terms of VBP design and implementation than what the published literature suggests. VBP program sponsors (particularly private program sponsors) have gained a great deal of experience through trial and error as they work to operationalize the VBP concept in real-world settings; however, these experiences are not being documented through traditional means. Because VBP programs are relatively new and experimentation is likely beneficial at this stage of VBP development, the question is how to generate information from all the experimentation. Efforts to extract these lessons from VBP sponsors are critically needed to strengthen the knowledge base.

Notes

* Value is defined as the outcomes (outputs) achieved divided by the cost or resources used (inputs) to generate those outcomes.

** Other common terms used for bundled payment arrangements are *episode-based payment*, *episode payment*, *episode-of-care payment*, *case rate*, *evidence-based case rate*, *global bundled payment*, and *global payment*.

*** For example, for fiscal year 2014, CMS has 59 clinical and patient experience measures in its Hospital Inpatient Quality Reporting program and 18 clinical measures for nursing homes under its Nursing Home Quality Initiative.

**** The Medicare and Medicaid EHR Incentive Programs provide incentive payments to eligible professionals, eligible hospitals, and critical access hospitals as they adopt, implement, upgrade, or demonstrate meaningful use of certified EHR technology. Eligible professionals can receive up to \$44,000 through the Medicare EHR Incentive Program and up to \$63,750 through the Medicaid EHR Incentive Program. (CMS, “Medicare and Medicaid EHR Incentive Program Basics,” web page, no date. As of November 15, 2013: <http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Basics.html>.)

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