

# Paying For Quality: Providers' Incentives For Quality Improvement

An assessment of recent efforts to align providers' incentives with the quality improvement agenda.

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**ABSTRACT:** Paying health care providers to meet quality goals is an idea with widespread appeal, given the common perception that quality of care in the United States remains unacceptably low despite a decade of benchmarking and public reporting. There has been little critical analysis of the design of the current generation of quality incentive programs. In this paper we examine public reports of paying for quality over the past five years and assess each of the identified programs in terms of key design features, including the market share of payers, the structure of the reward system, the amount of revenue at stake, and the targeted domains of health care quality.

**D**ELIVERING HIGH-QUALITY CARE in the current U.S. health care system does not always pay.<sup>1</sup> In the case of many aspects of clinical quality, the widespread use of fee-for-service payment fails to promote or even discourages optimal treatment. For example, an effective chronic care management program may lead to lower revenues for providers, since quality improvement activities are not billable and acute care visits are reduced as a result. Increasingly, however, individual purchasers and coalitions as well as health plans have implemented pay-for-performance systems to reward providers for delivering high-quality care and to motivate quality improvement.

To understand the importance of these incipient “pay-for-performance” efforts, we describe the prevalence and structure of these initiatives as they are now being adopted in the U.S. health care system. We focus on specific design elements identified using key lessons from the literature on the impact of financial incentives on behavior and quality improvement.<sup>2</sup> These include the market leverage of spon-

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sors, the magnitude of rewards, the use of competitive versus noncompetitive models of incentives, the targeted dimensions of health care quality, and whether quality improvement (change) is explicitly part of the bonus calculation. Examining current initiatives according to these design principles yields predictions about the likely short- and long-run effects of these payment systems. The discussion highlights broad themes among the programs we describe and suggests directions for the next generation of pay-for-performance systems and key questions for health services research.

### **Why Pay For Performance?**

One of the principal messages of the Institute of Medicine's (IOM's) 2001 Report, *Crossing the Quality Chasm*, is that U.S. health care quality falls short of established benchmarks based on the best available evidence.<sup>3</sup> A recent study documents this shortfall across a broad range of measures for appropriate preventive, acute, and chronic care.<sup>4</sup> Benchmarking of this type has repeatedly shown not only that performance is low relative to accepted standards on average, but also that adherence to recommended treatment patterns is extremely variable across regions and providers. This variation suggests that improvement is possible.

To date, purchasers and health plans have focused their efforts on profiling providers and publicly reporting information on their quality. This appeals to professionalism or organizational pride to drive quality improvement and also to the demand mechanism—in theory, consumers will “vote with their feet” and select the highest-quality providers. Despite major advances in quality measurement and reporting, studies of consumers' choices of health plans and hospitals continue to find that consumers fail to use available information on quality to inform their choices, even when quality measures appear to be highly salient.<sup>5</sup> More recently, purchasers have also begun tying consumers' financial incentives to measures of quality—for example, by varying health plan contributions or copayments according to quality ratings.

While these consumer-centered approaches continue to evolve, it is widely perceived that consumer choice alone will not provide sufficient impetus for providers to improve the quality of care. This is particularly the case in markets where the perceived high-quality providers are already inundated with patients.

### **Data Sources And Study Approach**

We sought descriptive information on paying for health care quality in the United States in the past five years. Because of current policy interest in making a business case for quality to providers of health care, we focused on payments by health plans or purchasers (largely employers) to physicians and hospitals. This approach puts performance contracting between purchasers and health plans and medical group payments to individual physicians beyond the scope of our review. While we began with the scientific literature (using the MEDLINE online data-

base of peer-reviewed articles), only one recent paper has examined a detailed example of this type of payment arrangement.<sup>6</sup> In fact, only five other evaluations appear in the health services research literature on paying for quality during the past fifteen years, and these generally describe very small-scale interventions, such as nominal payments to increase immunization rates, which are unlikely to be generalizable to the broader efforts now envisioned.<sup>7</sup> The one exception is U.S. HealthCare's (now Aetna's) more comprehensive Quality Care Compensation System, which was introduced in 1987 and has been described elsewhere.<sup>8</sup>

We obtained information on the extent and characteristics of plans' and employers' efforts to pay for quality from several sources. First, we used Lexis/Nexis to search all major U.S. newspapers from January 1998 to September 2003, using combinations of the following keywords: physician, hospital, health plans, pay for performance, pay for quality improvement, financial incentive, bonus, reward, quality initiative, provider payment, and performance improvement. Once we identified potential cases to include in our review, we conducted further research on each one through either Internet searches or phone calls. We supplemented these data with a general Internet search using the Google search engine. Finally, we compared our information to previously released reports compiled by the National Health Care Purchasing Institute (NHCPI) and the American Medical Association (AMA).<sup>9</sup> Using this approach, we identified thirty-seven separate incentive plans representing thirty-one different payers (some payers had both a hospital and a physician quality incentive, which we counted separately). We excluded a small number of publicized interventions that were still in the formative stages and thus difficult to characterize (two notable examples are the nascent efforts associated with the Massachusetts HealthCare Quality Partnership's Rewarding Results grant and the Central Florida Health Care Coalition's plans to tier fees based on quality).

To draw conclusions about the nature and likely impact of the interventions, we focused on five main features. The first two, sponsor leverage and incremental revenue, address the idea that the larger the magnitude of the reward, the more responsive providers will be to incentives. We measured sponsor leverage as its share of the insured population in the state in which the program operates unless the plan or program was explicitly limited to a subset of counties or markets. In such cases, we used the insured population of the smaller area as the denominator for the share calculation. For health plans, we used 2001 InterStudy data as the source of enrollment data; for other types of sponsors, we relied on self-reports.<sup>10</sup> Ideally, we would have captured the share of the average targeted provider's business that is represented by the payer in question. Our market-share measure almost certainly understates payers' leverage, because it assumes that covered lives are spread out evenly across providers in a state, whereas many networks (especially health maintenance organizations, or HMOs) are more concentrated.

A third feature was targeted dimensions of quality, using the classic "structure,

process, outcome” taxonomy because of the implications for selection, gaming, and innovation.<sup>11</sup> This taxonomy distinguishes among the resources assembled to deliver care, including personnel, facilities, and materials (structure); the completion of specific tasks or recommended treatments (process); and the ultimate results of care, including patients’ experience and health status (outcome). Paying for the adoption of structural measures of quality has the advantage of being free of case-mix influence, but it might not lead to desired outcomes if the structures are not used effectively. Process measures leave more discretion for alternative approaches to achieve the desired activity (for example, making sure that chronically ill patients are monitored regularly) but may be affected by patients’ preferences or health status and thus could create fairness and selection concerns. Outcome measures are, of course, more directly what payers are attempting to improve but are influenced by many factors beyond the provider’s control, including case-mix. The unpredictable elements of this variation will impose sizable risk on providers, while the predictable elements, unless adequate risk adjustment is used, will be the basis for selection. Among outcome measures, we distinguish between clinical outcomes and patient-experience measures, which may be differentially valued by sponsors.

The final two features influence how rewards are allocated across providers: whether or not providers compete for bonuses, with winners and losers, and whether targets are based on improvement or just good performance. Competitive bonus programs, also known as tournaments in the incentive literature, are thought to provide a stronger incentive to improve performance because even those with high baseline performance face the threat of not being rewarded if others improve and they do not. Noncompetitive programs, in which all providers have the opportunity to reach a fixed target or implement structural quality measures to obtain a share of the reward pool, may provide less of an incentive to improve quality. Targets based on quality improvement rather than absolute quality provide greater incentives for those with low baseline quality; if there are diminishing returns to quality improvement activities, it may actually be less costly for a provider at a low baseline level of performance than for one at a high level to improve quality.

## Results

Before characterizing the programs as a group, we describe three prototypical examples to provide context for the summary analyses.

■ **Three examples.** *Centers for Medicare and Medicaid Services (CMS) and Premier Inc.* In July 2003 the CMS and Premier Inc., a nationwide organization of not-for-profit hospitals, announced a demonstration project to provide quality bonuses for hospitals based on performance related to treatment in five clinical areas that are critical for Medicare’s elderly population: heart attack, heart failure, pneumonia, coronary artery bypass graft (CABG) surgery, and hip and knee replacements. Performance

measures include both process and outcome measures. For example, the proposed set of measures for CABG includes rates of aspirin prescribed at discharge, inpatient mortality, and postoperative hemorrhage or hematoma. Hospitals are to be scored and ranked by condition, and any hospital in the top 10 percent for a given condition will receive a 2 percent bonus on its Medicare payments; hospitals in the next decile will receive a bonus of 1 percent. In the third and final year of the demonstration, hospitals with the worst performance will be financially penalized.

*PacifiCare of California (PCC) Quality Incentive Program (QIP).* PCC is one of the seven participating health plans in the Integrated Healthcare Association (IHA) initiative that has aligned a large part of the health plan market in California behind a common set of measures to reward medical-group quality. The ten IHA domains (for 2003) are cervical cancer screening, mammography, childhood immunizations, diabetic hemoglobin A1c testing, screening of patients with coronary artery disease for elevated LDL cholesterol, satisfaction with medical group, satisfaction with primary care physician (PCP), satisfaction with referral process, satisfaction with specialist, and effective PCP communication.

The QIP builds on a series of efforts to use quality information to spur improvement, including sharing quarterly performance profiles with its network of physician organizations since 1995 and releasing medical group report cards since 1998. In July 2003 PCC began paying quarterly bonuses of up to \$2 per PCC member per month for meeting or exceeding fixed targets for the ten common measures agreed upon by IHA members plus six measures of quality and patient safety for the hospital to which the group admits the majority of its patients.

*Bridges to Excellence (BTE).* BTE is a multilateral effort backed by a group of large employers to offer new financial incentives for physicians to improve health care quality in several target markets (Boston, Cincinnati/Louisville, and Albany/Schenectady). Three distinct initiatives have been launched by BTE, including the Diabetes Care Link, the Physician Office Link, and the Cardiac Care Link. Each "link" comprises a broad set of measures, each of which is accorded points toward an overall score. For example, the Physician Office Link sets standards for clinical information systems, patient education and support, and care management. Under this link, physicians can receive prorated bonuses for partial achievement of goals and may earn up to \$55 per eligible patient. Under the Diabetes Care Link, the entire award (\$100 per diabetic patient) is tied to participation in a recognition program sponsored by the American Diabetes Association and the National Committee for Quality Assurance (NCQA).

■ **Summary analysis.** Exhibit 1 lists the thirty-seven payment-for-quality programs that our search identified and reports sponsor leverage and targeted domains for each physician and hospital quality bonus program.

*Sponsor leverage.* Fourteen of the thirty-one sponsors whose programs we describe either were themselves a coalition or participated (for example, by adopting recommended measures as the basis of payment) in multilateral efforts related to

**EXHIBIT 1**  
**Summary Of Payment-For-Quality Strategies**

Sponsor	Coalition <sup>a</sup>	Percent of insured population covered by sponsor <sup>b</sup>	Physician program (N = 28)	Hospital program (N = 9)
Aetna (CA)	Yes (IHA)	4	O-PE, P, S	
Anthem Blue Cross Blue Shield of NH	No	6	P	
Anthem Blue Cross Blue Shield Midwest (OH, IN, KY)	No	3	O-PE, PE (for OH)	O-CM, O-PE, P
Anthem Blue Cross Blue Shield of VA (formerly Trigon)	No	6	O-PE, P	O-PE, P
Blue Cross Blue Shield of IL	Yes (Bridges, Leapfrog)	9	P	O-PE, S
Blue Cross Blue Shield of MA	No	19	O-PE, P	
Blue Cross Blue Shield of MN	No	5	S	
Blue Cross Blue Shield of MI	Yes (Leapfrog)	7		P, S
Blue Cross Blue Shield of MO	No	4	O-PE, P	
Blue Cross Blue Shield of Rochester (Excellus) and Rochester IPA (NY)	No	40	O-PE, P	
Blue Cross of CA	Yes (IHA)	21	O-PE, P	
Blue Shield of CA	Yes (IHA)	11	O-PE, P, S	
Bridges to Excellence	Yes (Bridges)	3 Boston 10 Cincinnati-Louisville 6 Albany-Schenectady	P, S	
Buyers Health Care Action Group	— <sup>c</sup>	15	P, S	
Centers for Medicare and Medicaid Services (CMS) and Premier Inc.	No	40		O-CM, P
CIGNA (CA)	Yes (IHA)	3	O-PE, P, S	
CIGNA and Promina (GA)	No	1	O-PE, P	O-CM, O-PE, P
Empire Blue Cross and Leapfrog employers	Yes (Leapfrog)	4		S
Employer Coalition on Health	— <sup>c</sup>	13	P	
Harvard Pilgrim Health Care (MA)	No	5	P, S	
Hawaii Medical Service Association (Blue Cross Blue Shield of HI)	No	13	O-PE, P	O-CM, O-PE, P, S
HealthGuard (PA)	No	4	P	
Health Net	Yes (IHA)	12	O-PE, P	
HealthPartners (MN)	No	25	P	
Highmark Blue Cross Blue Shield (PA)	No	5	O, O-PE, P	
Independence Blue Cross (PA)	No	26	O-PE, P, S	O-CM, S
Independent Health (NY)	No	30	O-PE, P	
Integrated Healthcare Association (IHA) Local Initiative Rewarding Results (CA)	No	6	P	
PacifiCare (CA)	Yes (IHA, Leapfrog)	10	O-PE, P, S	
Tri-River Healthcare Coalition (OH)	— <sup>c</sup>	15	P, S	
Western Health Advantage (CA)	Yes (IHA)	4	O-PE, P, S	

**SOURCE:** Authors' analysis of publicly reported program descriptions.

**NOTES:** P = program focuses on process measures, such as Health Plan Employer Data and Information Set (HEDIS) diabetes or mammogram screening. O-PE = program focuses on patient-experience measures. O-CM = program focuses on clinical outcome measures, such as complications or mortality. S = program focuses on structure measures, such as Leapfrog measures for hospitals or information systems to track chronically ill patients. IHA is Integrated Healthcare Association.

<sup>a</sup> Sponsor participates in a coalition. Note that some sponsors also have efforts outside of the coalitions.

<sup>b</sup> In most cases, this measure reflects statewide share of insured lives covered by the plan or employer, based on 2001 InterStudy data. Where plans or programs were explicitly limited to a limited number of counties or metropolitan areas within a state (Blue Cross Blue Shield of Rochester, Bridges to Excellence, Empire Blue Cross/Leapfrog, Employer Coalition on Health, HealthGuard, PacifiCare, and Tri-River Healthcare Coalition), the figure reflects the share of insured people in those areas.

<sup>c</sup> These are coalitions themselves, not payers that are part of the named coalitions.

aligning quality incentives. We note in Exhibit 1 those plans that are involved with three of the largest efforts of this kind: the IHA, BTE, and Leapfrog Group. Because the IHA's members are concentrated in California, the effective leverage of each program is much higher. Summing across all seven IHA members, the total share of the relevant market exceeds 60 percent. For individual plans outside of coordinated efforts, the average share of the insured population is on the order of 10 percent. A major exception, of course, is the CMS, which has launched a paying-for-quality demonstration project with Premier Inc.

*Targeted dimensions of quality.* Most of the programs we examined focused on clinical process and structural measures. Patient-experience measures were also often included in physician bonuses, but they were typically weighted less than the clinical quality measures. For physicians, the process measures targeted are nearly always a subset of the Health Plan Employer Data and Information Set (HEDIS), particularly those that measure primary prevention, including cervical cancer screening, mammography, and immunizations, and secondary prevention for chronic illnesses such as asthma, diabetes, and coronary artery disease. Clinical outcome measures were rarely the basis of payment overall but were more common among hospital incentive programs where in-hospital mortality, complication, and readmission rates are widely used metrics. Some programs either implicitly or explicitly included cost or use measures alongside quality measures, and it was not always possible to discern the relative weighting of cost and quality.

■ **Competitive versus noncompetitive models.** Competitive bonus programs, which reward relative performance, were the most common overall (56 percent) with noncompetitive models used somewhat less often. In the competitive models, there were often two or more tiers that were eligible for a bonus, with reduced awards for lower tiers (Exhibit 2). Among the noncompetitive programs, the majority awarded bonuses based on meeting a fixed target or implementing systems (structures) (Exhibit 3). In these instances, bonuses were rarely prorated or tiered to reward partial achievement of the goal. A handful of programs meted out financial rewards based on a subjective determination, leaving some uncertainty about the connection between performance and payment.

*Incremental revenue.* For most programs, sponsors identified the maximum award in terms of incremental payment that could be gained with optimum performance. For comparison purposes, we converted the medical group bonuses that were reported as per member per month increments to a share of typical professional capitation rates of \$40 per member per month. The process and outcome performance-based bonuses for physicians (and medical groups) ranged from less than 1 percent of payments by the sponsor (\$0.30 per member per month or \$3.60 per enrollee annually) for achievement on two measures, to about 10 percent for achievement on a broader range of clinical and service quality measures. Among those programs that reward physicians for putting specific systems in place or gaining special accreditation, we found the largest financial rewards as an esti-

**EXHIBIT 2**  
**Competitive Bonus Programs**

<b>Sponsor</b>	<b>Description of measures and formula for award</b>	<b>Incremental revenues<sup>a</sup></b>
<b>Physician rewards</b>		
Aetna (CA) <sup>b</sup>	IHA measures (see Exhibit 1): 6 clinical process, 4 patient satisfaction, and 2 IT capability measures; awarded to top 25% of medical groups for each measure	3.5%
Anthem Blue Cross Blue Shield of NH	Clinical process measures and disease management structures; awarded to top two quartiles of primary care physicians for each clinical process measure	\$20 per member per year (~5%) top quartile; \$10 per member per year for 3rd quartile; \$20 per member per year for participating in disease management
Blue Cross of California <sup>b</sup> Physician Quality Incentive Program (PQIP)	Subset of IHA measures: mammograms, Pap smear, asthma measures, and patient satisfaction; increasing payment for 20th, 40th, 60th, and 80th percentiles	\$4.50 per member per month (~10%)
Blue Cross Blue Shield of MA	8 HEDIS (clinical process) measures and 10 patient satisfaction measures	Unknown portion of 15% annual withhold
Blue Cross Blue Shield of MN	Competitive grants for quality improvement projects with technical assistance from care managers	Up to \$50,000
Blue Cross Blue Shield of MO	HEDIS (clinical process) measures: cholesterol screening, asthma, mammography, diabetes, child immunization, patient satisfaction; target: increasing bonus for 5 strata of performance	8%
Blue Shield of CA <sup>b</sup>	IHA measures (see Exhibit 1); payments for 30th/50th/75th percentiles for clinical process measures and 50% of patient satisfaction award for average, 100% for above average; 50% of IT award for 1 IT activity and 100% for 2	\$2 per member per month: \$1 for clinical, \$0.80 for patient satisfaction, and \$0.20 for IT (~5%)
Buyers Health Care Action Group	Annual awards for patient safety and clinical quality projects, specific quality areas vary by year; applicants must meet thresholds for preventive care	2001: 2 awards of \$100,000 and 2 of \$50,000
CIGNA (CA) <sup>b</sup> Provider Group Rewards Program	IHA measures (see Exhibit 1); 50% of bonus for clinical measures, 40% patient satisfaction, 10% IT; 50th percentile or above receive award (increasing payment for higher score)	\$1.60 per member per month (~4%)
CIGNA and Promina (GA)	HEDIS measures: diabetes, Pap smear, mammogram; patient satisfaction; 3 tiers of fees based on scoring	5% differential between tiers

**EXHIBIT 2  
Competitive Bonus Programs (cont.)**

<b>Sponsor</b>	<b>Description of measures and formula for award</b>	<b>Incremental revenues<sup>a</sup></b>
<b>Physician rewards</b>		
Harvard Pilgrim Health Care (MA)	Competitive grants for quality improvement programs available for medical groups/clinics	\$50,000 per grant
Hawaii Medical Service Association (Blue Cross/Blue Shield of HI) Provider Quality and Service Recognition (PQSR)	Clinical and service quality measures	\$13,600 per physician (for quality portion) (~5.5% of overall salary)
HealthGuard (PA)	HEDIS measures: diabetes, asthma, hypertension; award to top-rated physicians (unspecified percentile)	~\$1 per member per month (2.5%)
Health Net (CA) <sup>b</sup>	IHA measures (see Exhibit 1); 50% of bonus for clinical measures, 40% patient satisfaction, 10% IT	\$2.25 per member per month plus additional bonus for groups with individual physician bonus plan (~5.5%)
Highmark Blue Cross Blue Shield (PA)	HEDIS measures for beta-blocker treatment, cancer screening, cholesterol screening, diabetes; patient satisfaction; electronic connectivity; and member access; award to top 50%	1% bonus for 50th–59th percentile; 2% for 60th–69th; 4% for 70th–84th; 5% for 85th–100th
Independence Blue Cross (PA) Practice Quality Assessment Program (PQAS) and Quality Incentive Payment System (QIPS)	11 clinical process measures (50% of score) and satisfaction (50% of score); increasing awards across 16 performance strata	\$2.30 per member per month (~5.5%)
Independent Health (NY)	Mammography, colorectal cancer screening, ER use, patient satisfaction, access	\$1.50 per member per month (~4%)
Western Health Advantage (CA) <sup>b</sup>	IHA measures (see Exhibit 1)	Unknown
<b>Hospital rewards</b>		
CMS and Premier Inc. demonstration program	Clinical process measures related to heart attack, heart failure, CABG, hip/knee replacement, pneumonia; awards to top 20%	Top 10% for each measure receive a 2% bonus; second 10% receive a 1% bonus
CIGNA and Promina (GA)	Individual hospital performance: readmission rates, patient satisfaction score, other measures; top performers within health system eligible; award structure unspecified	Unknown
Hawaii Medical Service Association (Blue Cross/Blue Shield of HI) Provider Quality and Service Recognition (PQSR)	Clinical metrics: complications, patient satisfaction, best practices, and readmissions; top performers eligible; award structure unspecified	\$1.1 million

**SOURCE:** Authors' analysis of publicly reported program descriptions.

**NOTES:** IT is information technology. HEDIS is Health Plan Employer Data and Information Set. ER is emergency room. CMS is Centers for Medicare and Medicaid Services. CABG is coronary artery bypass graft.

<sup>a</sup> Percentages reflect the approximate percentage of physician revenues from the plan. Where plans did not provide this figure, we used an average figure of \$40 per member per month to estimate the share. The incremental revenue reflects the total amount that would be awarded for top performance on all measures.

<sup>b</sup> Member of Integrated Healthcare Association (IHA).

### EXHIBIT 3 Noncompetitive Bonus Programs

Sponsor	Description of measures and formula for award	Incremental revenues <sup>a</sup>
<b>Physician rewards</b>		
Anthem Blue Cross Blue Shield (OH) and MaternOhio	Clinical process measures (mammograms, Pap smears), patient satisfaction; all physicians in medical group must meet target for any to receive bonus; target: 90% or above adherence to measures	5% (includes generic drug use measure)
Anthem Blue Cross Blue Shield of VA (formerly Trigon)	Proper antibiotic use, mammography, well-adolescent visit rates, advice to quit smoking, patient satisfaction; predetermined benchmarks for award (formula unknown)	Unknown
Blue Cross Blue Shield of IL	HEDIS measures and disease management; higher reimbursement rate awarded to medical groups that exceed thresholds; also participating in Bridges to Excellence	Unknown
Blue Cross Blue Shield of Rochester (Excellus) and Rochester IPA (NY)	Clinical process measures (asthma, diabetes), preventive care (prenatal care, immunizations), and service improvement	10%
Bridges to Excellence	See text; American Diabetes Association/NCQA Recognition for physicians who treat diabetic patients (min. 35 patients); clinical information system, chronic disease management, and patient education program targets for nondiabetic patients	\$100 per diabetic patient; \$55 per patient for office link/clinical management (~10%)
Employer Coalition on Health (Rockford, IL)	Diabetes disease management; awards for meeting thresholds for flowsheet completion and hemoglobin A1c	\$0.30 per member per month (<1%)
Harvard Pilgrim Health Care (MA)	Single provider contract: Partners Community Healthcare HEDIS measures for diabetes and asthma; awards for meeting preset thresholds	Part of annual withhold; unknown
HealthPartners (MN)	Clinical process measures including HEDIS scores for diabetes, pediatric immunizations, tobacco cessation efforts, behavioral health, adult preventive care, and coronary artery disease; awards for meeting annual fixed targets for each measure (for example, smoking cessation counseling = 81% for 2002)	Care system awards from \$100,000 to \$300,000
Integrated Healthcare Association (CA) Local Initiative Rewarding Results (LIRR)	Coalition of Medi-Cal plans bonuses for well-baby and adolescent visits, encounter data improvement in conjunction with nonfinancial incentives	Pay-per-visit amounts unknown

**EXHIBIT 3  
Noncompetitive Bonus Programs (cont.)**

<b>Sponsor</b>	<b>Description of measures and formula for award</b>	<b>Incremental revenues<sup>a</sup></b>
PacifiCare (CA) <sup>b</sup> Quality Incentive Program	In conjunction with report card (Quality Index) and quarterly profiling; in 2003, IHA measures for clinical and patient satisfaction but no IT, plus 6 hospital quality measures for primary hospital; bonus for 75th percentile for each measure	\$3 per member per month with Medicare enrollees, \$2 per member per month for commercial only (~7%)
Tri-River Healthcare Coalition (OH)	Process and structural measures for enrolling patients in care management, disease management developing patient education Web site	\$2 per member per month (~5%)
<b>Hospital rewards</b>		
Anthem Midwest (OH, IN, KY)	Comprehensive benchmarking report with clinical process and outcome measures, patient experience tied to rate increases by undisclosed formula reflecting hospital-specific improvement goals	Unknown
Anthem of Virginia (formerly Trigon) Quality-in-Sights Hospital Incentive Program	Patient safety (30%), clinical process and outcome measures for cardiac care and pregnancy or pneumonia (55%), and patient satisfaction (15%) tied to rate increases by formula	1% (increasing over time)
Blue Cross Blue Shield of IL	Clinical quality and patient safety targets including Leapfrog measures; subjective determination of additional reimbursement	Unknown
Blue Cross Blue Shield of MI	Clinical quality and patient safety targets including Leapfrog measures; annual change of targeted measures	~3%
Empire Blue Cross and Leapfrog employers	Leapfrog standards for implementation of CPOE and ICU staffing, 40%/60% of bonus, respectively	4% for 2002, 3% in 2003, and 2% in 2004
Independence Blue Cross (PA)	Quality-of-care standards for readmission, mortality and morbidity, Leapfrog standards	Unknown (portion of 4% bonus)

**SOURCE:** Authors' analysis of publicly reported program descriptions.

**NOTES:** IT is information technology. HEDIS is Health Plan Employer Data and Information Set. ER is emergency room. NCQA is National Committee for Quality Assurance. CPOE is computerized physician order entry. ICU is intensive care unit.

<sup>a</sup> Percentages reflect the approximate percentage of physician revenues from the plan. Where plans did not provide this figure, we used an average figure of \$40 per member per month to estimate the share. The incremental revenue reflects the total amount that would be awarded for top performance on all measures.

<sup>b</sup> Member of Integrated Healthcare Association (IHA).

mated percentage of fees per enrollee. For the covered population, BTE offers up to \$55 per patient for implementing a series of quality improvement modules in three categories, which the sponsor suggests could amount to approximately 10 percent of a physician's income. For one-time grants and competitive award programs, we found two health plans that offered up to \$50,000 in competitive infrastructure

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grants (along with technical assistance) and one program that gave awards of \$100,000 and \$50,000 to selected providers.

*Rewarding quality improvement.* We were surprised to find almost no emphasis on quality improvement in the payment arrangements we reviewed. In one case, Harvard Pilgrim Health Care, the quality bonus was offered to a single hospital network/health system and was couched in terms of improvement relative to baseline. In this case, however, there is no operational difference between a quality improvement target and a fixed target (since there is only a single provider). There were no other programs in which quality improvement was explicitly mentioned as the basis for computing awards.

## **Discussion**

In our search for examples of paying for quality, we found thirty-one separate sponsors of such arrangements, covering more than twenty million enrollees. Because of our focus on programs that were publicized in the press or on the Internet, there are probably other similar programs that we have not described. Because of the high degree of homogeneity we found, however, it would be surprising if the addition of a few other cases altered our conclusions much.

There is much commonality in the basic structure of these programs. The vast majority of incentive arrangements target a mix of process and structural measures with a smaller role for patient experience measures, and the sponsor nearly always rewards good performance rather than improvement. This puts physicians or hospitals that have already figured out how to deliver good quality health care along the targeted dimensions at an advantage. These providers deserve to be rewarded for past efforts, undertaken in an environment less supportive of high-quality health care delivery. This rewarding of historical investments in quality, however, strikes us as not altogether consistent with the stated goals of most of the programs: to improve quality for all enrollees/beneficiaries.

Physicians and hospitals that have a long way to go in terms of meeting absolute targets or are ranked low among their peers are less likely to find it worthwhile to strive for these bonuses. Moreover, because many programs use competitive models, with explicit winners and losers, these systems likely will result in redistribution of reimbursement from “low-quality” to “high-quality” providers and maybe the demise of some “low-quality” providers. Perhaps it is a good thing to use payment arrangements to enforce quality competition, since the market has been unable to do so. But one could argue that low-quality providers are precisely the ones that need increased resources to improve their quality. In this view, if bonuses cannot be explicitly structured around quality improvement, then grants or incen-

tives related to structural measures of quality might be better suited to simultaneously bringing up average quality and reducing variance across providers.

The few published evaluations of quality incentives describe programs in which a single clinical area or measure was targeted; this generation of paying for quality takes aim at a multidimensional notion of quality, including patients' experience. Incorporating a broad array of quality measures in an incentive program, as many of the examples we found do, appears to be an attempt to deal with what economists refer to as the "multitasking" problem. That is, if providers face a number of tasks and resources are limited, then effort will be allocated toward those tasks that are explicitly rewarded, taking resources away from other activities. By choosing to attach financial rewards to a larger set of tasks, payers can elevate and protect key priorities from these negative spillover effects. Inevitably, however, the dimensions of care that will receive the most attention will be those that are most easily measured and not necessarily those that are most valued. In addition, the focus on individual measures may discourage more unified quality improvement efforts that ultimately could prove more effective or efficient. For example, attaching rewards to secondary prevention for specific conditions such as diabetes or asthma may encourage condition-specific care management when integrated care management might be most efficient, because of high rates of comorbidity. Similarly, financial rewards for improving childhood immunization rates might lead to interventions that are narrowly targeted for this population instead of systems for tracking and assuring appropriate preventive care more generally.

A rough approximation suggests that payers have put aside more than \$200 million for these programs in 2004 (of course actual payouts may be much less). At the same time, we wonder if the incremental rewards for quality for any one provider will be sufficient to motivate the kind of change that is needed. Most programs put 5 percent or less of compensation at risk for performance on quality, and many simultaneously target ten or more separate clinical areas. Moreover, because few sponsors command a large share of the average provider's business, the quality incentive is further diluted by competing incentives.

Improving quality of care in the U.S. health care system has some elements of a public-good problem: Investments by one payer accrue benefits to other payers because of nonexclusive contracting (overlapping networks), and by corollary no individual payer will invest enough in trying to bridge the quality chasm. Purchasing coalitions and other multilateral entities such as the IHA, BTE, and Leapfrog have emerged to overcome this problem in part, but our data suggest that most paying-for-quality initiatives are relatively small in scale.

## **Looking Ahead**

While no systematic evaluations have yet been conducted with regard to either the intended or unintended consequences of paying for quality, the current level of enthusiasm for these programs suggests to us that their diffusion will continue.

Aligning providers' financial incentives with quality goals may be a necessary precursor to improvement, but it is probably not sufficient. Rather, quality-incentive programs should be viewed as part of a broader strategy of promoting health care quality through measuring and reporting performance, providing technical assistance and evidence-based guidelines, and, increasingly, giving consumers incentives to select higher-quality providers and proactively manage their own health.

Much uncertainty exists as to precisely how and how much providers will respond to the new payment incentives, but our review suggests some early predictions. Based on the design features of the programs in the aggregate, we expect that, at least initially, paying for quality will entail compensating historically high-quality providers, with less emphasis on overall quality improvement in the system. Some lower-quality providers may be sufficiently motivated to make the investments necessary to reach for bonuses, but many may find that the costs exceed the modest financial benefits from doing so. Over time, however, the programs may begin to reward quality improvement more directly, particularly if they find that the same providers receive bonuses every year.

These pay-for-performance initiatives are still in their infancy, and we expect many changes as they evolve. By using price as well as volume as a lever, they represent a new phase in the effort to improve quality of care. Despite good intentions, however, there are a number of concerns with their design, including whether their size and scope are sufficient to motivate and support the necessary structural investment and behavioral change, if they will raise quality in those already performing well or across the board, and whether they will lead to selection against sicker or less adherent patients. For all of these reasons, we believe that it is crucial for timely evaluation to be an integral part of the design of these experiments and for these results to help improve the next generation of programs.

In the near term, evaluations of paying-for-quality interventions should focus on whether and by how much bonuses accelerate quality improvement in targeted areas (generally care processes) and to what extent these gains come at the cost of losing ground in other quality areas. To be informative, this research will be data-intensive, requiring time-series data on targeted and other measures for the intervention group and a credible comparison group. As we suggested earlier, distributional effects (for example, which groups of targeted providers receive bonuses or achieve accelerated improvement) also should be tracked because of the possibility that some programs may exacerbate existing quality differentials across providers (and thus consumers). Finally, paying for quality will entail financial costs to the system, so these programs should be judged based on some notion of value or cost-effectiveness relative to alternative interventions for improving health care quality.

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