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Private-Payer Innovation In Massachusetts: The 'Alternative Quality Contract'

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ABSTRACT In January 2009 Blue Cross Blue Shield of Massachusetts launched a new payment arrangement called the Alternative Quality Contract. The contract stipulates a modified global payment (fixed payments for the care of a patient during a specified time period) arrangement. The model differs from past models of fixed payments or capitation because it explicitly connects payments to achieving quality goals and defines the rate of increase for each contract group's budget over a five-year period, unlike typical annual contracts. All groups participating in the Alternative Quality Contract earned significant quality bonuses in the first year. This arrangement exemplifies the type of experimentation encouraged by the Affordable Care Act. We describe this unique contract and show how it surmounts hurdles previously encountered with other global-payment models.

In January 2009 Blue Cross Blue Shield of Massachusetts launched a new provider payment system called the Alternative Quality Contract that exemplifies the type of experimentation with novel payment models that the Affordable Care Act encourages. The Alternative Quality Contract is a modified global payment model in which annual payments to medical groups are linked to a per member per month budget. The model was designed to improve quality and outcomes while greatly slowing health care spending growth. Although the Alternative Quality Contract has similarities to capitation models of the 1990s, which paid fixed amounts per member per month, it was designed specifically to address the most important limitations of prior capitation programs.

Historically, one concern about global-payment contracts has been the transfer of financial risk to providers. That is, in the event that a provider's patients needed more care or consumed more resources than allocated in the budgets, the provider would be responsible for some or all of the shortfall. Evidence of the eco-

nomical incentives created by these risk contracts, mostly based on prior studies of capitation, indicates that capitated providers practice a more conservative style of care, reducing the use of resources.¹⁻⁵ Despite the reduction in resources associated with these early capitation models, most available evidence finds no adverse effects on the quality of patient care or health outcomes.⁶⁻¹⁰ Nonetheless, many provider organizations suffered significant financial losses under capitation.¹¹

As a result, there is considerable resistance to payment models that put provider groups at financial risk for medical spending. In addition, concerns persist about the potential for global payments to diminish the quality of care. Capitation contracts of the 1990s had virtually no formal quality incentives, largely because of the lack of experience with quality measurement at the time.

For these reasons, as well as because of the consumer backlash against managed care restrictions on patients seeking care,¹² the prevalence of capitation contracts declined after the mid-1990s. The percentage of physicians refus-

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ing to participate in capitation contracts rose from 36.2 percent in 1998 to 60.7 percent in 2008.¹³

Since the decline of capitation, however, the need to control spending growth has become even more critical, particularly given anticipated coverage expansions under health care reform. Moreover, new attention has been focused on the role that fee-for-service incentives have played in our nation's unrelenting health care spending growth.

In this environment, there have been prominent efforts to reform payment policies. Newer models of global payment have attracted attention, including shared savings models, as envisioned for accountable care organizations (ACOs). Under shared savings, a per person spending target would be set by Medicare; physicians and hospitals would share the savings with the government if they could reduce aggregate Medicare spending to a level below the target. Stronger payment models, such as the Alternative Quality Contract, require providers to share some or all of the risk if spending exceeds the target.

As with capitation, these new payment models reduce the incentives for overusing services common in fee-for-service reimbursement systems. Moreover, in such systems it is difficult for health insurers, employers, and other purchasers to control spending because price reductions are frequently offset by increases in the volume of services provided. Global payment allows these purchasers to control price and quantity simultaneously, and thus achieve predictability and control over aggregate spending and, potentially, spending growth.

Structure Of The Alternative Quality Contract

Provider organizations in an Alternative Quality Contract agree to accept accountability for managing care within a specified annual budget and have an opportunity to earn significant financial rewards for meeting clinical performance targets. Participating provider organizations may be large multispecialty groups, independent practice associations that represent many smaller physician practices, or physician-hospital organizations—that is, joint ventures between one or more hospitals and physician groups.

Eligibility for the Alternative Quality Contract requires that a group include primary care physicians who collectively care for at least 5,000 members of Blue Cross health maintenance organizations (HMOs) or point-of-service (POS) plans. The Alternative Quality Contract lasts

for five years, compared with typical provider contracts of one to three years. Provider groups supported this longer window to have more-predictable payment levels and time to develop the necessary capacity to manage the new payment model.

Thus, three major features define the Alternative Quality Contract: a global budget with annual spending growth limits, incentive payments to improve quality, and technical support for participating groups.

Global Budgets With Negotiated Annual Spending Limits

Alternative Quality Contract groups agree to accept a global budget to cover all health care services delivered to Blue Cross HMO and POS patients, whether or not the care is provided by that provider group's physicians and hospitals.¹⁴ Blue Cross negotiates a base year's budget with each participating provider group. The starting point for the negotiation is the past year's medical spending for Blue Cross HMO and POS patients who are on the panel, or patient roster, of the group's primary care physicians.

Blue Cross does not seek to reduce a group's initial budget below its current spending levels. Rather, it focuses on controlling future growth rates. This helps ensure that there are adequate resources to provide the level of care delivered in the past and that no group will be forced to reduce quality as a result of initial budget reductions.

After initial budgets are set, Blue Cross uses trend allowances to manage health care spending growth over the five-year contract period. Setting these annual budget growth rates is a critical aspect of the negotiation.

In general, Blue Cross negotiates explicit annual rates of change in the budget. In the early years, the updates generally reflect the HMO network's projected average increase in spending. Over the five-year period, the budget increases are reduced by about half.

Groups with high baseline budgets are generally given lower budget increases relative to those with lower baseline budgets. Although the baseline budgets tend to incorporate existing payment rate differences that were influenced by each group's market power, the budget trajectories are intended to reduce the disparities. Provider groups with more leverage could theoretically negotiate for higher annual growth rates, but Blue Cross has been successful so far at negotiating contracts that narrow payment differences over time.

The Alternative Quality Contract incorporates several means of mitigating financial risk. First,

The use of absolute performance thresholds encourages groups to continuously improve.

each group's budget is adjusted annually for changes in patients' health status (measured concurrently) using the Diagnostic Cost Groups (DxCg) risk-adjustment model.¹⁵ In the absence of ongoing risk adjustment for budgets, provider groups could easily lose money if they encountered high adverse patient selection—that is, a higher-than-typical proportion of sicker patients.

Second, groups can choose to participate in the Alternative Quality Contract on a risk-sharing basis rather than a full-risk arrangement. Currently, the risk borne by groups ranges from 50 percent to 100 percent. Groups that accept 100 percent risk for being both over or under budget retain all surpluses earned relative to their budget and are financially responsible for all deficits. Groups assuming less than 100 percent risk share both surpluses and deficits with Blue Cross.

Third, all groups are required to have reinsurance—a separate insurance policy that protects them in the event of high-cost cases, in which a patient's medical spending exceeds a specific threshold, such as \$100,000. The policy value generally covers 70–90 percent of the cost above the threshold. Groups can purchase reinsurance coverage from Blue Cross or another reinsurer.

Fourth, the Alternative Quality Contract includes a “unit cost corridor,” which increases (or decreases) the global budget if Blue Cross negotiates higher (or lower) fees with providers than originally projected.¹⁶

Finally, some groups were concerned about being locked into a five-year rate agreement even if unforeseen events greatly increased their costs. Therefore, in some cases an overall cost-trend corridor, based on the experiences of all Blue Cross HMO patients, allows Alternative Quality Contract group budgets to be increased to protect groups against significant trends that affect all HMO business.¹⁷

Quality Incentive Payments

Prior versions of capitation were criticized for creating financial incentives for medical groups to withhold necessary care in order to save money. Blue Cross has attempted to address this criticism by creating quality incentive payments of up to 10 percent of the total per member per month payments. The incentive payments are determined based on quality measures drawn from nationally accepted sets of measures.

Groups can earn bonuses of up to 5 percent based on their performance on thirty-two care measures for ambulatory or office-based services (Exhibit 1) and up to another 5 percent for their performance on thirty-two measures of hospital care (Exhibit 2). The incentive payments are not incorporated into the budgets but must be earned each year. The potential for up to 10 percent additional earnings annually represents an important source of revenue for these groups, and the bonus may be used as each group deems appropriate (for instance, investing in system improvements or rewarding clinicians, staff, and managers).

The quality bonus system is based on absolute rather than relative performance. It is the same for all groups and constant for the entire contract period. Ultimately, the bonus depends on an overall quality score that is created by aggregating quality scores from each measure.

Specifically, for each measure, there is a range of performance targets (“gates”) enumerated in Exhibit 1. The highest target (gate 5) is set at an empirically derived score that available evidence suggests can be achieved by an optimally performing physician group or hospital. Gate 1 is set at about the network median for each measure. For each measure a “gate score” is computed linearly based on where the group scores relative to the gate 1 and gate 5 thresholds. For example, if a group's performance is halfway between gates 1 and 5, the group gets a 3 for that measure. If it is 75 percent of the way from gate 1 to gate 5, the score for that measure is a 4. The gate scores for each measure are then summed.

Outcome measures, such as controlling blood pressure, are given triple weight compared to process measures, such as breast cancer screening, and also compared to patient experience measures, such as the quality of communication. The annual quality payment is based on the aggregated score. The relationship between the bonus and aggregate score is S-shaped. Thus, a one-unit increase in aggregate score generates a bigger increase in the bonus for groups around the middle of the performance range relative to at the top or bottom. The use of absolute performance scores (as opposed to scores relative to other groups) encourages groups to continu-

EXHIBIT 1

Alternative Quality Contract Ambulatory Quality Measures, Blue Cross Blue Shield Of Massachusetts, 2009

Measure	Gate 1	Gate 5	Weight
PROCESS			
Depression			
Acute-phase Rx	65.3	80.0	1.0
Continuation-phase Rx	49.6	70.0	1.0
Diabetes			
HbA1c testing (2 times)	69.9	83.2	1.0
Eye exams	58.0	72.0	1.0
Nephropathy screening	79.7	91.4	1.0
Cholesterol management			
Diabetes LDL-C screening	85.3	93.8	1.0
Cardiovascular LDL-C screening	85.3	93.8	1.0
Preventive screening/treatment			
Breast cancer screening	77.1	90.0	1.0
Cervical cancer screening	83.5	92.4	1.0
Colorectal cancer screening	65.2	83.3	1.0
Chlamydia screening			
Ages 16–20	45.9	63.7	0.5
Ages 21–24	50.1	67.3	0.5
Adult respiratory testing/treatment			
Acute bronchitis ^a	—	—	1.0
Medication adherence			
Digoxin monitoring	83.9	91.6	1.0
Pediatric testing/treatment			
Upper respiratory infection	90.6	97.7	1.0
Pharyngitis	83.1	99.6	1.0
Pediatric well-care visits			
<15 months	91.8	99.3	1.0
3–6 years	85.5	99.2	1.0
Adolescent well-care visits	60.0	87.7	1.0
OUTCOMES			
Diabetes			
HbA1c poor control	45.0	4.7	3.0
LDL-C control (<100 mg)	33.4	75.6	3.0
Blood pressure control (130/80)	30.9	47.3	3.0
Hypertension			
Controlling high blood pressure	71.6	82.5	3.0
Cardiovascular disease			
LDL-C control (<100 mg)	33.4	75.6	3.0
PATIENT EXPERIENCE			
Patient experience (c/G CAHPS/ACES)—adult			
Communication quality	91.0	98.0	1.0
Knowledge of patients	80.0	95.0	1.0
Integration of care	80.0	96.0	1.0
Access to care	79.0	96.0	1.0
Patient experience (c/G CAHPS/ACES)—pediatric			
Communication quality	95.0	97.0	1.0
Knowledge of patients	89.0	93.0	1.0
Integration of care	85.0	91.0	1.0
Access to care	70.0	90.0	1.0

SOURCE Data from Blue Cross Blue Shield of Massachusetts. **NOTES** Gates are performance targets, with 5 being the highest and 1 being the network median for each measure. HbA1c is glycated hemoglobin. LDL-C is low-density lipoprotein cholesterol. C/G CAHPS/ACES is Clinician and Group Consumer Assessment of Healthcare Providers and Systems/Ambulatory Care Experiences Survey. ^aThis measure was reported in 2010 but was not included in the incentive payments. Thus, no performance targets (gates) were defined.

ously improve and to share best practices with one another.

Ambulatory quality measures almost exclusively reflect the performance of the group's pri-

mary care practices, creating strong incentives for groups to invest in primary care. The primary care incentives of the Alternative Quality Contract are notably different from traditional fee-

EXHIBIT 2
Alternative Quality Contract Hospital Quality Measures, Blue Cross Blue Shield Of Massachusetts, 2009

Measure	Gate 1	Gate 5	Weight
PROCESS			
Acute myocardial infarction			
ACE inhibitor/ARB for LVSD	89.1	98.9	1.0
Aspirin at arrival	98.3		1.0
Aspirin at discharge	98.2		1.0
Beta-blocker at arrival ^a	96.9		1.0
Beta-blocker at discharge	98.5		1.0
Smoking cessation	93.1	99.9	1.0
Heart failure			
ACE inhibitor for LVSD	87.3	98.9	1.0
LVS function evaluation	95.1	100.0	1.0
Discharge instructions	71.4	98.5	1.0
Smoking cessation	88.3	99.6	1.0
Pneumonia			
Flu vaccine	77.8	98.6	1.0
Antibiotics within 6 hours	95.6	99.8	1.0
Oxygen assessment	100.0		1.0
Smoking cessation	86.7	99.8	1.0
Antibiotic selection	87.4	95.4	1
Blood culture	91.0	98.0	1.0
Surgical infection			
Antibiotic received	86.5	98.9	1.0
Received appropriate preventative antibiotic(s)	94.1	99.4	1.0
Antibiotic discontinued	77.9	96.2	1.0
OUTCOMES			
In-hospital mortality, overall	2.15	0.88	1.0
Wound infection	0.30	0.09	1.0
Select infections due to medical care	0.18	0.02	1.0
AMI after major surgery	1.57	0.10	1.0
Pneumonia after major surgery	1.57	0.60	1.0
Postoperative PE/DVT	0.93	0.22	1.0
Birth trauma, injury to neonate	0.20	0.01	1.0
Obstetrics trauma, vaginal without instrument	3.54	1.54	1.0
PATIENT EXPERIENCE			
Communication with nurses	72.6	81.2	1.0
Communication with doctors	78.1	85.5	1.0
Responsiveness of staff	58.4	76.4	1.0
Discharge information	77.7	90.4	1.0

SOURCE Data from Blue Cross Blue Shield of Massachusetts. **NOTES** Gates are performance targets with 5 being the highest and 1 being the network median for each measure. ACE is angiotensin-converting enzyme. ARB is angiotensin-receptor blocker. LVSD is left ventricular systolic dysfunction. AMI is acute myocardial infarction. PE is pulmonary embolism. DVT is deep venous thrombosis. ^aBecause the performance on this measure is so high, a single gate value is used. Providers meeting this threshold were rewarded as if they met gate 5.

for-service incentives, which motivate providers to use highly specialized services and which often leave primary care practices as just the gateway to specialty care revenue.

The potential quality bonus is much higher than typical pay-for-performance programs because it is a percentage of total per member per month payments rather than just physician fees. For example, primary care physician payments currently make up about 10 percent of total network medical spending. If a group allocates the entire ambulatory quality bonus (up to 5 percent of total per member per month spending) to

primary care physicians, these bonuses could increase primary care physician payments considerably.¹⁸

Technical Support For Participating Groups

One of the biggest challenges that physician groups face in managing population health is incomplete data. US medical groups generally lack data on care delivered outside of their group, and they may not be informed in a timely manner, or at all, when their patients are admit-

ted to a hospital.

Blue Cross has developed a data-reporting system that supports medical groups' ability to implement timely medical management. The support includes a series of regular data and performance reports, consultative support, and organized sessions where the groups meet jointly and share best practices. The reports allow groups to monitor their performance on the quality bonus measures as well as current performance relative to their budgets. This informs their efforts to address clinical waste and to manage referrals more effectively.

Blue Cross's reporting emphasizes unexplained practice pattern variations that are both clinically and financially important. Reports include both condition-specific variations in treatment provided in a given medical or surgical specialty and potentially avoidable use of hospital resources. The analyses of condition-specific practice pattern variations demonstrate how physicians within a given specialty—for example, cardiology—differ from their peers in their use of particular technologies, treatments, or diagnostic tests for patients with the same underlying clinical status.

The methodology, drawn from the work reported by Robert Greene and colleagues,¹⁹ has been used to demonstrate unexplained variations in practice patterns such as treatment for conditions like knee, back, and hip pain; use of brand-name medications rather than generics; use of cardiac catheterization and coronary artery bypass graft procedures; use of advanced imaging; nonurgent emergency department care; and treatment of gastroesophageal reflux disease.

Using a similar approach, Blue Cross provides participating groups with data on three categories of potentially avoidable hospital use: admissions that could have been avoided by appropriate outpatient care for conditions like asthma and diabetes; readmissions within thirty days of a hospital discharge; and nonurgent emergency department use.

Operation Of The Alternative Quality Contract

PROVIDER PERSPECTIVE Throughout the contract year, groups are paid on a fee-for-service basis, as they were before the Alternative Quality Contract. All Blue Cross payments for medical services, whether delivered by providers inside an Alternative Quality Contract group or by unaffiliated providers, are debited against the group's budget. Fee-for-service rates paid by Blue Cross differ widely across individual hospitals and physician groups, creating strong incentives

The Alternative Quality Contract does not lock patients into any provider network.

for groups to direct referrals to low-cost providers. At year's end, Blue Cross conducts a final reconciliation with each group, paying the group its surplus or recouping any deficit relative to the budget.

ENROLLEE PERSPECTIVE At present, the Alternative Quality Contract applies only to HMO and POS plan enrollees. Because enrollees in such plans are required to designate a primary care physician, attribution of patients to primary care physicians and to the provider's budget is relatively straightforward.

Blue Cross members are not formally notified when they select a primary care physician who is part of an Alternative Quality Contract group. This is consistent with general industry practice of not notifying patients when physician incentives change. The fact that their primary care physician is part of this contract may be invisible to the member, whose benefits remain identical to those of other HMO and POS enrollees. Like any other Blue Cross HMO or POS enrollee, members with physicians in the Alternative Quality Contract may seek care from any network provider if they obtain a referral from their primary care physician prior to receiving specialty care.

Enrollee cost-sharing requirements are not affected by the Alternative Quality Contract or by whether or not the provider a patient sees is part of an Alternative Quality Contract group. Thus, enrollees do not have financial disincentives to see providers outside of the relevant group. The absence of such financial disincentives has the potential to create conflict between patients and primary care physicians, who may want to limit referrals outside their own network. As with any HMO or POS member, enrollees who are dissatisfied with their primary care physician—based on difficulty in obtaining a referral or for any other reason—have the option of changing physicians. Thus, the Alternative Quality Contract does not lock patients into any provider network, but neither does it allow unrestricted patient choice.

In fact, a considerable amount of care delivered to Alternative Quality Contract patients—

EXHIBIT 3

Groups Enrolled In The Blue Cross Blue Shield Of Massachusetts Alternative Quality Contract Through 2009

Group name	Description	No. of primary care physicians	No. of specialists	Typical physician group size ^a	No. of hospitals	Prior BCBSMA risk contract
Atrius Health	Multispecialty group	400	444	Large	0	Yes
Caritas Christi Network Services	PHO	276	843	Small	6	No
Hamden County IPA	IPA	72	0	Small	0	No
Lowell General PHO	PHO	80	200	Small	1	No
Mt. Auburn Cambridge IPA	IPA with aligned hospital	112	399	Small	1	Yes
New England Quality Care Alliance ^b	Hospital-owned IPA	369	982	Mixed	0	For some providers
Signature Healthcare	Integrated system	50	109	Large	1	No
South Shore PHO ^c	PHO	98	281	Small	1	No

SOURCE Data from Blue Cross Blue Shield of Massachusetts (BCBSMA). **NOTES** PHO is physician-hospital organization. IPA is independent practice association. “Small” means that the majority of physicians practice in groups of five or fewer. “Large” means that the majority of physicians practice in groups of twenty-one or more. ^bOrganization works with Tufts Medical Center. ^cThe number of physicians was estimated by Blue Cross. Other groups reported numbers of physicians.

generally about one-third, according to Blue Cross data—is delivered by other primary care providers, specialists, or hospitals outside the patients’ Alternative Quality Contract groups. However, Blue Cross reports no change in the rate of patients who switch to a new primary care physician.

Medical Groups’ Participation In The Alternative Quality Contract

As of the end of 2009, eight provider groups had joined the Alternative Quality Contract; four more have since joined. The groups are diverse in terms of size, geography, organizational form, and prior experience with risk contracting (Exhibit 3).

The Alternative Quality Contract groups include one independent multispecialty group practice, several independent practice associations that contract on behalf of multiple smaller physician groups, and several physician-hospital organizations. Three of the groups, and some of the practices that composed a fourth group, contracted with Blue Cross on a risk-sharing basis prior to signing the Alternative Quality Contract in 2009. The rest of the groups were previously paid on a fee-for-service basis.

It is noteworthy that although all Alternative Quality Contract physicians are part of some organizational structure that contracts on their behalf, about 12 percent of participating physicians are in one- or two-physician practices. For these physicians, the independent practice association or other organizational structure provides an important basis for contracting and ad-

ministrative functions as well as for performance improvement initiatives. In contrast, physicians practicing in very small practices but without any larger organizational affiliation—about 16 percent of Blue Cross’s network—would probably need to join an existing organization or form a new organization in order to manage successfully under this type of contract.

The smallest Alternative Quality Contract group has seventy-two physicians, and the largest group has well over 1,300. Five of the groups include hospitals. Three are independent physician organizations without a hospital.

In some of the groups, the majority of physicians are employed physicians—meaning that they are directly employed by the hospital or large physician group—and in others, most of the physicians are independent practitioners. In 2009 the Alternative Quality Contract covered about 1,600 primary care physicians, representing just over one-quarter of the primary care physicians in the Blue Cross HMO and POS network, who care for about one-third of Blue Cross’s HMO and POS plan members.

Importantly, several of the largest provider networks initially chose not to participate in the Alternative Quality Contract, including the physician networks affiliated with Partners Healthcare, Beth Israel Deaconess, UMass Memorial Healthcare, and the Lahey Clinic. Their concerns included their ability to manage risk and the overall generosity of payment. Yet despite these concerns, Blue Cross’s discussions with these groups are ongoing, and, in fact, Beth Israel Deaconess has recently signed an Alternative Quality Contract that begins January 2011.

The initial Alternative Quality Contract groups represent a wide range of baseline cost and quality performance compared with the network average. These groups ranked between fourth-highest and thirty-seventh-highest out of thirty-nine groups for 2008 total medical expenses, according to data that Blue Cross reported to the Massachusetts attorney general's office.²⁰ Similarly, their 2008 quality scores ranged from the high end to the low end of network performance.

Discussion

Blue Cross's primary motivation for the Alternative Quality Contract was to reduce the growth in medical spending and improve quality and outcomes. Several features of this contract program differentiate it from past capitation models, including the five-year contract period and quality bonuses.

AIMS OF THE CONTRACT PERIOD The five-year contract period achieves two important aims. First, under prior versions of capitation with shorter contract periods, groups that successfully controlled use or services were often "punished" by having to adhere to a lower global budget in subsequent years. Under the longer-term Alternative Quality Contract, groups will have longer to reap the benefit of successful efforts to control use. Second, because the growth rates for the global budgets are specified in the contract, premium increases for purchasers of health insurance become more predictable.

The effect of the Alternative Quality Contract on spending depends on the negotiated global budgets relative to spending that would have occurred otherwise. Although it was Blue Cross's intention that the Alternative Quality Contract's declining budget increases would yield cumulatively large savings even after accounting for anticipated quality bonuses, this result is uncertain because the trend throughout the Blue Cross network cannot be predicted with accuracy over the five-year contract period. Moreover, it is plausible that spending in the Alternative Quality Contract could be higher during the initial contract period than in the rest of the network because some initial budgets were set at relatively generous rates to attract early adopters.

Over longer periods, the Alternative Quality Contract can reduce spending growth by influencing delivery system structures and processes. If contracted groups invest in new infrastructure such as more health information technology, reorient practice culture to place a greater emphasis on primary care, and develop more-efficient care models during the five years of their first contract, they could be poised to oper-

In the first year of the Alternative Quality Contract, all groups met their budget targets and, in fact, achieved savings.

ate profitably under future budget growth rates that track the growth of the rest of the economy.

Many policy makers believe that a larger ratio of global payment arrangements relative to other payment reforms will be needed to drive large-scale reorganization of delivery systems. It is likely that successful Alternative Quality Contract groups will want to enter into global budget contracts with other payers, thereby generating broader system effects. Whether this slows spending growth over a much longer time period will depend on whether these efficiencies affect the rate at which groups adopt and use new medical technology and how rates are set after five years.

CHALLENGES TO THE SYSTEM There are several challenges facing the Alternative Quality Contract system. One will be attracting more large physician groups on terms that are consistent with the goals of the contract. A second will be finding ways to effectively engage groups that now have limited infrastructure for managing risk contracts.

Another important problem to consider is the fact that patients' financial incentives are generally not well aligned with the goal of careful use of health care resources that is central to Alternative Quality Contracts. This could create conflicts as groups aim to keep patient referrals within their core provider networks. Blue Cross and contracted groups are working to address these issues but might not succeed in doing so.

Past global payment models have failed because physicians were unable to manage risk.¹¹ In the first year of the Alternative Quality Contract, Blue Cross reports that all groups met their budget targets and, in fact, achieved savings. Subsequent analyses will evaluate changes that may have generated these savings and will monitor groups' success against budget targets during the five-year contract. All groups are also reported to have earned significant quality bonuses in the first year.

Some form of provider accountability for resource use seems essential to reining in spending growth.

Even if the Alternative Quality Contract is successful for Blue Cross, other payers might not find it easy to replicate the model. Because Blue Cross is the largest insurer in Massachusetts, its market share may be sufficient to induce meaningful changes in a provider organization's clinical and financial operations. Furthermore, a substantial proportion of the plan's business is in HMO and POS products, which allow provider organizations greater control over patient referrals. Finally, Blue Cross has long-standing relationships with provider organizations in the state. In contrast, large national health plans may have relatively limited market share in any given local area and relatively limited relationships with most local providers.

Public payers such as Medicare may be able to surmount the problem of provider market power and even compel providers—or give them strong incentives—to participate in global payment systems. Yet public payers (and private payers with less local knowledge) may find it more difficult to tailor their model to different organizations and to support those organizations with data. It is likely that Blue Cross's success will reflect its ability to work with providers who face unique situations and to change certain details of the model as needed, based on deep knowledge of the market and providers. Public and many private payers are likely to find such flexibility more difficult.

Nevertheless, the Alternative Quality Contract represents one possible vision for paying accountable care organizations. Alternative Quality Contract groups are responsible for delivering care for a defined patient population within an agreed-upon budget, with financial rewards for meeting quality thresholds. The primary care orientation is consistent with medical home models. But the Alternative Quality Contract does not require participating groups to exhibit any particular structure, nor does it require that groups invest additional funds in primary care payment and infrastructure.

DIFFERENCES FROM MEDICARE SHARED SAV-

INGS MODEL The Alternative Quality Contract differs from the shared savings model proposed for paying Medicare accountable care organizations under the Affordable Care Act in a number of important ways. First, the Alternative Quality Contract groups bear significant financial risk for failure to meet budget targets. Medicare ACOs may not bear significant financial risk if they fail to meet budget targets.²¹

Second, Blue Cross members can be in the Alternative Quality Contract only if they are enrolled in an HMO or POS plan in which they must select a primary care provider. There is no such requirement for Medicare fee-for-service beneficiaries. There are many advantages to having beneficiaries select their own primary care physician. It allows primary care physicians and affiliated medical groups to know ahead of time which patients they are responsible for.

In contrast, although the proposed method of assigning Medicare beneficiaries to accountable care organizations is consistent with the program's emphasis on freedom of choice, it continues a fundamental disconnect between beneficiary responsibilities and the goals of care systems.

Third, the Alternative Quality Contract is based on negotiated payment rates and budgets. Groups are paid differing amounts based on historical differences in care patterns, severity of patients' medical conditions, and negotiated rates.

Blue Cross's decision to set baseline budgets in accordance with each group's current spending levels was considered necessary to attract voluntary participation. Nevertheless, provider market power has become a major concern of both employers and health insurers. Conceivably, Blue Cross or other insurers could have difficulty negotiating annual budget growth rates below prevailing medical trends, if providers retain sufficient market power to dictate rates.

In contrast, the budget targets of Medicare ACOs will probably be based on administered prices that vary much less than Blue Cross's negotiated rates. Spending growth will therefore depend on congressional decisions about Medicare spending.

CONCLUSION The Alternative Quality Contract represents a global payment model intended to control spending growth and improve quality and outcomes. The same goals are behind policy makers' efforts to encourage growth of accountable care organizations.

Models like the Alternative Quality Contract create stronger financial incentives for improving the value of care. By requiring that members have a primary care physician, they also give medical groups more ability to engage patients

and coordinate care.

Barriers to success of the Alternative Quality Contract remain. Yet simply clinging to, or modestly rearranging, the fee-for-service payment systems of the past is not a viable option for long-term sustainability. Some form of provider accountability for resource use seems essential

to reining in annual health care spending growth rates that continually outpace income growth rates. Pairing accountability for spending with accountability for quality, as the Alternative Quality Contract does, seems an important foundation or design principle for the reforms that will be tested in the years ahead. ■

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NOTES

- 1 Hillman A, Pauly M, Kerstein J. How do financial incentives affect physicians' clinical decisions and the financial performance of health maintenance organizations? *N Engl J Med*. 1989;321(2):86–92.
- 2 Stearns S, Wolfe B, Kindig D. Physician responses to fee-for-service and capitation payment. *Inquiry*. 1992;29(4):416–25.
- 3 Shrank W, Ettner SL, Slavin PH, Kaplan HJ. Effect of physician reimbursement methodology on the rate and cost of cataract surgery. *Arch Ophthalmol*. 2005;123:1733–8.
- 4 Shafrin J. Operating on commission: analyzing how physician financial incentives affect surgery rates. *Health Econ*. 2010;19:562–80.
- 5 Chernew ME, Cowen ME, Kirking DM, Smith DG, Valenstein P, Fendrick AM. Pharmaceutical cost growth under capitation: a case study. *Health Aff (Millwood)*. 2000;19(6):266–76.
- 6 Oleske DM, Branca ML, Schmidt JB, Ferguson R, Linn ES. A comparison of capitated and fee-for-service Medicaid reimbursement methods on pregnancy outcomes. *Health Serv Res*. 1998;33(1):55–73.
- 7 Kralewski JE, Rich EC, Feldman R, Dowd BE, Bernhardt T, Johnson C, et al. The effects of medical group practice and physician payment methods on costs of care. *Health Serv Res*. 2000;35(3):591–613.
- 8 Krieger JW, Connell FA, LoGerfo JP. Medicaid prenatal care: a comparison of use and outcomes in fee-for-service and managed care. *Am J Public Health*. 1992;82(2):185–90.
- 9 Landon BE, Normand SL, Meara E, Qi Z, Simon SR, Frank R, et al. The relationship between medical practice characteristics and quality of care for cardiovascular disease. *Med Care Res Rev*. 2008;65(2):167–86.
- 10 Berwick DM. Quality of health care. Part 5: Payment by capitation and the quality of care. *N Engl J Med*. 1996;335(16):1227–31.
- 11 Robinson JC. The end of managed care. *JAMA*. 2001;285(20):2622–8.
- 12 Mechanic D. The managed care backlash: perceptions and rhetoric in health care policy and the potential for health care reform. *Milbank Q*. 2001;79(1):35–54.
- 13 Center for Studying Health System Change. CTS physician surveys and the HSC health tracking physician survey [Internet]. Washington (DC): The Center; 2008 [cited 2010 Sep 28]. Available from: <http://www.hschange.com/index.cgi?data=04>
- 14 Global payments for some Alternative Quality Contract groups do not include mental health and substance abuse treatment services. In those groups, providers of those services are paid on a fee-for-service basis, and the expense is not counted toward the group's budget target.
- 15 The DxCG model is proprietary software available from Verisk Health. It is based on statistical analysis of claims data. The model generates a risk score for individuals that predicts spending based on diagnostic codes that appear in claims data. Because the risk adjustment is based on concurrent claims, final payment is not determined until the middle of the following year. However, groups are given regular updates of their risk profile and performance during the year. For example, the risk adjustment for 2009 was based on 2009 claims. Those claims are considered complete after April 2010, and analysis lasts until the fall of 2010.
- 16 If the unit cost (price) changes for a hospital used frequently by an Alternative Quality Contract group, the budget trend for that group is adjusted to account for that change.
- 17 For example, some groups may have their budget increase adjusted so that it never deviates from the overall Blue Cross HMO trend by more than a fixed amount (typically 2 percent). This illustrates the flexibility that Blue Cross uses in negotiating contracts.
- 18 Because of risk adjustment, groups that keep their patients healthier may receive lower risk scores and thus lower payments.
- 19 Greene RA, Beckman HB, Mahoney T. Beyond the efficiency index: finding a better way to reduce overuse and increase efficiency in physician care. *Health Aff (Millwood)*. 2008;27(4):w250–9. DOI: 10.1377/hlthaff.27.4.w250
- 20 Office of Massachusetts Attorney General Martha Coakley. Examination of health care cost trends and cost drivers [Internet]. Boston (MA): The Office; 2010 Mar 16 [cited 2010 Dec 7]. Available from: http://www.mass.gov/Cago/docs/healthcare/final_report_w_cover_appendices_glossary.pdf
- 21 McClellan M, McKethan AN, Lewis JL, Roski J, Fisher ES. A national strategy to put accountable care into practice. *Health Aff (Millwood)*. 2010;29(5):982–90.

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Michael Chernew, Robert Mechanic, Bruce Landon, and Dana Gelb Safran introduce *Health Affairs* readers this month to the Alternative Quality Contract, a new payment model for providers initiated by Blue Cross Blue Shield of Massachusetts. All four authors view payment reform as fundamental to controlling cost growth in health care, and they believe that the Alternative Quality Contract could influence similar initiatives across the country.

The authors came together under the auspices of Blue Cross Blue Shield. Safran, who is the health insurer's senior vice president for performance measurement and improvement, sought a top-flight evaluation of the program. The result was what she describes as this "trifecta" in health services research, bringing together Chernew's expertise with global payments, Landon's work in quality measurements, and Mechanic's research in the leadership and culture of health care organizations.

Lead author Chernew is a professor of health care policy in the Department of Health Care Policy at Harvard Medical School and also serves as the director of Harvard's program for value-based insurance design. Chernew received

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