Introduction
This report summarizes the history of an innovative payment reform project in Massachusetts which began in 2009 and ended in autumn 2011, at which time project stakeholders mutually decided that the originally anticipated payment change -- paying equally for procedures that, according to comparative effectiveness reviews, produced equal outcomes for patients with low-risk prostate cancer -- was not feasible. This report describes the context of the original payment reform project; its objectives and implementation approach; the logic model underlying its design; the barriers and facilitators to implementation; evaluation; and lessons learned. In addition to reporting on the original project, we present changes in the Massachusetts environment through autumn 2012, the subsequent evolution of payment and health care innovation of the project and in Massachusetts, and updated lessons for payment reform endeavors.

Context
The Commonwealth of Massachusetts has been on the forefront of health reform, particularly since the enactment of legislation in 2006 that established an individual mandate for health insurance coverage. The legislation was coupled with one of the nation’s first health insurance exchanges designed to improve access to coverage for uninsured persons, particularly those seeking coverage in the individual and small group markets. At the same time, policymakers, employers, and residents of the Commonwealth have struggled with rising health care costs and the burden of those expenditures on consumers, businesses, and government. Recognizing these challenges, a coalition of employers, health care providers, and health plans (EACH, the Employers Action Coalition on Healthcare) has been collaborating on a variety of efforts in the greater Boston area to improve health care and reduce costs.

This case report describes the Payment Reform to Pay Equally for What Works Equally Well Project, which was facilitated by the Institute for Clinical and Economic Review (ICER, an affiliate of Massachusetts General Hospital) and sponsored by EACH. The Payment Reform Project began in 2009 within the larger context of joint, multi-stakeholder health care initiatives in the greater Boston area. EACH convened employers, insurers, providers, consumers, and academics to work on solving complex problems, such as the fragmentation of care, medical errors, administrative complexity, and racial and ethnic disparities. Stakeholders remarked that the Commonwealth has a shared sense of responsibility and a culture of shared sacrifice and learning. The highly educated populace and the breadth and depth
of the area’s academic institutions in medical science and health care also offer a background favorable to innovation.

Moreover, with universal health insurance coverage there is increasing need for cost control, which has lent impetus to payment reform. In fact, competing approaches to cost containment are emerging. In 2011 the Governor’s office was contemplating state action, and during that time frame the Eastern Massachusetts Health Initiative (EMHI), whose members are the Commonwealth’s major insurers and hospital and physician networks, including Blue Cross Blue Shield of Massachusetts [BCBSMA] and Partners Healthcare) convened a group of prominent academics and health care executives to forward a proposal that would allow hospitals and insurers a three-year grace period for voluntary cost control initiatives prior to state action.¹

Ultimately, however, state action was not forestalled by these voluntary efforts. In 2012 Chapter 224 legislation² was passed in Massachusetts and signed by the Governor; this comprehensive set of regulations and rules focused on health care cost reduction. In a major regulatory shift, a new Health Policy Commission will have authority to ensure that providers are not “overspending.” The legislation sets specific goals for limiting annual spending growth, and the Commission will work with individual providers missing those spending benchmarks.

There is a continuing and increasing emphasis on accountable care organizations (ACOs) and integrated care organizations, joined by movement toward a global payment model and away from fee for service (FFS). Payers are moving to payer-specific arrangements with selected provider organizations, but, per the state legislation, any state-sponsored health care (e.g., for Medicaid or state retirees) will be paid through an accountable care organization (ACO) or global payment arrangement.

Another contextual change in 2012 was the merger of EACH and the Massachusetts Health Leaders for Appropriate and Affordable Care. EACH has been an employer-sponsored initiative pinpointing health care cost reduction, whereas the Massachusetts Health Leaders (MHL) group had adopted a broader perspective -- acting more like a health policy “think tank” -- in which stakeholders assembled, shared thoughts and best practices, and returned to their individual organizations to try out promising approaches. In the judgment of one interviewee, this approach represented a change in vision from the

original one, which was of a multi-stakeholder coalition seeking a common solution to a shared problem. This shift might reflect emerging institutional imperatives to work with ACOs and limited internal capacity to commit to such coalitions. With the appointment of MHL’s two leaders to the Massachusetts Health Policy Commission, MHL has announced that it will be disbanding in spring or summer of 2013, having served its initial purpose.

The environment for payment reform in Massachusetts and the greater Boston area reflects the interplay of many factors. Most health plans in the state have not-for-profit status, which can help facilitate cooperation in the development of innovations. The greater Boston area also has a mature provider and payer community that lends itself to payers and providers working together. The state’s Division of Insurance plays an important role in oversight of health care delivery and payment and in regulation pertinent to health plan and provider contracting. Payer–provider collaboration is shaped by the presence of three or four leading not-for-profit health plans (one with substantially greater market penetration) which jointly dominate the market, and a highly competitive provider market characterized by several substantial medical groups and academic medical centers.

The impact of these environmental forces on the prospects for payment reform is mixed: a history of payer–provider cooperation, active regulatory oversight by the Division of Insurance, and a shared community of learning are balanced by competition among providers. The latter factor potentially makes cooperation more difficult, especially in the absence of one dominant provider to lead the way. However, the breadth of EACH’s stakeholder commitment in the Payment Reform Project was an encouraging sign for payment reform. EACH participants included leading providers, three major regional health plans, and large regional employers and business leaders.

In parallel payment reform developments, BCBSMA implemented the Alternative Quality Contract (AQC)\(^3\) in 2009, which links capitation payments for care of a defined population over a multi-year period with potential quality bonuses for medical group practices, and Harvard Pilgrim Health Care (HPHC) is considering a bundled payment approach to plan–provider contracting. As of 2011, total enrollment in the AQC was 470,000 covered lives, 11 percent of the state’s privately insured population. Interviews by a team of researchers from Brandeis University and Harvard Medical School revealed that the group practices initially were focusing on building infrastructure to support attainment of quality bonuses and managing referrals to guide patients toward lower-cost providers.

A related study estimated savings of 1.9 percent in rate of increase of average spending for AQC physicians’ patient panels, when compared to a control group of demographically matched BCBSMA

\(^3\) Mechanic R, Sanos P, Landon BE, Chernew ME. Medical group responses to global payment: Early lessons from the ‘Alternative Quality Contract’ in Massachusetts. Health Affairs 2011 (September); 30(9): 1734-42.
patients in the first year\(^4\). One early challenge for sustainability of the AQC was that total plan payments (including quality bonuses, surplus sharing, and infrastructure support) in Year One to all provider organizations contracting with BCBSMA (the AQC and control group of non-participants) probably exceeded the estimated savings.

In Year Two of the contract, savings in health care spending rose to 3.3 percent compared to the control group, resulting in total savings of 2.8 percent over the first two years relative to the non-participating organizations. Savings were achieved mainly by shifting procedures, tests, and imaging to lower-priced providers, plus lower utilization in some provider organization. Based on these findings, the authors conjecture that incremental BCBSMA payments (bonuses, surplus sharing, and infrastructure support) in 2010 probably exceeded savings in medical spending.\(^5\)

There has been something of a return to capitation payment in the region. Whereas FFS payment dominated the Boston market at the inception of the Payment Reform Project in 2009, at the start of 2012 roughly 70 percent of BCBSMA enrollees in their HMO product will be seeing physicians with at-risk contracts.

**Objective**

The vision of the original Payment Reform Project was to deploy comparative effectiveness research (CER) to inform payment changes for the treatment of low-risk prostate cancer (i.e., cancer at low risk of recurrence). The clinical effectiveness of various treatment options for patients with low-risk, localized prostate cancer is comparable, but the reimbursement rates providers receive for these different treatment options vary widely. The project brought together stakeholders from the major payers and providers with employers to implement a payment change for the treatment of low-risk prostate cancer that would lower provider reimbursement rates for more costly treatments -- in this case, intensity-modulated radiation therapy (IMRT) -- to the level of less costly treatments of similar clinical effectiveness (brachytherapy or active surveillance). In short, the payment change was oriented toward equal payment for equal outcomes. The project’s stated goal was two-fold: to shift the treatment mix for low-risk prostate cancer toward higher-value services, and to produce overall savings in the system for treatments of low-risk prostate cancer\(^6\).


The project was envisioned as a pilot project: a “proof of concept” for the broader vision of applying CER to equalize payment for treatment regimens of equivalent clinical effectiveness. However, interviewees indicated a divergence in the primary outcomes desired by payers and providers, respectively. The former principally sought savings in health care spending through improved value, while the latter were primarily interested in helping patients to make the right treatment decision. Providers’ main objective was to change the decision process and to enhance patient engagement; cost-savings were of secondary interest.

**Approach**
This particular low-risk prostate cancer project required development and implementation of a coding algorithm and subsequent reimbursement change that would reward physicians for choosing lower-cost, clinically equivalent treatment regimens rather than higher-cost regimens. One stakeholder from a provider organization observed that part of the early work among provider stakeholders was to develop a flow chart, including pre-screening education by the primary care provider (PCP) prior to a prostate-specific antigen (PSA) test. If the PSA result is high, the next step would be pre-biopsy education. The entire multidisciplinary care team would be involved in joint decision making: patient, partner, PCP, urologist, oncologist, and radiologist.

The stated project design involved several steps:

- Identifying the correct CPT category II F-codes to distinguish risk of recurrence for patients with localized prostate cancer: low risk, intermediate risk, high risk, and undetermined risk.
- Notifying providers of the required CPT category II F-codes that must accompany claims from urologists, medical oncologists, and radiologists if the claims include an ICD-9 code for prostate cancer.
- Working with providers to communicate best practices among different provider groups for updating their systems and educating colleagues on the F-code requirement and impending payment change.
- Managing resistance and barriers to maintain engagement of the coalition and focus on the initiative’s guiding principle: to reduce incentives for over-utilization of established test and treatment options when those options are more expensive than equally effective alternatives.
- Creating a “roadmap” of lessons learned and barriers encountered and overcome during the project.

By autumn 2011, the participants in the Boston Payment Reform Project terminated the low risk prostate cancer initiative. Only one of the health plans was able to adjudicate claims with the F-codes, a function which was critical for full implementation of equal payment for equal effectiveness. None of the other payers had the type of claims editing capability to utilize the F-codes as a basis of differentiating payment. Those organizations determined that the costs of reprogramming their claims
transaction systems for one clinical condition and only for commercial insurance substantially exceeded
the benefits of doing so. The ICER team conducted several one-on-one sessions with key players to
brainstorm alternatives to the F-codes, but none of the options was judged to be viable.

Notwithstanding this decision to terminate the prostate cancer payment project, the collaborative
efforts of ICER and EACH continued in 2012. EACH and ICER stakeholders agreed that comparative
effectiveness research creates a solid basis for adopting low back pain (LBP) as the condition of interest
for a subsequent project focusing on supporting high value choices. The number of commercially
insured persons affected by this condition is considerably greater than those with low-risk prostate
cancer and offers the prospect of a significantly greater rate of return on the requisite investment.

The LBP project comparative effectiveness work by ICER was completed during 2012, and there was
early interest among EACH participants in using that research and evidence to define pathways of care
with high value. The general goal was to reduce costs by providing evidence-based care, but there was
little consensus on how each organization might best use that evidence. For example, among the tools
that health plans might deploy to improve value, private payers are reluctant to use prior authorization
due to lack of member acceptance, whereas Medicaid directors tend to perceive prior authorization of
one of few workable approaches in their cost containment arsenal. Among three interested payers, two
actually engaged in the initial work, but ultimately went their own way after a few months. In light of
the more policy-oriented emphasis of the newly-formed Massachusetts Health Leaders group,
maintaining payer engagement in the LBP project as a multi-stakeholder initiative was no longer an
organizational priority.

Nonetheless, ICER has continued to facilitate dialogue among the payers. Payment reform per se seems
to be of secondary importance to these payers, who were, however, interested in what other initiatives
(e.g., in Oregon) might be doing to reduce costs of caring for persons with LBP. At this point, any
learning from those conversations has been internalized by individual payers, and there is no available
information on those private efforts.

Overall, no further payment reform initiatives have emerged from the work of ICER and Massachusetts
Health Leaders. ICER created The New England Comparative Effectiveness Public Advisory Council
(CEPAC), to convene independent clinicians and patients to vote on comparative effectiveness evidence
to inform efforts of payers and other stakeholders in using evidence to set medical policy. Operationally,
CEPAC members vote on evidence but do not make recommendations; for example, if the group
identifies a treatment which is as good as and costs less than the alternative, and is therefore higher
value, ICER works with stakeholders to implement those votes. The thrust is to develop policies that
emphasize higher value care.
Logic Model

The linchpin of the project’s original logic model was changing reimbursement to pay equally for equal outcomes, and in so doing, to lead to higher value care. In that sense, broad dissemination and deep penetration of CER-based information creates a “level playing field” for clinician–patient shared decision making. In contrast, patients currently receive little information on the relative risks and benefits of different treatment regimens; as a result, older treatments of equal effectiveness are at a disadvantage in comparison to the “latest and greatest” procedures. The underlying idea was to break the current pattern in clinical decision making (in which the patient’s ultimate treatment choice is often determined by the sequence of providers seen) and replace it with choice driven jointly by evidence, clinical judgment, and the patient’s values and preferences. The logic model posited that the first step is to inform patients and clinicians of the equivalent outcomes of IMRT and brachytherapy, and then to lower IMRT payments to that for brachytherapy (which are less than one-third the cost of IMRT). The combination of lowered profit margins for IMRT and improved, evidence-based information will tilt decisions toward less costly, therapeutically equivalent treatments. Moreover, even if treatment mix did not shift significantly, payers would still realize system savings from dramatically lower prices for the more costly procedures.

Facilitators and Barriers

The facilitators and barriers are presented in no particular order of importance.

Facilitators

In addition to the generally favorable market, social, legislative, and regulatory context for payment reform in Greater Boston and the Commonwealth of Massachusetts, several factors supported the original initiative. The EACH board was comprised of the CEO of every major stakeholder, and they declared their support and engagement. The quality of coalition governance was one of the initiative’s strengths. ICER itself continues its role as a neutral convener and facilitator, and especially as a trusted source of clinically relevant and scientifically valid evidence regarding comparative effectiveness. ICER’s involvement of and credibility with academics has enhanced the validity of CER initiatives in the eyes of the provider community. The clarity of the evidence on relative clinical effectiveness of alternative treatments for low-risk prostate cancer was crucial in reaching consensus on the proposed payment change. The relevant science was mature and the issue of alternative treatments for low-risk prostate cancer was familiar to the players. Provider engagement was also enhanced by their perception that the

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7 Pearson SD, Bach PB. Techwatch: How Medicare could use comparative effectiveness research in deciding on new coverage and reimbursement. Health Affairs 2010 (October); 29(10): 1796-1804.
initiative was prioritizing clinical work and quality improvement from the beginning. Finally, CEPAC is established as a known and legitimate facilitator and convener of diverse groups.

**Barriers**

Probably the greatest barrier to completion of the prostate cancer payment reform project was the inability of all but one health plan to adjudicate claims using the F-codes for risk of recurrence. This was the rate-limiting step in implementing equal payment.

Another important factor was the choice of clinical condition. The CER evidence base on clinical effectiveness of different treatments for low-risk prostate cancer is very solid, and payment differentials are very large (on the order of $30,000 per treatment regimen). This enabled agreement in principle on equal payment. However, low-risk prostate cancer was a relatively infrequent condition in the commercially insured population, and -- in the face of high fixed programming costs to implement F-codes -- the business case for the prostate cancer payment initiative became unsustainable.

The participation of key partners was important. Medicare was not at the table, and that meant fewer covered lives at significant risk for prostate cancer were influencing decision making or helping establish the business case. While present at the outset of the project, senior executives of the coalition employers subsequently delegated meeting attendance and actual decision making to others in their organizations. The result was that those purchasers were a “soft voice” at the table, rather than a consistent, strong catalyst for action.

The divergence in priorities of providers and payers -- the former stressing decision quality and shared decision making, while the latter emphasized cost control via reduced payment for more costly (but clinically not superior) treatments -- also slowed progress on the initiative. Several informants mentioned that the implementation process took so long that the project lost momentum.

One medical group interviewee noted that the lack of a multidisciplinary team payment that would support joint consultation with patients was an impediment to improved decision quality. Moreover, the practice was sustaining significant losses on such team visits. The difference in prevailing payment methods (fee for service versus capitation) across health plans and providers also may have heightened the difficulty of carrying out a community-wide approach to the payment initiative.

Because the regional market environment has shifted toward global payments, there may have been less interest in effectuating a payment change that would directly affect only providers in fee for service payment arrangements. Reform in the direction of bundled per case payment could pose analogous challenges.
While CEPAC’s existence is noted as a facilitator, the diversity of its stakeholders (e.g., Medicaid, private employers, health plans, and small hospitals) poses a continuing challenge. To make evidence useful to different audiences, one has to deal with varying institutional constraints and cultures specific to each group. The key is to vary topics to address differing interests (e.g., ADHD, depression), engage the right stakeholders for each topic, and maintain strong communication. Another challenge is the newness of the initiative and the need to spread the word and secure buy-in from an array of different groups. This is hard work and requires resources, yet it is difficult to secure operational support from external sources. Support from foundation and government sources tends to flow to new initiatives, not for the support of ongoing programming.

**Evaluation and Sustainability**

In January 2013 ICER produced a white paper that summarized the methods and conclusions of their local evaluation of the Payment Reform Project. The authors interviewed a total of 10 persons involved in the implementation efforts of the project: three providers, five payers, one business consultant, and one employer representative. The semi-structured interviews concentrated on themes related to barriers and facilitators of the project: specifically, its attempt to use comparative effectiveness research as an instrument for improving value in the health system. The local evaluation concluded that several factors ultimately led to the inability to implement the low-risk prostate cancer equal pay for equal outcomes reform: “misalignment of goals between payers and providers; competing priorities among quality improvement leaders of provider organizations; and decreasing emphasis on fee for service payment arrangements.”

These conclusions from ICER’s local evaluation square with those of our UW-based evaluation team.

Since the RWJF-sponsored Payment Reform Project has been terminated, rather than discuss sustainability *per se*, we turn next to the lessons learned from this project.

**Lessons Learned**

Choice of condition is critical for an initiative grounded in the principle of equal pay for equal outcome. In retrospect, many of the coalition’s participants noted that the significantly greater incidence and prevalence of prostate cancer among Medicare beneficiaries, as compared to the commercially insured, would have made that target population a stronger value proposition. Furthermore, it may be easier to

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9 Ibid, p.4.
implement the equal pay for equal outcome approach with new technologies and procedures before they become established in the market as part of customary practice.

The operational challenges were significant: only one of the health plans could use the F-code in its billing systems. The effort required of providers to do the additional step of coding may have been underestimated by some of the stakeholders.

An active role for employers and other organized purchasers, backed by ongoing and consistent senior executive leadership support, would have supplied valuable external pressure for health plans and providers to maintain the momentum of the initiative. Such leadership from the top is likely to be maintained and communicated throughout the organization if the business case for the payment intervention is strong and clearly articulated from the beginning. Some of the internal difficulties experienced by health plan staff related to the payment reform project, e.g., retrieving data or gaining timely access to corporate resources, were traceable to lack of a strong priority from the top.

This value proposition will be reinforced by choosing topics and conditions closely aligned with the main strategic priorities of the payers and providers in the coalition. Early “wins” in that respect may be achievable with paired payment programs wherein a large purchaser combines forces with a single large integrated system or provider network on a high-impact clinical condition affecting a large number of covered lives.

Reflecting an important lesson from the low-risk prostate cancer and low back pain projects, ICER’s other work and CEPAC have intentionally not framed their goals as producing recommendations per se, but rather as evidence statements, which different stakeholders can use as appropriate for their particular audience(s). CEPAC is setting expectations that different entities will apply the same evidence differently, and thus attempting to be realistic about what evidence can do in the case of an issue such as payment reform.

Under current FFS reimbursement, payment reform inevitably creates winners and losers, which limits the appeal of such reform. In part, the movement toward global payment in Massachusetts, as embodied in the AQC, represents an attempt to change incentives so that payment reform becomes a “win-win” proposition.