Original Investigation

Emerging Lessons From Regional and State
Innovation in Value-Based Payment Reform:
Balancing Collaboration and Disruptive
Innovation

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Policy Points:

- Public and private purchasers must create a “burning bridge” of countervailing pressure that signals “no turning back” to fee-for-service in order to sustain the momentum for value-based payment.
- Multi-stakeholder coalitions must establish a defined set of quality, outcomes, and cost performance measures and the interoperable information systems to support data collection and reporting of value-based payment schemes.
- Anti-trust vigilance is necessary to find the “sweet spot” of competition and cooperation among health plans and health care providers.
- Provider and health plan transparency of price and quality, supported by all-payer claims data, are critical in driving value-based payment innovation and cost constraint.

Context: In recent decades, practitioners and policymakers have turned to value-based payment initiatives to help contain spending on health care and to improve the quality of care. The Robert Wood Johnson Foundation funded 7 grantees across the country to design and implement value-based, multi-stakeholder payment reform projects in 6 states and 3 regions of the United States.

Methods: As the external evaluator of these projects, we reviewed documents, conducted Internet searches, interviewed key stakeholders, cross-validated

factual and narrative interpretation, and performed qualitative analyses to derive cross-site themes and implications for policy and practice.

Findings: The nature of payment reform and its momentum closely reflects the environmental context of each project. Federal legislation such as the Patient Protection and Affordable Care Act and federal and state support for the development of the patient-centered medical home and accountable care organizations encourage value-based payment innovation, as do local market conditions for payers and providers that combine a history of collaboration with independent innovation and experimentation by individual organizations.

Multistakeholder coalitions offer a useful facilitating structure for galvanizing payment reform. But to achieve the objectives of reduced cost and improved quality, multistakeholder payment innovation must overcome such barriers as incompatible information systems, the technical difficulties and transaction costs of altering existing billing and payment systems, competing stakeholder priorities, insufficient scale to bear population health risk, providers' limited experience with risk-bearing payment models, and the failure to align care delivery models with the form of payment.

Conclusions: From the evidence adduced in this article, multistakeholder, value-based payment reform requires a trusted, widely respected "honest broker" that can convene and maintain the ongoing commitment of health plans, providers, and purchasers. Change management is complex and challenging, and coalition governance requires flexibility and stable leadership, as market conditions and stakeholder engagement and priorities shift over time. Another significant facilitator of value-based payment reform is outside investment that enables increased investment in human resources, information infrastructure, and care management by provider organizations and their collaborators. Supportive community and social service networks that enhance population health management also are important enablers of value-based payment reform. External pressure from public and private payers is fueling a "burning bridge" between the past of fee-for-service payment models and the future of payments based on value. Robust competition in local health plan and provider markets, coupled with an appropriate mix of multistakeholder governance, pressure from organized purchasers, and regulatory oversight, has the potential to spur value-based payment innovation that combines elements of "reformed" fee-for-service with bundled payments and global payments.

Keywords: payment reform, innovation, multistakeholder coalitions.

CONTROLLING THE COSTS AND IMPROVING THE QUALITY OF health care are central to payment reform efforts. Currently, however, we have little information about the design,

implementation, and challenges of payment reform initiatives from an “on-the-ground” perspective. Understanding how markets and organizations are experiencing payment reform thus may help guide future efforts, which is the focus of this article.

Payment Reform

Over the past 3 decades, policymakers, payers, and insurance companies have tried a variety of payment reforms. These have included the Medicare hospital inpatient prospective payment system,¹ followed by the Medicare resource-based relative value scale for physicians;^{2,3} the growth of capitation contracting with medical groups, integrated delivery systems, and pay for performance;⁴⁻⁶ shared savings;⁷ bundled payments;⁸⁻¹⁰ and a risk-adjusted global payment.¹¹⁻¹³ Recently the focus has turned to improving value by enhancing quality, reducing costs, and matching payment innovations to the structure of the delivery system. These value-based payments link providers’ reimbursements to the value, rather than the volume, of services.

Global Payment Models

Medicare Pioneer and Shared Savings Accountable Care Organization (ACO) programs, which establish global population-based budgets for participating organizations, are the most visible ongoing payment reform efforts.^{14,15} Global payment encourages coordination among providers of acute, postacute, and chronic care. ACO programs share any savings with participating organizations, and Pioneer ACOs also share any losses. Accordingly, the payment model encourages treatment decisions that are both clinically effective and cost-effective. Similarly, some private insurers now use the global payment approach. For example, Blue Cross Blue Shield of Massachusetts implemented a global payment linked to pay for performance, referred to as “Alternative Quality Contracting.”^{11,16} Those providers facing a downside financial risk clearly have a strong incentive to control costs. Similarly, the Massachusetts patient-centered medical home (PCMH) pilot eliminated fee-for-service (FFS) payments to a group of primary care physicians in favor of risk-adjusted capitation (global payment) to support both

the physicians and the care team, as well as the health information technology necessary for the PCMH.¹⁷

Bundled Payments

Several sites are testing the Prometheus program, which offers episode-based, bundled payments for 21 medical conditions and procedures, based on both the expected costs of treatment and evidence-based practice standards.¹⁰ Blue Shield of California joined with Dignity Health and Hill Physicians to offer an ACO under a global payment system for enrollees in the California Public Employees' Retirement System (CalPERS).¹⁸ Partner organizations agreed to share both the upside and downside financial risks. Similar to Medicare ACO programs, the global payment, combined with shared financial risk, encourages the coordination of care as well as cost-effective treatments. As a result, in 2010, the ACO saved \$15.5 million, which it shared with its partner organizations.

Value-Based Supplemental Payments

Value-based supplements to FFS or bundled payments may serve as a "stepping stone" toward greater accountability.¹⁹ For example, Blue Cross Blue Shield of Michigan has a "fee-for-value" incentive program in which physicians are rewarded for both an efficient use of health care resources and increased buy-in.²⁰ WellPoint uses "value-based payments" to supplement FFS reimbursements for primary care providers in PCMHs.²¹ In this way, payments reward quality and efficiency and are intended to compensate physicians for non-visit-based services, such as maintaining disease registries. Several multipayer PCMH pilots provide a "management fee" (based on panel size) to participating providers.^{22,23} For example, Horizon Healthcare in New Jersey pays "coordination fees" that vary with the type of patient.²⁴

Promise and Challenges of Value-Based Payment Reform

Several studies indicate potential for the global budget approach, particularly when it is paired with 2-sided financial risk, to improve quality as well as reduce the level or growth of spending.^{16,18} Evidence of the

effectiveness of marginal incentive payments for value is more mixed, however, and may depend on the size of the incentives.^{25,26}

Many payment reform efforts require significant changes in the care delivery and support systems, for instance, in the data- and claims-processing infrastructure, electronic health records (EHRs), and staff roles. But providers' limited ability to meet infrastructure demands for payment reform has made them resistant and hindered its implementation. Some providers thus favor reforming the delivery system through collaborative processes and changes in payment to support the proposed system redesign.²⁷ Payment reform efforts likewise face challenges in setting the "right" level of payment, namely, payment that rewards the appropriate delivery of care and discourages inappropriate care. Particularly when facing the costs associated with system redesign, providers might perceive the expected benefits of new payments as insufficient. The inevitable presence of payment reform "winners and losers" also will dampen the interest of risk-averse players.

Implementation Process

Studies of payment reform do not elucidate the process of implementing payment reform, yet knowledge of this process could help inform future payment reform. For example, which stakeholders participate; what strategies are undertaken; what specific facilitators and barriers arise; and what lessons have been learned from various projects? Successful payment reform requires providers and payers to collaborate and coordinate and may be impeded by the many contentious and competitive relationships among stakeholders.^{10,23,28,29} For example, bundled or global payments require that stakeholders agree on the type of payment and means of sharing risk and payment, as well as the metrics for measuring performance. Concerns about potential financial losses and inequitable sharing of risk may keep them from reaching a consensus. Furthermore, stakeholders may have different perceptions of the proposed changes, even those on which they agree.¹⁰ Concerns about potential violations of antitrust regulation also complicate collaboration among competitors.³⁰ Conversely, strong payer-provider relationships appear to facilitate the implementation of payment and system changes.^{31,32}

The principal role of payment reform is to realign incentives to promote the desired outcomes. Improving value often requires changing

care processes or even redesigning the system itself. Although many payment experiments are under way, little is known about how health care organizations are aligning their payments with their care delivery models in order to lower costs and improve quality and access to care.

Purpose of This Article

In this article we explain the challenges, opportunities, and emerging lessons of multistakeholder, value-based payment reform by highlighting projects being carried out in 3 regions (and 6 states) of the United States: New England (Massachusetts, Maine, and New Hampshire), southwestern Pennsylvania, and the Pacific Northwest (Oregon and Washington). We highlight the multistakeholder aspect of our study to distinguish it from other projects focused on the result(s) of individual insurer-provider payment innovations not grounded in a multipayer/multiprovider context. Each of the projects we describe here is led by a coalition (with varying constituencies) whose principal role is to act as a neutral convener, honest broker, and governing mechanism for a set of stakeholders joined in a common objective: value-based payment reform through independently owned and potentially competing organizations. In each state the Robert Wood Johnson Foundation (RWJF) is supporting projects that emphasize value-based payment reform.³³ (The RWJF's funding goals and strategy and detailed project descriptions are presented elsewhere.³⁴) Notably, each of these projects has been ongoing for more than 3 years, and each (with 1 exception) is at a "midterm," but not final, stage of development.

Methods

We applied guidelines from organizational sociology and qualitative methods for the comparative case studies.³⁵⁻³⁸ In keeping with the principles of qualitative research, our approach to data collection and analysis was inductive, structured around a set of common questions and allowing for open-ended responses and follow-up probes. Consequently, this article does not offer a conceptual model or test explicit hypotheses. Instead, it articulates lessons learned and implications for policy and practice derived from qualitative analysis. The analysis is both vertical,

in that it briefly examines the context and detail of each distinct project, and horizontal, in that we search for cross-cutting themes among the projects. While we do not claim generalizability *per se* for our findings, given the natural limits and self-selected nature of our study sample, we do present themes and implications that can inform clinical and managerial practice and policy in value-based payment reform in diverse contexts and markets.

The University of Washington's Institutional Review Board reviewed and approved our study protocols. Our qualitative methodology had 6 steps. First, the evaluation team developed a semistructured interview instrument with open-ended items for the key informant interviews. We obtained each site's grant application, documents from each project's public website, and other local, publicly available information about each project. Based on within- and between-site reviews of the documents, we then created a semistructured, 2-part key informant interview questionnaire: general questions for all sites covering context, stakeholders, objectives, approach, logic model, progress, and results; and specific questions addressing payment reform features unique to each site. We also made a list of the key informants at each site based on the documents and the RWJF's records.

Second, we interviewed the key informants in each site over time. In each site the evaluation team conducted 2 sets of in-person and phone interviews with key stakeholders after obtaining written informed consent, first in autumn 2011 and then in autumn 2012. The interviews were conducted by the principal or coprincipal investigator, with a coauthor taking real-time interview notes on a laptop computer. In both years, the interviews were audio recorded, and the audio recordings from the 2011 interviews were transcribed. During each site visit, we also collected background documents that key informants shared with us, such as project reports, information from stakeholder websites and other relevant Internet sites, and regional and state publications.

Third, we performed qualitative analysis for each site and each year of interviews following the accepted protocols.³⁹ Before analyzing interview data, the team read and annotated the background documents, interview notes, and transcripts. For each question, we summarized the response and coded insights from the interview and/or background documents. Next, for each site, we reviewed the key informants' responses and constructed responses to each question.

Fourth, we produced a site report and executive summary for each interview in 2011 and 2012. For each site and year, the lead faculty interviewer and cointerviewer prepared the first draft of the site report and an executive summary, which at least 2 other team members reviewed. Based on their reading of interview notes, transcripts, and audio recordings (recordings were referred to only as necessary, such as when notes were missing or ambiguous), the reviewers made annotations and suggested revisions and comments on the first draft of each site report and executive summary. After all 5 members of the team agreed on the facts, narrative, and interpretation, the lead interviewer wrote a report, which the team also reviewed and again revised the report and executive summary.

Fifth, we vetted each site's report and executive summary with the lead contact for each project, whom we asked to identify any apparent errors of omission or commission and to specify any inadvertent breaches of confidentiality or revelations of proprietary or competitively sensitive information. The team reviewed the critiques of all the sites and revised the documents in accordance with the team's consensus.

Sixth, we compared the responses to each interview question in each site to identify cross-cutting themes represented in at least 2 sites. The evaluation team agreed on the themes and observations. In the spring of 2012 and 2013 we evaluated the cross-cutting themes with the sites during a structured webinar. The study's advisory group, composed of 8 national experts in payment reform, reviewed the updated reports in Years 1 and 2, and they suggested themes and insights relevant to payment reform. We then used their comments and insights for the cross-cutting themes in this article.

The Projects in Profile

Next we describe each project's objectives, strategies, facilitators, and barriers that have shaped its implementation and progress, as well as the emerging lessons from each project. Appendix Table A1 presents a detailed summary of objectives, care delivery and payment strategies, and target population for each payment reform project, as well as its leadership, governance, and stakeholders. Appendix Table A2 describes the specific barriers and facilitators for each project, which emerged as the main drivers of the "midterm" learning. Appendix Table A3

summarizes cross-cutting themes and lessons from these regional and state innovations in payment reform and reflects the methodology just described, along with our conclusions.

New Hampshire: Accountability Through Transparency and Informed Design

The New Hampshire Accountable Care Organization (ACO) Pilot Project: The New Hampshire Citizens Health Initiative

New Hampshire (NH) has one of the highest levels of health care spending. Employers are calling for cost containment as more physician practices consolidate and push for reimbursement increases. Against this backdrop, in 2005 the NH Citizens Health Initiative (CHI) convened stakeholders, including 4 major payers, to develop an accountable care organization (ACO).

The objective of the original ACO pilot project was to reduce the cost and improve the quality of health care by testing new options for payment reform, clinical care, and system transformation.

The strategy was to implement a statewide, 5-year ACO pilot with 5 provider organizations, 4 private commercial carriers, the NH Department of Health and Human Services, the NH Department of Insurance, and other stakeholder organizations. In 2012 one of the 4 major payers in NH declined to pursue the common financial model because of that payer's desire to pursue a unified, national payment approach. In response, the project's emphasis shifted to agreeing on and developing a common measurement framework for assessing the statewide performance of the health care system, now known as the Accountable Care Project (ACP).

The number of participants in this project has risen substantially, and the updated strategy now has the following components:

- A common performance measurement system, offering approximately 40 claims- and electronic health record (EHR)-based indicators and reports at various levels.

- Cross-carrier data available through the legislatively mandated NH Comprehensive Healthcare Information System.
- By 2013, goal of having final definitions of measures, with targets set for each and methods and metrics for risk adjustment.

Private and public payers and certain provider organizations are negotiating several payment models based on performance. These models include ACOs and variants, tiered networks, and complex condition management.

Payment reform in NH is now being driven mainly by legislative and market forces rather than the CHI. The principal external influences are the Patient Protection and Affordable Care Act (PPACA) and anticipation of a large increase in statewide demand for health care due to expanded access to health insurance and directly through local efforts sponsored by the Center for Medicare and Medicaid Innovation (CMMI).

Facilitators. NH's small size and strong civic culture encourage collaboration, and there is growing consensus among stakeholders on the need to control health care spending. The availability of an all-payer claims database and a partnership with the University of New Hampshire's Center for Health Analytics and other entities have enabled stakeholders to perform claims-based analyses and track performance metrics across organizations and over time. The CHI's leadership and expertise in facilitation have reinforced relationships and goodwill. The physicians' input and buy-in through their participation in the project's clinical subcommittee have laid the groundwork for NH's payment reform, as has experience with this state's medical home pilot, which the CHI coordinated as well.

Barriers. The providers' reluctance to adopt capitation or provider-risk-bearing payment models because of their mixed earlier experiences with capitation models has slowed payment reform. Self-insured employers are more comfortable with payments based on actual claims than they are with a capitated amount. Persuading physicians and hospitals in areas where provider organizations typically are not part of integrated delivery systems has hampered movement toward value-based payment arrangements, particularly bundled and global payments. Attribution of individuals to particular providers and organizations (in contrast to the clarity of enrollment in and assignment to HMOs) is an inherent challenge to the ACO model, and was an early focus in New Hampshire when the common financial model was first being designed. The small

population size and provider scarcity in rural areas also limit the scope for efficient contractual arrangements between primary care providers (PCPs), specialists, and hospitals.

The lack of significant competition in the NH health insurance market has dampened private insurers' incentive for payment innovation. Similarly, the hospitals' and health systems' firm market control has discouraged independent medical groups and hospitals from experimenting with different models of payment innovation.

Lessons Learned. The NH champions of this initiative stressed both the need to be nimble in a constantly changing environment and the importance of learning from the effort. NH's leaders cited the value of agile funding partners such as the RWJF and the Jessie B. Cox Charitable Trust,⁴⁰ with one executive noting the benefit of seeking common ground for progress on joint efforts when private interests began to hinder their progress.

A major challenge to the ACO's market penetration in NH is the ex-post allocation of organizational revenues to the ACO's constituent providers, principally specialists, PCPs, and hospitals. Because hospitals and specialists are the ACO's biggest spenders, it is likely to seek savings as a whole by reducing total payments to those providers by optimizing primary care, prevention, and care coordination. Unless the ACO can design internal allocation mechanisms that simultaneously satisfy the hospitals, specialists, PCPs, and, importantly, the patients and health plans they serve, conflicts over resources could stymie the ACO's development, a problem not unique to New Hampshire. Nonetheless, the market power of hospitals and specialists could impede reaching agreement over distribution of resources within the ACO.

Maine: Aligning Forces for Quality Payment Reform and Piloting Population-Based Health Metrics for Accountable Care Organizations

The Maine Health Management Coalition Foundation (MHMC-F)

The Maine Health Management Coalition Foundation (MHMC-F) provides leadership for 2 integrated projects funded by the RWJF, one

through the Aligning Forces for Quality (AF4Q) Program⁴¹ and the other through the foundation's payment reform initiative.

The AF4Q-sponsored Maine project examines small-area variations in utilization, identifies areas of underuse and overuse, and compares risk-adjusted annual per capita spending across areas. The outcome of this project will be the Maine Value-Based Payment Model, which controls health care costs and offers financial incentives to providers to preserve and expand access to high-quality health care services. This model probably will contain elements of the Prometheus model of bundled payment for episodes of chronic illness,⁴¹ and the participating provider systems recognize that using bundled payments entails a whole new set of administrative tasks. As they seek additional expertise in bundled payments, some are looking to the state and other potential partners, such as a health plan, to collaborate in these new arrangements.

The second project, population-based health metrics for ACO pilots, is supporting the following 5 activities to address measurement deficits: (1) using a balanced scorecard to expand and enhance the public reporting of important measures; (2) developing a tool for risk modeling and prioritization to help identify priority-improvement opportunities based on local data; (3) establishing pilot ACO cost, use, and quality targets; (4) providing actuarial support to develop global budgets and risk-based contracts; and (5) supporting and collaborating with other, related payment reform efforts in Maine, as well as regional reforms, which include some in New Hampshire.

A major achievement in 2012 was implementing a multipayer claims data infrastructure that can deliver actionable information for discussions of payment reform by the coalition, employers, and provider systems. The database allows them to find primary cost drivers and improvement opportunities in the population for which the provider is willing to accept risk and then to determine per member per month (PMPM) payment and utilization by service category by clinical condition. HealthInfoNet, Maine's designated statewide health information exchange, currently supports the exchange of patient clinical data for more than 1 million of Maine's 1.3 million residents. The exchange is participating in a demonstration project to connect the statewide All-Payer Claims Database (APCD) with the statewide clinical database on an episode-of-care basis.

Facilitators. The existence of a statewide APCD and a robust capacity for managing, encrypting, and opening access to data are important enablers. Providers have invested much in the ACO model. In a small state with a history of cooperation, providers are able to collaborate across organizational boundaries even while competing in health care delivery. Moreover, the health insurers are becoming more engaged in producing data analytics for their members and facilitating the development of an ACO. Now that the coalition has the data, health plans increasingly want to be part of the engaged stakeholder groups.

Committed leadership is another great strength of the coalition-facilitated payment reform and ACO pilot initiatives. Forums sponsored by the MHMC-F have allowed consensus building among stakeholders, and in turn, they are acutely aware of the value of the APCD and the data analytic support provided by the coalition. The coalition has made a positive impression in the community and has secured extensive partnerships and community engagement.

Barriers. The previous vendor's inability to provide sufficient reporting and analytic support has limited the APCD's practical utility. The lack of electronic health records (EHRs) in many small practices has inhibited the efficient input of data into the database, and some provider organizations have been reluctant to share their data with employers. With certain important exceptions, employers' engagement in the project has been inconsistent, so providers have often dominated the payment reform effort. Similarly, securing significant patient/consumer involvement continues to be a challenge. Finally, even though private health insurers increasingly want to join the discussions about multi-stakeholder payment reform, maintaining their interest in collaboration remains a challenge, especially when the economic environment favors competitive advantage.

Lessons Learned. Collaboration among stakeholders becomes more and more difficult as the possible financial and organizational consequences of payment reform increase. In contrast to quality improvement, in which "win-win" alliances form more easily, changing payment levels and methodologies inevitably reduces income and adds financial risk for some parties (eg, certain provider systems and specialists) even as it raises income and reduces risk for the "counterparties" to those contractual arrangements (eg, plan sponsors, consumers, and PCPs). For hospitals, the challenge of value-based payments is shrinking excess capacity and redirecting resources toward higher-valued centers of excellence. Specialists

now face restricted payments and narrower networks, which require them to earn their profits through better quality and lower costs.

The sharing of clinical and claims data among employers, health plans, and providers raises considerations of privacy, confidentiality, control over the data, and antitrust law. In particular, concerns about health plans' willingness to share data and provider organizations' development of their own potentially redundant data systems must be addressed. As we noted earlier, employers, plans, and providers increasingly recognize that the publicly maintained APCD and accompanying analytic capacity are valuable and unique resources. That recognition is a "centripetal" force, which to some extent counteracts the centrifugal forces of each player seeking to maximize its self-interest.

Southwestern Pennsylvania: Pittsburgh Regional Health Initiative

A Novel Adjustable Provider Payment Model in a Community-Based Accountable Care Network: The Pittsburgh Regional Health Initiative

The Pittsburgh Accountable Care Network (ACN) Project is led by the Pittsburgh Regional Health Initiative (PRHI), a nonprofit organization focused on value in health care. The project's main objective is to lower costs by reducing readmissions and managing chronic conditions by means of a sustainable, replicable economic model. The strategy is to create an ACN, in which services that add value are rewarded with incremental payments. Although the network of accountable care organizations will collaborate, they will maintain their distinct identities.

Phase I of the ACN project focuses on care coordination. Disease-specific nurse care managers provide coordination throughout the hospital discharge process. Building on early positive results (reductions in 30-day readmissions for chronic obstructive pulmonary disease), the next step is to apply these methods in community hospitals. Nurse care managers will work out of a community hospital's primary care resource center (PCRC). One hospital partner offered space for the PCRC, and Highmark Blue Cross Blue Shield, the region's dominant health insurer,

agreed to fund the nurse care managers, whether or not the patients were enrolled in its plan.

The next phase, payment redesign, combines the savings from fewer readmissions with FFS payments for value-added primary care services and pay-for-performance (P4P) payments to hospitals and physicians. The PRHI and its partners are exploring the idea of blending P4P payments with a PMPM case management fee. Any savings will be shared among the providers and hospitals. Although the details of the ACN payment model have not yet been determined, now a major insurer is implementing the Prometheus model of episode-based bundled payments.

Highmark reached an affiliation agreement with the Western Pennsylvania Allegheny Health System in November 2011, which led to a conflict with the University of Pittsburgh Medical Center and its health plan. In turn, this temporarily disrupted the speed and momentum of developing the ACN. Countering this negative shock to some extent, in 2012 the PRHI received a \$10.4 million Health Care Innovation Award from the CMMI for its ACN project.

Facilitators. The PRHI's role as a trusted, neutral convener and catalyst for innovation in care organization and payment reform has been critical to the ACN project. The allocation of significant CMMI resources toward payment and delivery system innovation is another stimulus of ACO growth and payment reform. In the PRHI's case, the CMMI grant allowed the PCRC to expand to 6 more hospitals in Pennsylvania and West Virginia. Grants from other foundations and federal sources also have enhanced the region's multistakeholder collaboration.

Barriers. The regional health insurers' lack of a history of collaboration has impeded payment reform in the region, as has the lack of experience with capitation payment models. Obtaining and sustaining funding for the PCRC remains a challenge for the long term and requires payers to invest in designing a delivery system that would offer other insurers any spillover benefits from lower costs. Such uncompensated positive "externalities" must be managed carefully by an entity like the PRHI that can facilitate cooperation among typically competitive players.

About 70% of the region's medical practices are small (5 or fewer physicians), which need EHR capability and interoperability that will allow them to track patients across care settings. Furthermore, even though overcoming legal and privacy issues in data sharing will be a

challenge, the practices are putting together a third-party nondisclosure agreement to address these considerations.

Lessons Learned. The Pittsburgh ACN project is in a formative period. The PRHI and its stakeholders have laid the groundwork for improved care coordination and delivery in the region, especially through a strong lead hospital and health plan partner, and secured near-term funding for the nurse care managers in the PCRC. They must demonstrate continued success in reducing readmissions for the chronic diseases that are the system's major drivers of cost, and they must design a payment model that attracts the participation of hospitals and specialists, as well as PCPs, which are best-positioned to realize the near-term benefits of system cost savings. Because clinical redesign was initially emphasized as a foundation of the ACN, payment reform is only in its beginning stages now. But implementing a payment mechanism that aligns the incentives of all parties and that actually saves money must be a priority in order to maintain the project's momentum and to secure continued broad participation of stakeholders.

Health plans implementing P4P mechanisms also must offer provider organizations timely performance reporting and appropriate financial incentives (eg, PMPM payment for care coordination, assistance with health information exchange). Regional sponsoring organizations like the PRHI offer significant infrastructure support, coaching, access to technical assistance, and a safe forum for collaboration to achieve project objectives.

Salem, Oregon: The Program-Oriented Payment Demonstration Project

The Physicians Choice Foundation

The Program-Oriented Payment (POP) Demonstration Project, led by the Physicians Choice Foundation (PCF), is based in Marion and Polk Counties, which have more than 500 independent physicians in small practices and no large, integrated systems in the area. Determined partly by its decentralized market, the project's objective is to improve the quality and efficiency of health care in the region through programs that pay a virtual provider team a bonus when a minimal percentage of patients achieves all the clinical targets for a specific chronic condition.

The project's payment reform rests on 3 pillars: (1) accountability (reward providers when their patients achieve better outcomes at a lower cost), (2) programs (protocols for paying financial incentives when target outcomes are achieved for specific clinical conditions), and (3) virtual provider teams (payments for results go to all providers and clinics caring for the patient's condition). The POP program initially targets 3 chronic conditions with the highest costs: congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), and diabetes. For each condition, the program defines eligible provider specialties, identifies a patient's providers through claims or referrals, computes the program's payment, and distributes it to the virtual team. The program's payments are projected to be either budget neutral or potentially cost saving. On January 1, 2013, the POP began tracking claims for these 3 conditions in each coordinated care organization (CCO), with the payment of incentives starting after July 1, 2013. The CCO is a network of all health care providers agreeing to collaborate in their local areas for persons with health care coverage through the Oregon Health Plan (Medicaid).

The PCF's implementation strategy is to partner with the local independent physicians' association (WVP Health Authority), its subsidiary Medicaid plan, and a private firm that administers health plan benefits (Performance Health Technology [PH Tech]). In 2011 the Oregon legislature authorized the creation of statewide CCOs to provide care to Oregonians with public health insurance through global health budgets, supported by a \$1.9 billion award from the Centers for Medicare and Medicaid Services (CMS). The birth of Salem's CCO, which is mandated legally to coordinate care across all participating health care organizations, may accelerate the POP's implementation.

Facilitators. External government forces are a key facilitator. The Oregon legislature and federal government require CCOs to have alternative payment methods based on quality and reduced cost growth, which has created a receptive environment in the Salem area for implementing the POP. Another external facilitator is funding from the RWJF, which has raised local awareness and credibility of the project. Local facilitators include a history of collaboration and innovation, as well as the leadership of the PCF, PH Tech, and WVP Health Authority. PH Tech has invested substantial resources to develop the POP computer software and routinely collects much of the medical claims data for operating the POP.

Barriers. External facilitators also can be barriers. The Oregon legislature's and the federal government's authorization of CCOs focused the energy and attention of virtually all health care organizations in the Salem area on developing the CCO but left little time and capacity for developing and implementing the POP. A local barrier to collaboration was the departure of a POP leader who was instrumental in building and maintaining cohesive relations between the independent practice association and the local medical society. The POP is also complicated, and communicating to medical practices how it works is challenging.

Lessons Learned. Context can be both a facilitator and a barrier. Oregon's legislature mandated the statewide rollout of CCOs with alternative payment methods, which diverted attention away from the POP and delayed its implementation but ultimately paved the way for the POP rollout. Payment reform can be heavily dependent on computer software and data, which in turn may require a substantial financial investment. Clear explanations of payment reform may help providers accept it. In any case, the project has taken longer than expected to implement, and most of the lessons will be learned in the coming months after the POP has been implemented by the Salem region's CCO.

Boston, Massachusetts: Development and Implementation of Payment Reform to Pay Equally for What Works Equally Well

*The Institute for Clinical and Economic Review,
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The Payment Reform to Pay Equally for What Works Equally Well project was facilitated by the Institute for Clinical and Economic Review (ICER) and sponsored by the Employers Action Coalition on Healthcare (EACH), in collaboration with the New England Comparative Effectiveness Public Advisory Council (CEPAC).

The 2 objectives for these stakeholders were to shift the treatment mix for low-risk prostate cancer toward higher-value services and to generate overall savings. The ICER intended to use comparative effectiveness research to inform and carry out payment changes for low-risk prostate

cancer treatment. The payment reform was changing the health plans' FFS reimbursement to reward physicians for using lower-cost treatments that were equally as effective as higher-cost treatments ("reference pricing"). But in autumn 2011, the stakeholders decided to end the prostate cancer project, for the reasons discussed under Barriers.

Facilitators. This payment reform effort was enabled by favorable market, social, legislative, and regulatory conditions, as well as strong support from the EACH's board. The ICER's role as a neutral convener and a trusted source of comparative effectiveness evidence, plus its credibility with academia, gave impetus to the project. The evidence of clinical equivalence among the alternatives was clear and compelling.

Barriers. Ultimately, the inability of all but one health plan to adjudicate claims using special "F-codes" (which indicate risk of recurrence) undercut the feasibility of the equal pay-for-equal-effectiveness payment change. Focusing on low-risk prostate cancer as the clinical condition, which is relatively uncommon in commercially insured populations, substantially weakened the value proposition for private insurers.

After an early meeting, the senior executives delegated the decision making to other, lower-level, authorities in their organizations. Along with setbacks to the project's momentum due to a lengthy implementation process, the organizational executives' commitment dissipated when challenges arose. In addition, the providers' and payers' priorities fundamentally diverged. The providers saw the reform as improving shared decision making by providers and patients, whereas the payers stressed the potential for cost savings and changes in incentives. Finally, the Boston market was shifting from the domination of FFS payments toward capitation and an increasing emphasis on ACOs and integrated care organizations, which dampened enthusiasm for the project.

Lessons Learned. The choices of clinical condition and target population are important to an "equal payment for equal outcome" project. Operational challenges, such as the ability to adjudicate claims with F-codes, may be difficult to overcome, especially without a strong business case to maintain the investment in change. In addition, strong and sustained support from senior executive leadership of employers and other purchasers is necessary to maintain momentum. It may be more effective to produce "evidence statements" (rather than recommendations) that can be used by different stakeholders for their audiences.

Portland, Oregon: The High-Value Patient-Centered Care Model

The Oregon Health Care Quality Corporation

The High-Value Patient-Centered Care Initiative (HVPCCI), directed by the Oregon Health Leadership Council, is being implemented with the same legislative reforms in Oregon discussed earlier, as well as 4 other health reform projects operating in the Portland area.

The objective of the project is to reduce health care costs and improve quality and patient satisfaction through the use of nurse care managers for high-risk patients. The HVPCCI provides enhanced care management resources for as many as 3,600 high-utilization patients identified by health plans or medical groups. Five health plans, 4 state purchasing groups, and 14 medical groups are participating. Health plans pay the medical groups PMPM payments to cover the personnel costs of the care managers and, at the end of the initiative, a 50/50 sharing of medical group savings up to a cap. The PMPM and gain sharing arrangements vary by medical group.

The Oregon Health Care Quality Corporation (Quality Corp) is a data source for the initiative and has developed interactive, graphically based utilization reports for use by the medical groups. Quality Corp also supplies quarterly health plan reports and periodic summary reports for the council and participating groups, as well as data for the project's evaluation.

Facilitators. Oregon has a history of collaboration, innovation, and open communication, and its health system reforms create a receptive environment for local innovation. Trust also is instrumental: Quality Corp is regarded by the health care community as a credible data analyzer and provider of information about health system performance. Finally, the initiative is being implemented through each plan's existing contracts with each medical group. Physician leadership in the medical groups is necessary for the successful implementation of collaborative care through nurse care managers.

Barriers. One challenge to implementation is data timeliness and accuracy. Utilization data are reported quarterly to medical groups, but reporting emergency department (ED) visits in real time would aid in managing care transitions. A related barrier is the attribution and assignment of patients. That is, when patients may change employers

and health plans, attributing them to a health plan and assigning them a provider and a medical group creates challenges. Nurse retention also is an issue: The project's nurse-training program has increased the nurses' clinical skills, which other employers are seeking. Although most high-risk patients want care management, not all patients want to participate. In addition, despite being defined as being high risk by their health plans and medical groups, some patients believe they are healthy. Finally, local providers are overwhelmed by other health care reforms, which have reduced providers' available time and energy for the initiative.

Lessons Learned. The initiative has been completed, and its future will depend partly on whether it has saved money. Emerging insights are that medical groups may be more willing to participate in payment reform when the payment amounts offset their costs of implementing the project and that introducing nurse care managers and team care requires a shift in the clinic culture of the initiative's medical groups. This initiative confronted, and eventually resolved, several data issues, which contributed to its successful implementation.

Washington State: The Washington State Multipayer Medical Home Reimbursement Pilot

The Puget Sound Health Alliance and Washington State Health Care Authority

The Washington State Multipayer Medical Home Reimbursement Pilot is a 3-year initiative authorized by the Washington State legislature to promote the growth of patient-centered medical homes. The legislation charged the Washington State Health Care Authority (HCA, a public payer) and the state's Department of Social and Health Services with leading this unfunded mandate and its multistakeholder participants.

The pilot's objective is to recruit multiple payers to implement PMPM payments of sufficient size and scale to create incentives for medical groups to improve primary care and reduce avoidable hospitalizations and ED visits, ultimately saving costs. Primary care clinics with medical homes or medical organizations that participated in an earlier legislative initiative (the Washington Patient-Centered Medical Home Collaborative) are eligible to join. Ultimately, 8 medical groups with 12 clinics

met the criteria and agreed to participate, along with 7 health plans. All the medical groups are reforming their systems to reduce avoidable ED visits, but only one is also aiming to reduce avoidable hospitalizations.

The multiple participating payers provide “new money” to medical groups as supplemental PMPM payments based on the number of plan members in each medical group. If a medical group fails to meet the targets for utilization reductions, it risks having to repay part of the supplemental payments in the final 2 years. Cost savings from reductions in avoidable hospitalizations and ED visits in Months 9 through 20 are shared 25% and 75% between the medical groups and the health plans, respectively, contingent on the medical group’s satisfying the clinical quality metrics. In Year 3 (Months 21 to 32), the share of savings will rise to 50% for the providers.

Facilitators. Several local features have facilitated stakeholder collaboration. The state legislature mandated the pilot’s implementation and provided antitrust protection. Leadership helped as well: The HCA and the alliance are the conveners of the pilot’s stakeholders and the facilitators of collaboration, which is essential to developing a common vision of the pilot, planning its features, and achieving objectives. The alliance has a history of fostering collaboration among diverse stakeholders, and medical groups have earlier experience participating in a medical home collaborative.

Barriers. After the pilot started, changes in the HCA project leadership created some discontinuity in convening stakeholders and maintaining collaboration. Market competition also is a factor: Health plans in Washington State have a history of competing rather than collaborating in the marketplace. Another challenge is funding: Although the RWJF provided funds to support project management in the pilot’s early stages, the funds were insufficient to support the staffing necessary for this large, complex undertaking.

There also are several information- and data-related barriers, particularly (1) limited, real-time information about local ED visits and hospitalizations, which slowed the pilot’s design and start-up and undermined the medical groups’ ability to coordinate care; and (2) the lack of uniform data across health plans, which resulted in data discrepancies and delays in reporting and payment. Challenges also can be found in accurately attributing patients to different plans when they change their coverage. Hospitals are not participating in the pilot, which also may limit the real-time sharing of information about ED visits.

The size of the PMPM payment may be insufficient to cover the medical groups' costs of reforms, mainly because the pilot's patient population is smaller than expected and consequently medical groups receive smaller PMPM payments. Health plans that provide administrative services only generally do not control the expenses of self-insured employers, and PMPM payments may require employers' approval.

Finally, context matters: Payers are shifting their energy from the pilot toward PPACA reforms, and the growth and marketing of free-standing EDs may have undermined the pilot's efforts to reduce preventable ED visits. Not all high-risk patients want to be in a medical home and receive highly coordinated care, and patients' habits of using EDs are hard to change.

Lessons Learned. A legislative mandate is no guarantee that implementation will be timely, inexpensive, and free of difficulties. Involving 7 payers increases complexity. Originally, progress was slowed by competition among health plans and provider-plan differences in perspectives on financial risk bearing. Specifically, the health plans sought 2-sided risk models, whereas the providers favored a shared-savings approach. Limited utilization and pricing data also delayed initial implementation. Challenges in securing the participation of self-insured employers reduced the number of lives covered in the pilot.

Cross-Cutting Themes

Several common themes emerged across the payment reform initiatives in the 6 states we examined in this article (see Appendix Table A3). First, federal initiatives and regional, state, and local contexts significantly shaped the form and implementation of the payment reform initiatives. The general pressures for innovation prompted by the PPACA, state legislative mandates for reimbursement reform and delivery system experimentation, and regional market forces together drove payers and providers to pursue quality improvement and cost reduction more actively. State and regional history and civic culture played a strong role in the nature and pace of both payment and delivery system reform.

In Appendix Table A3, the columns for each state are grouped by type of payment reform: global payment, PMPM care management fee, pay for performance (P4P), and equal pay for equal effectiveness (reference pricing). The 2 states leaning toward global payment models, New

Hampshire and Maine, have an all-payer database, as well as a strong history and civic culture of collaboration. Progress toward the goal of global payment has been slowed significantly, however, by competing internal and external priorities and the complexity of managing such significant change. Both states are now more focused on building common performance measures, developing ACO models, and supporting patient-centered medical homes (PCMHs).

The PMPM-based care management models in the Portland, Oregon, area and Washington State were shaped by state legislation enabling CCOs and PCMHs, respectively, whereas in southwestern Pennsylvania, a key reform stimulus was anticipation of federal ACO legislation and opportunities for payment innovation under the PPACA. All 3 of those projects have encountered information and data-related barriers to full implementation.

The P4P design in Salem, Oregon—Program-Oriented Payment (POP)—is distinctive among the value-based payment models examined in this study. In the face of competing state and local priorities centered on developing CCOs, the novelty and complexity of the computer software required to effectuate performance-based payments to virtual care teams, and transitions in local physician leadership, implementation of POP has been slowed. The aforementioned challenges confronting the POP project are cross-cutting in that they are the flip side of the facilitators present in other payment reform projects: consistent reform priorities, ongoing and robust communication and support for complex change, and stability of local project leadership.

The attempt at reference pricing for the care of low-risk prostate cancer in the Boston area—albeit unique in payment design among the project sites analyzed in this study—underscores certain general themes: the need to reach consensus among stakeholders on a compelling value proposition and the importance of a data infrastructure and transaction system to support an effective and timely implementation of the new payment model.

In addition to these themes, driven by the nature of the particular payment innovation being employed, other common themes emerged in this study. For example, the presence of a neutral convening organization that functions as an honest broker of collaboration among parties with different interests is a powerful facilitator of payment innovation. The role of

the convener is fundamental to finding common ground among competitors, managing stakeholders' expectations, and reconciling competing priorities. The continued infusion of outside investment—financial and human capital, in particular—catalyzes and reinforces payment innovation, and the convening organization often plays a leading role in securing external resources (eg, grants), which act to maintain early and midterm momentum.

The projects we examined here initially approached payment reform through the collaboration of several stakeholders. Across the board, trusted leadership and physician buy-in proved critical to maintaining progress on reform. However, securing the consistent engagement of stakeholders—especially that of private employers, hospitals, individual consumers, and consumer organizations—has been particularly challenging. Such coalitions tend to settle for “least common denominator” solutions in order to secure the agreement of parties with diverse and sometimes opposing interests, which is more likely to produce incremental rather than transformative payment and system reforms.

Another overarching theme is the ubiquity of information- and data-related barriers. The prevalence of disparate EHR systems that are not interoperable or cannot adapt to one another, FFS-based billing and transaction systems incompatible with new modes of payment (eg, reference pricing), and difficulties with patient attribution all impede the advance of value-based payment. The absence of “real time” data—for example, the instantaneous notification of primary care offices when their patients present in EDs—compromises delivery systems' efforts to manage utilization and costs.

Finally, value-based payment innovation in most of the states we examined is hampered by the lack of, or historically unfavorable, provider experience with risk-bearing models and a relatively small number of covered lives, thus limiting the potential to spread actuarial risk. The rise of ACOs reflects providers' and payers' attempts both to better manage care across the continuum and to reach a critical mass in accepting actuarial risk. Providers' success in redesigning and better coordinating patient care will fundamentally determine their health care organizations' capacity to bear and manage population health risk. Value-based payment reform is a stimulus to improved provider efficiency and effectiveness. It also is a strategy for aligning payment method with providers' focus on improving their patients' health status.

Implications for Policy and Practice

True value-based payment innovation, which transcends shared savings and modest care coordination payments, requires a “burning bridge” that precludes staying with the status quo of FFS. To the extent that multistakeholder coalitions tend toward sustaining the status quo rather than engaging in disruptive innovation,⁴² these efforts are most likely a transitional stage toward independent provider-payer combinations of integrated care delivery and value-based payment. Managing such competition will demand more transparent public pricing, a common public performance measurement of price and quality, and antitrust vigilance.

Value-based prospective payment that drives additional patients to superior performers is an important component of comprehensive payment reform. This “steering” could occur implicitly on the supply side when provider organizations compete on price and quality for health plan business. Similarly, on the demand side, health plan cost sharing could be designed to encourage the selection of higher-value provider organizations. The ACOs being adopted in New Hampshire, Maine, and southwestern Pennsylvania illustrate this prospective payment model, with variants of shared savings, bundled payments, and capitated, global payment arrangements involving a mix of public and private payers (CMS, state employers, and private insurers). One inevitable consequence of ACO development is the creation of larger aggregations of hospitals, PCPs, specialists, and ancillary facilities (eg, imaging, testing).

Large, vertically linked organizations could increase the participating providers’ pricing power relative to that of private insurers and self-insured employers, and—when the providers’ market shares substantially increase—these arrangements should be subject to scrutiny by the Federal Trade Commission and state attorneys general to ensure that better clinical quality and reduced costs, rather than higher prices, are the market outcome.⁴³⁻⁴⁵ Economic theory implies that under certain market conditions, the integration of hospitals and physicians can result in higher provider prices through exclusive tying arrangements and by raising barriers to entry.^{46,47} The limited empirical evidence on the effects of hospital-physician integration is mixed. One study in California found that neither vertical integration nor disintegration among hospitals and physicians significantly affected hospital prices.⁴⁸ In contrast,

another study⁴⁹ of 3 states (Arizona, Florida, and Wisconsin) concluded that hospital prices were higher in integrated organizations than in un-integrated hospitals and were highest in exclusive arrangements and in less competitive markets.

ACOs, in particular, are attempting to replicate the benefits of clinical and economic integration historically achieved by common ownership and unified organization in vertically integrated group model and network model HMOs. The key difference is that ACOs seek to achieve these benefits through “virtual integration,” using a mix of incentives, information exchange, and contracts to coordinate decision making and organizational objectives. ACOs have the potential to support value-based payment but should not allocate dollars among participating providers retrospectively in a way that recreates volume-based FFS incentives.⁵⁰

The ACO also must overcome the ambiguity in clinical and financial accountability that derives from attribution of patients to particular provider organizations (based on statistical assignments to the provider seen most frequently), as opposed to the clarity of patients’ self-assignment to a specific provider in the typical group or network model HMO. The New Hampshire project encountered these issues in its ACO development.

The creation and maintenance of all-payer claims databases (APCDs) can help break down critical informational barriers and build a platform of common cost and quality metrics. Such databases, structured to enable tracking patient-level utilization and costs over time, greatly enhance decision makers’ ability to identify trends and cross-sectional variation in health care delivery. An APCD is invaluable for measuring processes of care and economic performance across patients, payers, purchasers, and providers, which would significantly advance the quality and rigor of payment reform evaluations.

As the states move to establish APCDs, the inclusion of self-insured lives (eg, employers taking financial risks for employees’ claims costs, typically managed and processed by health insurance carriers as third-party administrators) will be important. In many markets (eg, New Hampshire, Washington State), the majority of covered lives will be self-insured. Since claims and member data are often viewed as a source of competitive advantage by carriers, policymakers will need to ensure that self-insured population data are incorporated in the APCD. This becomes increasingly significant as APCDs become the basis for

generating provider performance information and transparency of insurance premiums and provider prices.

Innovations such as value-based benefit design and reference pricing will encourage purchasers and consumers to demand value by increasing their economic stake in health care decisions.⁵¹⁻⁵³ Organized private and public purchasers, particularly self-insured employers and welfare and union trusts, are appropriate candidates to create a countervailing force against rising costs and unrealized values. Examples of labor-management initiatives in Maine and ACO developments in New Hampshire, Oregon, and southwestern Pennsylvania, coupled with the rapid growth of Medicare-sponsored shared savings, bundled payments, and 2-sided risk models, demonstrate the power of the private and public purse to stimulate payment reform.

Our review of payment reform efforts in 6 states implies that these initiatives have not yet reached the “tipping point” for robust value-based payment reform, in which market forces and coordinated public action coalesce to disrupt FFS payment primacy. Multistakeholder coalitions have laid the groundwork for common measurement and care delivery redesign and, in collaboration with public authorities, have provided appropriate “cover” for collective action by providers and insurers to pursue joint initiatives. The next step for public and private purchasers is to take a more active posture in leveraging their market presence into demands for incentive payment models aligned with radically reduced costs and improved quality. To sustain this rapid evolution, individual patients and organized consumers must be educated to understand and insist on value, in partnership with those organized purchasers. The advent of market exchanges under the PPACA may move the health system toward this goal.

The fundamental question for multistakeholder payment reform is, Can a coalition of sometimes competing and sometimes cooperating market players be nurtured and governed over time to move toward robust, sustainable value-based payment reform? Our study implies that the initial steps toward collaborating on quality, building the care delivery platform for PCMHs, and creating a common performance measurement (eg, Maine, New Hampshire, Washington State, southwestern Pennsylvania) proceed more expeditiously than actual multistakeholder, multipayer value-based payment reform. For example, in Maine and New Hampshire, individual payer-provider ACO and payment arrangements evolved from what began as multipayer, multiprovider initiatives.

Washington State has retained its 7-payer, 8-provider organization shared savings pilot, but some of the major private payers are investing considerably greater resources in global payment contracts with larger provider organizations than in the pilot itself. Similar efforts, accompanied by ACO development, are under way in New Hampshire and Maine.

Pressure from policymakers, regulators, and organized public and private purchasers will be required to create momentum toward value-based payment reform. Our case studies suggest that providers and payers will move slowly, and we project that external market forces and leverage from purchasers (eg, Medicare, state employees, Medicaid programs, and labor-management groups) will be required to accelerate change. Based on the evidence from our cases, in a decentralized health care system, payment reform is a social and learning process for stakeholders. Global payments and bundled payments will be adopted later, with shared savings and PMPM care management leading the way in early innovation.

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Appendix

Table A1. Summaries of Site Descriptions	
Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
<p>New Hampshire</p> <p>Objective(s): Reduce cost; improve quality.</p> <p>Target population: Entire state population.</p> <p>Objective 1: Reduce cost.</p> <p>Care delivery reform: Early Patient-Centered Medical Home (PCMH) pilot.</p> <p>Payment reform strategy:</p> <p>Two-sided (upside potential and downside risk) risk arrangement with roughly one-fourth of New Hampshire physicians through its accountable care organization (ACO) payment model with Dartmouth-Hitchcock. The Patient-Centered Primary Care Program (PC2) offers physicians up-front per member per month (PMPM) payments for care planning regarding patients with multiple and complex conditions. Physicians receive patient-specific reports, and in return for committing to practice transformation, care management, and maintaining quality, clinicians can share in the savings.</p> <p>Objective 2: Reduce cost.</p> <p>Care delivery reform: Originally was an ACO; updated to build a common measurement system.</p>	<p>Project leadership: The New Hampshire Citizens Health Initiative (CHI) created by the Endowment for Health (foundation funded by sale of a nonprofit insurer) and the University of New Hampshire.</p> <p>Governance: The University of New Hampshire and the Endowment for Health identified goals, established the initiative's structure and focus, recruited leadership, and originally established policy directions in quality of care, health promotion, disease prevention, and finance and cost information. Ongoing work groups vet their work in the community in 3 domains: health promotion and disease prevention, health payment reform, and medical homes.</p> <p>Stakeholders: Citizen representatives, joined by businesses, medical providers, and community agencies under CHI leadership.</p>

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
<p>Payment reform strategy: Originally was a global budget; updated to produce a measurement system with claims-based and EHR-based indicators.</p> <p>Objective 3: Improve quality.</p> <p>Care delivery reform: PCMH pilot and ACO development.</p> <p>Payment reform strategy: Provide cost and quality performance reports at various levels.</p>	
<p>Maine</p> <p>Objective(s): Cost containment; data transparency; decrease in unwarranted variation in health services across geographic areas; and organizational accountability for quality and health outcomes within a set of ACOs.</p> <p>Target population: Patients with supply- and preference-sensitive conditions and provider organizations and health plans pursuing payment reform and ACO development.</p> <p>Objective 1: Cost containment.</p> <p>Care delivery reform: PCMH pilot and ACO development.</p> <p>Payment reform strategy:</p> <p>Phased movement toward global payment on a PMPM basis: (1) PMPM for care coordination in PCMH while maintaining the base of fee-for-service (FFS) payment; (2) shared savings and 2-sided risk models in ACO</p>	<p>Project leadership:</p> <p>The Maine Health Management Coalition Foundation (MHMC-F), a nonprofit organization composed of public and private employers, unions, hospitals, health plans, and providers.</p> <p>Governance: Multistakeholder team of physicians, hospitals, private and government insurers, employers, and union representatives. Through the</p>

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
structures; (3) new primary care billing codes for email communications and new referral mechanisms and payment codes for occupational and physical therapy in their manufacturing workforce. Objective 2: Cost containment. Care delivery reform: ACO. Payment reform strategy: Global budget. Objective 3: Data transparency. Care delivery reform: None. Payment reform strategy: Value-based payment. Objective 4: Decrease in unwarranted variation in health services across geographic areas. Care delivery reform: None. Payment reform strategy: Risk-adjusted annual per capita spending for selected services. Objective 5: Organizational accountability for quality and health outcomes within a set of ACOs. Care delivery reform: Leverage PCMH into ACO development. Payment reform strategy: For supply-sensitive care, offer global payment for providers and high copayments for	MHMC-F, the group also solicits patient feedback, advice, and service. Stakeholders: Currently include 16 private employers, 5 public purchasers, 21 hospitals, 14 medical groups, and 5 health plans (collectively representing 35% of the commercial health insurance market).

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
patients. For preference-sensitive care, provide incentives for shared decision making. For effective and safe care, reduce cost sharing for evidence-based care. Use a balanced scorecard for public reporting. Develop a tool for risk modeling and prioritization to identify improvement opportunities. Establish ACO cost, use, and quality targets. Provide actuarial support to develop global budgets and risk-based contracts. Support and collaborate with related efforts in Maine and other regional reforms.	
Portland, Oregon	
Objective(s): Reduce health care costs; improve quality and patient satisfaction.	
Target population: High-risk patients.	
Objective 1: Reduce health care costs.	
Care delivery reform: Nurse care managers.	
Payment reform strategy: PMPM payments to cover personnel costs of the nurse care managers and share any cost savings. Shared savings are based on the difference in costs between the intervention group and a tightly matched control group of patients at the end of the project if threshold targets for quality of care and patient satisfaction are met.	
	Project leadership: The nonprofit Oregon Health Care Quality Corporation (Quality Corp), a contractor and partner in the High-Value Patient-Centered Care Initiative (HVPCCI).
	Governance: Board of directors is composed of representatives from state agencies; hospitals; health plans; and consumer, employer, and provider groups.

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
<p>Objective 2: Improve quality and patient satisfaction.</p> <p>Care delivery reform: Same-day access; 24/7 phone support designated team; involvement of a care neighborhood.</p> <p>Payment reform strategy: High-risk patient payment per month; 50/50 sharing of medical group savings up to a cap, at the end of the initiative.</p>	<p>Stakeholders:</p> <p>The 30 members of the Oregon Health Leadership Council's HVPCCI, consisting of 8 major medical groups, 8 major hospitals/health systems and the Oregon Association of Hospitals and Health Systems, 12 health plans, and the director of the (state's) Oregon Health Care Authority.</p>
<p>Washington State</p> <p>Objective(s): Improve primary care; reduce avoidable hospitalizations and ED visits; ultimately cut costs; and identify necessary implementation features for reducing avoidable hospital admissions and ED visits.</p> <p>Target population: Enrollees of 7 participating health plans, including 2 Medicaid managed care plans.</p> <p>Objective 1: Improve primary care.</p> <p>Care delivery reform: Support primary care and PCMH development.</p> <p>Payment reform strategy:</p> <p>The pilot's payment model has 4 components:</p> <ol style="list-style-type: none">1. Patient attribution.2. PMPM payment to medical groups.3. Medical group targets for quality of care and cost savings.	<p>Project leadership:</p> <p>The Washington State Health Care Authority (state agency responsible for state employee benefits and Medicaid purchasing) and Puget Sound Health Alliance (co-convenor of the pilot).</p> <p>Governance:</p> <p>The board has 23 members: 12 purchasers, 4 health care professionals, 4 health plans, and 3 community members.</p>

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
4. Potential medical group repayment of PMPM. Objective 2: Reduce avoidable hospitalizations and ED visits. Care delivery reform: Support the PCMH. Payment reform strategy: \$2.50 PMPM during the first 8 months. Objective 3: Ultimately cut costs. Care delivery reform: None. Payment reform strategy: \$2.00 PMPM each of the next 2 years after initial period. Objective 4: Identify the necessary implementation features for reducing avoidable hospital admissions and ED visits. Care delivery reform: None. Payment reform strategy: Cost savings shared equally between medical groups and health plans, contingent on the medical group's satisfying clinical quality metrics.	Stakeholders: Participating in this project are 8 provider organizations, 7 private health insurers, and the state's managed care Medicaid program, all from a stakeholder universe of 175 state, county, and private employers; union trusts; health plans; hospitals and physician groups; government agencies; community-based organizations; educational institutions; pharmaceutical companies; and individuals.
Southwestern Pennsylvania Objective(s): Develop a bundled payment model; create a suite of services that adds value and demonstrates how alternative payment arrangements can support improved care; lower costs; and create virtual patient-centered medical homes (PCMHs).	

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
<p>Target population: Patients with certain chronic conditions.</p> <p>Objective 1: Develop a bundled payment model.</p> <p>Care delivery reform: Facilitate the PCMH and apply to specialty care.</p> <p>Payment reform strategy: Prometheus model of evidence-informed case rates (bundled payment) for episodes of care, which is close to rollout for orthopedics and cardiology. Approximately 18 practices engaged in PCMH have signed contracts with that carrier for shared savings. The typical model involves up-front dollars to the participating practice. The shared savings are introduced once specific performance targets are met; those shared savings can reach as much as 40% of fee-for-service (FFS) payments. The targeted performance measures are reported monthly to the practice.</p> <p>Objective 2: Create a suite of services that adds value and demonstrates how alternative payment arrangements can support improved care.</p> <p>Care delivery reform: ACO with patient-centered medical home.</p> <p>Payment reform strategy: Primary care PMPM.</p> <p>Objective 3: Lower costs.</p>	<p>Project leadership: Pittsburgh Regional Health Initiative (PRHI) was founded in 1997 by a consortium of 42 hospitals, 4 health plans, and corporate and civic leadership. It is a nonprofit organization focused on value in health care and a supporting organization of the Jewish Healthcare Foundation. PRHI is the lead sponsor and convener of the Pittsburgh Accountable Care Network (ACN) Project.</p> <p>Governance: The PRHI board of directors is made up of representatives of community development organizations, hospitals, health insurers, universities, individuals, health networks, the regional hospital council, consumer health coalitions, the Veterans Administration, quality improvement organizations, the county health department, and the state department of public welfare.</p> <p>Stakeholders: In southwestern Pennsylvania, 7 community hospitals are participating in the ACN Project.</p>

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
Care delivery reform: Nurse case management. Payment reform strategy: Improving care for chronic conditions.	
Objective 4: Create virtual patient-centered medical homes (PCMHs).	
Care delivery reform: Hospital-based primary care resource center is the vehicle for improved care coordination, especially for transitions between inpatient and ambulatory care.	
Payment reform strategy: Combine savings from reduced readmissions with FFS payments for value-added primary care services and pay-for-performance (P4P) payments to hospitals and physicians.	
Salem, Oregon	
Objective(s): Reduce cost; improve quality; improve efficiency of health care.	
Target population: High-risk patients.	
Objective 1: Reduce cost.	
Care delivery reform: Support virtual patient care teams.	
Payment reform strategy: The payment reform approach of the Program-Oriented Payment (POP) Demonstration Project blends the concepts of pay for performance with value-based health insurance, or	Project leadership: Physicians Choice Foundation (PCF) is the lead organization for the POP. Performance Health Technology (PH Tech) is a private, for-profit firm offering health plan benefits administration to more than 700,000 individuals and

Continued

Table A1. <i>Continued</i>	
Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
<p>paying extra for health services that generate better clinical results based on scientific evidence, ultimately to improve the quality and efficiency of local health care.</p> <p>Objective 2: Improve quality.</p> <p>Care delivery reform: None.</p> <p>Payment reform strategy: Pay for performance.</p> <p>Objective 3: Improve efficiency of health care.</p> <p>Care delivery reform: Virtual provider team across medical offices.</p> <p>Payment reform strategy: Payment programs pay a virtual provider team a financial incentive when a minimal percentage of patients achieve all clinical targets for a specific condition.</p>	<p>is leading the design and development of the project's payment strategy.</p> <p>Governance:</p> <p>The POP project is governed by the PCF.</p> <p>Stakeholders:</p> <p>Local independent physicians' association, WVP Health Authority (formerly Mid-Valley Independent Physicians Association), and its subsidiary, Marion-Polk Community (Medicaid) Health Plan, and PH Tech. WVP is now part of Willamette Valley Community Health (WVCH), the coordinated care organization (CCO) that will serve Oregon Health Plan patients throughout the mid-valley.</p>
<p>Boston, Massachusetts</p> <p>Objective(s): Shift treatment mix for low-risk prostate cancer toward higher-value services and support shared patient-provider decision making; generate overall savings.</p> <p>Target population: Patients with low-risk prostate cancer.</p>	

Continued

Table A1. *Continued*

Objective, Care Delivery Reform, and Payment Reform Strategy	Project Leadership, Governance, and Stakeholders
<p>Objective 1: Shift treatment mix for low-risk prostate cancer toward higher-value services and support shared patient-provider decision making.</p> <p>Care delivery reform: None.</p> <p>Payment reform strategy: The project's original model was changing reimbursement to pay equally for equal outcomes and, in so doing, to lead to higher value care. 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.</p> <p>Objective 2: Generate overall savings.</p> <p>Care delivery reform: None.</p> <p>Payment reform strategy: Value-based payment; reward physicians for using lower-cost treatments that are equally as effective as higher-cost treatments.</p>	<p>Project leadership: Institute for Clinical and Economic Review (ICER), an affiliate of Massachusetts General Hospital.</p> <p>Governance: Sponsored and governed by the Employers Action Coalition on Healthcare (EACH), a coalition of employers, providers, and health insurers.</p> <p>Stakeholders: The 4 major private insurers in the greater Boston market (> 85% market share), Massachusetts General Hospital, Brigham and Women's Hospital, and other leading provider organizations.</p>

Table A2. Facilitators and Barriers

Project Site	Facilitators	Barriers
New Hampshire	<p>Strong civic culture and small state size make working together somewhat easier.</p> <p>Emerging consensus among stakeholders about the need to control health care spending.</p> <p>The availability of an all-payer claims database and a partnership with the University of New Hampshire's Center for Health Analytics and other entities.</p> <p>The New Hampshire Citizens Health Initiative (CHI)'s leadership and expertise in facilitation have helped develop relationships and goodwill.</p> <p>Physician input and buy-in via the clinical subcommittee in the development of clinical quality, prevention, and utilization measures.</p>	<p>New Hampshire's providers are reluctant to adopt capitation or provider risk-bearing payment models because of mixed experience with capitation models, especially in the 1990s.</p> <p>Employers' comfort and familiarity with payment based on actual claims rather than a capitated amount; providers' familiarity with fee-for-service (FFS) payment.</p> <p>The challenge of creating arrangements between physicians and hospitals in areas where provider organizations typically are not part of integrated delivery systems. Attribution of patients to a virtual provider organization of independently owned entities significantly complicates clinical and financial integration and accountability in accountable care organizations (ACOs).</p> <p>Lack of significant competition in New Hampshire's health insurance market limits payment innovation for providers.</p> <p>Hospitals have substantial control of health systems, and few large medical groups practice independently.</p>

Continued

Table A2. *Continued*

Project Site	Facilitators	Barriers
	The ability to build on and learn from the Multistakeholder Medical Home Pilot. The Patient Protection and Affordable Care Act (PPACA) has stimulated payment and delivery system reform.	Because of the distribution of population and providers in rural areas, it can be difficult to craft contractual arrangements among primary care providers, specialists, and hospitals. The multiple initiatives under way dilute the effort of any given project, which may contribute to suboptimal results.
Maine	Data related: existence of a statewide, all-payer claims database; Health Data and Management Services' robust capacity for managing, encrypting, and allowing access to data. Committed leadership by providers and others. Stability of the workforce encourages employers to take the long-run view.	Data related: the prior vendor's inability to provide sufficient reporting and analytic support; lack of electronic health records in many small practices preventing efficiently inputting data into the database; reluctance by some provider organizations to share their data with employers. Challenges in consistently engaging employers and maintaining balance between employers and providers in the project. Securing significant consumer involvement.

Continued

Table A2. *Continued*

Project Site	Facilitators	Barriers
Portland, Oregon	Provider interest in the ACO model and willingness to collaborate. Balanced engagement by purchasers, providers, and payers, with increased engagement among the health plans. Powerful collaborators, including the Dartmouth Institute. Strong foundation of trust in a well-established multistakeholder forum.	Challenges in engaging and maintaining health plans in collaboration.
	Oregon's history of collaboration and innovation. Leadership of the health plans and the Oregon Health Leadership Council (OHL) agreement on the care model, payment approach, and contract. Physician leadership. Well-qualified nurse care managers in all medical groups. Trust in and credibility for all members of the team	Competition for time and attention: when the High-Value Patient-Centered Care Initiative (HVPCCI) began, there were few health reforms operating; now there are several. Payment environment: health plans and medical groups operate in a FFS environment and have limited capability for making and receiving capitated payments. Attribution and ongoing enrollment: identifying high-risk patients and attributing them to a health plan is challenging because patients may change employers and health plans.

Continued

Table A2. *Continued*

Project Site	Facilitators	Barriers
	implementing the initiative, including the Oregon Health Care Quality Corporation (Quality Corp) as a credible and respected data provider of information about system performance.	<p>Risk identification methodology: health plans identify high-risk patients through a computer algorithm.</p> <p>Medical groups also may define patients as high risk based on their clinical histories.</p> <p>Data timeliness and accuracy: utilization data are reported quarterly to medical groups, but reporting data in real time would help manage care transitions, especially for emergency room visits and hospitalizations.</p> <p>Data literacy: some medical group staff had limited spreadsheet skills and required assistance in understanding and applying information in quarterly reports.</p> <p>Nurse retention: the skills the nurses gained from care management have made them strong candidates for other positions and have led to some turnover.</p> <p>Patient preferences: not all high-risk patients want to be in a medical home or participate in the project, and some believe they are healthy.</p>

Continued

Table A2. *Continued*

Project Site	Facilitators	Barriers
Washington State	<p>Context: the alliance's history of fostering collaboration among stakeholders, the legislature's mandate to implement the pilot, and medical groups' experience with a medical home collaborative. New forms of collaboration have emerged to address common problems.</p> <p>Leadership: HCA's and alliance's role as conveners, and medical leadership in support of practice transformation.</p> <p>The Robert Wood Johnson Foundation (RWJF) Conference provided an opportunity for leadership across payment reform projects to share best practices with one another and explore solutions to challenges.</p>	<p>Turnover in Health Care Authority (HCA)'s leadership. Competition, rather than collaboration, among health plans.</p> <p>Limited funds contributed to an understaffed pilot for managing this complex undertaking.</p> <p>Information- and data-related barriers: Data discrepancies and delays and the lack of a uniform data set across health plans.</p> <p>Limited information about ED visits and hospitalizations slowed the pilot's design and start.</p> <p>Medical groups have limited, real-time information about their patients' utilization of the emergency room and hospital, which limits their ability to be proactive in coordinating care.</p> <p>Hospitals are not participating in the pilot, which may have limited the real-time sharing of information about ED visits.</p> <p>Pilot's patient population was smaller than expected and therefore did not represent the majority of a practice population, making it hard to ascertain whether the</p>

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Table A2. <i>Continued</i>		
Project Site	Facilitators	Barriers
		<p>pilot's results accurately reflect the clinics' experience as a whole.</p> <p>The practices' risk of financial losses creates an incentive to target limited resources to the smaller pilot population rather than the greater practice population.</p> <p>Plans that provide administrative services only generally do not control the expenses of self-insured employers, and per member per month (PMPM) payments may require employer approval.</p> <p>Difficulty of accurately attributing patients to plans as they change insurance.</p> <p>Not all high-risk patients want to be in a medical home and receive highly coordinated care, and the habits of visiting EDs are hard to change.</p> <p>Size of PMPM payment may be insufficient to cover the medical groups' costs of reforms.</p> <p>Increased marketing by free-standing emergency rooms and hospitals to seek care in the ED rather than a primary care doctor's office likely influences patients' choice for treatment location.</p>
		<i>Continued</i>

Table A2. *Continued*

Project Site	Facilitators	Barriers
Pennsylvania	<p>Pittsburgh Regional Health Initiative (PRHI)'s role as a facilitator of ACN development and payment reform.</p> <p>One hospital's already existing integrated delivery network and experienced leaders.</p> <p>Anticipation of Medicare payment changes.</p> <p>PRHI's ability to communicate with physicians and foster cooperation among partners.</p> <p>The resources provided by the RW/JF grant.</p>	<p>Lack of a history of collaboration among health insurers.</p> <p>Absence of capitation experience in the region.</p> <p>Obtaining and sustaining funding for the primary care resource centers (PCRCs).</p> <p>The challenge of engaging independent physicians to participate in the ACN.</p> <p>Ongoing challenges with electronic medical records.</p> <p>Validity of claims data and legal and privacy issues regarding data sharing.</p>
Salem, Oregon	<p>History of collaboration and innovation in Oregon and particularly in Salem.</p> <p>The leadership of Physicians Choice Foundation (PCF), Performance Health Technology (PH Tech), and WVP Health Authority.</p> <p>Legislative action related to CCOs directed through HB 3650.</p>	<p>Competing priorities created with the Oregon legislature's and the federal government's authorization of coordinated care organizations (CCOs) and other local other health care reforms.</p> <p>Departure of a program-oriented payment (POP) leader who was instrumental in building and maintaining cohesive relations between the independent practice association and the local medical society.</p> <p>Not all providers could submit claims electronically.</p>

Continued

Table A2. Continued

Project Site	Facilitators	Barriers
	<p>The Oregon legislature's and federal government's mandates that CCOs are required to have alternative payment methods that pay providers based on quality and reduce cost growth created a receptive environment in the Salem area for implementing POP. Local physicians and other providers contribute to the development of each program.</p> <p>PH Tech routinely collects much of the medical claims data for operating POP.</p> <p>Funding from the RWJF raised awareness and credibility of the project.</p> <p>WVP Health Authority's successful track record in managing payment withhold in prior years.</p> <p>PH Tech's substantial investment in POP software.</p> <p>Web interface already used by providers in the community to track their claims payments.</p>	<p>Complexity of the POP program; challenges in explaining it to medical practices.</p>

Continued

Table A2. *Continued*

Project Site	Facilitators	Barriers
Boston, Massachusetts	<p>Favorable market, social, legislative, and regulatory environments for payment reform.</p> <p>Employers Action Coalition on Healthcare (EACH)'s board, made up of the CEO of every major stakeholder and the CEOs' declared support.</p> <p>Strong coalition governance.</p> <p>Institute for Clinical and Economic Review (ICER)'s role as neutral convener and trusted source of comparative effectiveness evidence, and its credibility with academia.</p> <p>Comparative Effectiveness Public Advisory Council (CEPAC)'s role as a facilitator and convener.</p> <p>Clarity of low-risk prostate cancer treatment effectiveness evidence.</p> <p>Stakeholders' familiarity with alternative treatments for low-risk prostate cancer.</p>	<p>Inability of health plans to adjudicate claims using the F-codes for risk of recurrence.</p> <p>Choice of low-risk prostate cancer as the clinical condition, a relatively infrequent condition in commercially insured populations.</p> <p>Senior executives' delegation of decision making to others in their organizations.</p> <p>Lost momentum due to lengthy implementation process.</p> <p>Divergence in providers' and payers' priorities.</p> <p>Diversity of stakeholders and need to address multiple needs and priorities.</p> <p>Differing payment methods across health plans and providers.</p>

Table A3. Summary of Themes

Type of Payment Reform	Global Payments			Per Member per Month Care Management				Pay for Performance	Equal Pay for Equal Effectiveness
	NH	ME	Portland OR	WA	PA	Salem OR	Boston MA		
Site									
Context									
Implementation and early results are shaped by local and national events.	✓	✓	✓	✓	✓	✓	✓	✓	✓
Objectives									
Improve quality of care and reduce cost of care/produce savings.	✓	✓	✓	✓	✓	✓	✓	✓	✓
Approach									
Focus on high-risk and/or high-cost patients and conditions.		✓	✓	✓	✓	✓		✓	
Facilitators									
Stakeholder collaboration/engagement	✓	✓	✓	✓		✓		✓	✓

Continued

Table A3. *Continued*

Type of Payment Reform	Global Payments			Per Member per Month Care Management				Pay for Performance		Equal Pay for Equal Effectiveness
	NH	ME	Portland OR	WA	PA	Salem OR	Boston MA			
Site										
Local area culture/context	✓	✓	✓	✓		✓	✓			✓
Trusted leadership		✓	✓	✓	✓	✓				
Anticipation of/or legislative action at the state and national levels	✓		✓	✓	✓	✓				
Presence of neutral convener	✓		✓	✓	✓		✓			✓
Outside investment (financial, human resources)			✓	✓	✓	✓				
Ability to build on existing resources/knowledge	✓		✓	✓	✓					
Existing claims data set and infrastructure	✓	✓						✓		

Continued

Table A3. *Continued*

Type of Payment Reform	Global Payments			Per Member per Month Care Management				Pay for Performance	Equal Pay for Equal Effectiveness
	NH	ME	Portland OR	WA	PA	Salem OR	Boston MA		
Lessons learned									
Change management is complex and challenging.	✓	✓		✓	✓				✓
Stakeholder collaboration is critical, varies, and must be nurtured.	✓		✓	✓	✓				
Technical barriers with data can slow implementation.				✓	✓	✓		✓	✓
Context can be both a facilitator and a barrier.			✓	✓				✓	
Payments should appropriately offset the costs of implementation.			✓	✓					
The presence of a neutral third-party convener is critical.	✓	✓							
Access to an all-payer claims database is important.	✓	✓							