Testing PROMETHEUS Payment®
A payment model uses Evidence-informed Case Rates® to meet health care needs

SUMMARY
Bundled payments—paying providers a lump sum to care for a patient over the entire course of a disease or clinical episode of care, instead of paying for each service individually—encourage providers to practice cost-effective care and to avoid costly medical errors. From 2007 to 2011, the Health Care Incentives Improvement Institute (Institute) in Newtown, Conn., furthered the development and pilot testing of its bundled payment model, PROMETHEUS Payment®.1 Researchers at the RAND Corporation and the Harvard School of Public Health evaluated the implementation of the PROMETHEUS Payment system at three pilot sites.

Key Results and Findings
According to project reports; interviews with the implementers, the evaluators, and with Robert Wood Johnson Foundation (RWJF) program officers; and the evaluation findings published in Health Affairs:2

- The Institute developed 21 Evidence-informed Case Rates® (ECRs) for bundled services to treat acute and chronic medical conditions and surgical procedures. Among the conditions with case rates are heart attacks, hip and knee replacements, diabetes, asthma, congestive heart failure, and hypertension.

- Three pilot sites implemented Prometheus Payment over the three-year project period (two additional organizations initially enrolled but dropped out early in the process).

- None of the pilot projects had a bundled payment system in place at the end of the grant period, nor had they executed contracts between payers and providers to do so. Challenges to the pilot sites included those related to defining the bundles, defining

---

1 Prometheus is the acronym for Provider Payment Reform for Outcomes, Margins, Evidence, Transparency, Hassle Reduction, Excellence, Understandability, and Sustainability.
the payment method, implementing quality measurement, determining accountability, engaging providers, and delivery redesign.

- Despite the implementation barriers, participants continue to see promise and value in the bundled payment model, but evaluation findings suggest that the desired benefits of payment reform may take time and considerable effort to materialize.

Michael Painter, MD, the Robert Wood Johnson Foundation (RWJF) senior program officer for three of the PROMETHEUS grants, notes that “the implementation barriers are not unique to bundled payments. Instead, virtually any effort to rationalize payment will encounter significant barriers. There are some unique challenges for bundles—but many more generic problems that all value-focused payment reforms encounter.”

- Simulation modeling conducted on a commercial insurance plan and a Medicare managed care plan during the pilot period also suggests that because most individual providers have relatively few patients with any given condition or disease, and given the wide variation in treatment costs for individual patients—providers could face substantial financial risk under a bundled payment system.

**Afterward**

The Institute continues to enlist payers and health care organizations in efforts to implement PROMETHEUS. In June 2012, there were at least 19 pilots in the United States implementing bundled payment programs with public and private sector payers, and nearly half were using the PROMETHEUS Payment model.³

Generally speaking, the “beta” sites, e.g., the sites that were launched after the initial three RWJF-funded pilots, went from concept to full implementation in less than a year, thanks to the lessons learned from the initial three sites.

In 2011 and 2012, the federal Center for Medicare & Medicaid Innovation awarded contracts to the Institute as part of a team led by individuals at Brandeis University to develop a public domain episode grouper.

The RAND Corporation continues to evaluate bundled payment initiatives using the methods developed in this project. With a three-year grant from the federal Agency for Healthcare Research and Quality, RAND and the Integrated Healthcare Association are implementing and evaluating a bundled episode payment demonstration project in California.

---

**Funding**

The RWJF provided five grants totaling $6,504,666 for this project between 2007 and 2011.

See the Appendix for details on how these grants were structured.

**CONTEXT**

The current fee-for-service system for reimbursing medical care tends to reward the generous provision of health care services rather than the quality of that care, and is widely recognized as a significant contributor to the high cost of care in the United States. One unintended consequence of a fee-for-service system is that if medical errors do occur, physicians receive extra compensation to treat and remediate them.

One alternative is some form of bundled payment—paying providers a lump sum to care for a patient over the entire course of a disease or clinical episode, instead of paying for each service individually. Bundled payments encourage providers to practice cost-effective care.

“The idea of going from fee-for-service to bundled payment is to alter incentives,” explained Meredith Rosenthal, PhD, professor of health economics and policy at Harvard School of Public Health, who was one of the evaluators for PROMETHEUS. “Rather than paying providers to do more in terms of volume, we pay them to prevent high-cost complications.”

“Bundling payments creates accountability,” said Francois de Brantes, MS, MBA, executive director of the Health Care Incentives Improvement Institute.

**The PROMETHEUS Model**

PROMETHEUS is a health care compensation model that pays for all the medical services needed to treat a single illness or injury episode under one negotiated fee. These bundled rates can be developed for a broad range of acute, chronic, and inpatient procedures. The PROMETHEUS model was built starting in 2006 with input from a group of experts in health care law, quality measurement, economics, plan benefits, operations, and related fields.

De Brantes oversaw its development as chief executive officer of Bridges to Excellence: Rewarding Quality Across the Healthcare System. A group of employers, physicians, health plans, and patients established Bridges, based in Newtown, Conn., to create programs that would realign incentives to encourage higher-quality health care; it later became a part of the Health Care Incentives Improvement Institute during the course of this project.
became part of the Health Care Incentives Improvement Institute. Early support came from the Commonwealth Fund and other funders.

While the model is complex, its reimbursement system is based on three basic concepts:

- **Compensation is determined by the cost of providing appropriate care.** Bundled payments are based on a patient-specific budget—called the Evidence-informed Case Rate—that includes the cost of all care from all providers (including the hospital, physicians, laboratory, pharmacy, and rehabilitation facility). The rate is adjusted to take into account the severity and complexity of each patient’s condition. The services covered are determined by commonly accepted clinical guidelines or expert opinion that spells out optimal treatment.

- **The bundled payment includes a partial allowance for “potentially avoidable complications.”** Potentially avoidable complications are events that often can be prevented with quality care—examples of avoidable complications include re-hospitalizations following a surgical procedure, or an emergency room visit for a chronic condition such as diabetes. While they do not necessarily reflect errors on the part of the provider, they can sometimes be avoided with appropriate safeguards. An example of an intervention that can prevent a complication is sending a visiting nurse to assess the home of a patient who has just had a joint replacement for potential fall hazards.

  The traditional fee-for-service system pays for the full cost of addressing these complications. Under PROMETHEUS, the bundled payment is sufficient to cover some level of such complications, but not as much as typically occurs, giving providers an incentive to improve quality of care.

- **A portion of the payment is based on a provider quality scorecard.** The scorecard uses a set of validated measures, tracked to specific medical conditions and procedures, that can be reported easily by providers, and which reflect clinical practice guidelines. To create a clear incentive for clinical collaboration, 30 percent of each provider’s score is based on the quality of care provided by the entire team treating the patient. The other 70 percent of the score is based on the individual provider’s performance.

Further information about reimbursement under the PROMETHEUS system can be found in the following publications:

- **PROMETHEUS PAYMENT: On the Frontlines of Health Care Payment Reform**
- **WHAT IS PROMETHEUS PAYMENT? An Evidence-Informed Model for Payment Reform**
- **PROMETHEUS PAYMENT®: WHAT’S THE SCORE?: How Scores Determine Provider Payment**
RWJF’s Interest in This Area

The Robert Wood Johnson Foundation’s Quality/Equality portfolio is committed to improving the quality of health care for all Americans. Its approach is shaped by what staff has learned through extensive investments in improving chronic care and the knowledge that everyone who gets care, gives care, and pays for care must work together to achieve meaningful improvement.

Examples of RWJF’s programs in the area of quality measurement and financing include:

- **High-Value Health Care Project** (2007–2010), an initiative of the Quality Alliance Steering Committee—composed of top executives from more than 30 health care and business organizations—built the initial infrastructure for a nationwide performance measurement and reporting system. Project staff selected 22 measures of physician performance in preventing and managing chronic conditions; pilot tested a methodology for combining information on those measures across health plans; and communicated with physicians about the findings. In addition, they developed 22 episode-of-care cost measures for diagnosing, treating, and managing 12 common and costly medical conditions, and tested the measures on a commercial health care claims dataset that drew on a pool of 15 million insured people. See the Program Results for more information.

- **Rewarding Results: Aligning Incentives with High-Quality Health Care** (2002–2008) tested the use of financial incentives to improve the quality of health care. The program supported seven projects across the nation that implemented systems designed to measure the performance of health care providers and adjust their compensation based on performance scores—a strategy commonly termed pay for performance. See the Program Results for more information.

THE PROJECT

This RWJF-funded project, which ran from 2007 to 2011, had three objectives:

- Further development of the PROMETHEUS model, including developing rates for bundled services and systems to track care and costs and determine payments to providers
- Testing the PROMETHEUS methodology in pilot communities around the country
- An independent evaluation of that pilot test

The Health Care Incentives Improvement Institute (and its antecedents—see the Appendix for details) had primary responsibility for the project, including developing the model and providing technical assistance to the pilot sites.
Three pilots participated in the project:

- Crozer Keystone Health System and Independence Blue Cross (Chester, Pennsylvania)
- The Employers’ Coalition on Health (Rockford, Ill.)
- Priority Health–Spectrum Health (Grand Rapids, Michigan)

The pilot sites used tools and systems developed by the Institute to set reimbursement rates based on their historical patterns and to negotiate contracts between insurers and providers based on these rates. The sites were also expected to engage physicians and other frontline staff in the project and develop ways to improve care processes. They were not reimbursed for their work on the project.

**Evaluation Design**

The limited empirical literature on bundled episode payments for physicians and hospitals suggests that bundled payments may be effective in slowing health care spending growth; reducing complications, readmissions, and waste; and increasing provider accountability for patient outcomes. The evaluation was conducted concurrent with PROMETHEUS’ initial “road test” and was focused on whether the model is “scalable” and what factors might predict successful implementation “in the real world.”

Evaluators at the RAND Corporation and the Harvard School of Public Health used qualitative methods to evaluate the implementation of PROMETHEUS Payment and simulation modeling to assess which providers might be “winners” and “losers” under PROMETHEUS Payment incentives.

**Implementation Evaluation**

M. Susan Ridgely, JD, a senior policy analyst at RAND, directed the PROMETHEUS implementation evaluation. Her collaborators were Peter Hussey, PhD at RAND, and Harvard’s Rosenthal. Their goals were to document and compare the experiences of the key stakeholders in each of the three pilot sites, identify barriers and facilitators to implementing the payment model, and to understand any adaptations necessary to the model prior to wider scale-up.

Case study methods were chosen because of the small number of sites, the complexity and early phase of the intervention, and the primary interest in questions of implementation. To collect data, the researchers conducted a series of telephone interviews with key pilot staff in two of the sites in 2009, and visited each of those sites in the fall of 2010. In January 2011, they conducted a single visit to the third pilot site—which had only been operational for one year.
**Simulation Modeling**

Rosenthal and her colleagues used simulation modeling to compare provider payments under a commercially insured plan and a Medicare managed care plan to simulated payments under a variety of possible risk-sharing arrangements using the PROMETHEUS Payment model.

To do so, the researchers first identified the actual cost of an episode of care, based on claims data—for example, the amount paid by an insurer for an episode of care related to diabetes. They then compared that cost to six models of simulated payments, which were based on various adjustments to the “potentially avoidable complications” allowance and a “stop loss” that limited losses to providers for the most costly episodes of care. The models included actual costs plus an allowance for potentially avoidable complications (e.g., either a full allowance or a 50 percent allowance) and risk-adjusted “typical” costs plus various allowances.

Drawing on data from almost 290,000 commercially insured adults and almost 9,750 adults enrolled in a Medicare managed care plan, they examined which providers would benefit and which would lose under the PROMETHEUS Payment model.

**RESULTS**

Project director de Brantes reported the following results of the project to RWJF:

- **The Health Care Incentives Improvement Institute developed 21 evidence-informed case rates for bundled services, including acute and chronic medical conditions and surgical procedures.** These included heart attacks, hip and knee replacements, diabetes, asthma, congestive heart failure, and hypertension.

- **The Institute’s definitions of “potentially avoidable complications” were endorsed by the National Quality Forum (NQF).** A frequent RWJF grantee, NQF endorses national consensus standards for measuring and publicly reporting on performance. The Institute had sought this endorsement to overcome some of the objections raised by physicians about the legitimacy of the PROMETHEUS definitions.

- **Dozens of payers and other agencies have used the tools created by the Institute to estimate the costs of their episodes of care.** The Institute provides a free download of its evidence-informed case rates analytic package through which organizations can run their claims data. “This has helped to spread the concepts of the use of episode of care as a payment reform model, and in particular the importance of identifying and reducing potentially avoidable complications,” wrote Institute staff in a report to RWJF.

- **The Institute created a comprehensive toolkit to help other organizations launch and support implementation of a bundled payment initiative.**
EVALUATION FINDINGS

The RAND and Harvard evaluators reported the following findings in an article in *Health Affairs*:^5^

- None of the three pilot projects had executed contracts between payers and providers to put a bundled payment system in place by the end of the three-year grant period. “The model is well-thought-out and the simulations show the potential, but what we don’t have at the end of the demonstration period is a ‘proof of concept,’” said evaluator Ridgely. “There is no place we can look to and say, ‘they were able to do it there and here’s how.’”

  RWJF’s Painter points out that “the implementation barriers are not unique to bundled payments. Instead,” he says, “Virtually any effort to rationalize payment in the current dysfunctional system will encounter significant barriers. There are some unique challenges for bundles—but many more generic problems that all value focused payment reforms encounter.”

- The pilot sites encountered substantial challenges and took longer than expected to implement because the model itself is very complex, and it builds on the complexity of existing health care systems. Among the challenges:
  
    — It was difficult to determine what services should be part of the bundle, and whether these should be classified as “typical care” or “potentially avoidable complications.” The claims data systems used to define the services that are part of a clinical episode were not designed with bundled payments in mind.

    — PROMETHEUS has essentially developed its own lexicon. The meaning of terms such as “potentially avoidable complications” and “evidence-informed case rates” were not commonly understood and subject to differing interpretations.

    — Physicians questioned the validity of some of the “potentially avoidable complications” designations. They noted that the evidence to back up the claim of a 50 percent potentially avoidable complication rate was thin.

    — Both payers and providers were leery of increasing their risk of financial loss. The pilot sites experimented with ways to share savings, but none of them settled on the specific payment incentives to be used.

  RWJF’s Painter adds, “Any value-focused payment change will be complex. Part of the problem is the poor-quality data that is caused in part by the dysfunctional fee-for-service system that does not need high-quality data to assess value and reward it—mostly because fee-for-service doesn’t look to reward value, but rather volume.”

---

● Some of the initial delays at the pilot sites reflected the evolution of the PROMETHEUS model, and the need to refine the available tools and technical support. Many of the technical issues were subsequently resolved by the Institute.

● Other causes of delays can be expected to challenge any new adopter. These include deficiencies in the fee-for-service claims data systems and the time needed for participants to learn and understand a complex system and its distinctive lexicon.

● PROMETHEUS is more likely to be successful among integrated payer and delivery systems, but—even then—implementation may take a number of years.

● Despite the slow progress, participants recognized the promise and potential value of the bundled payment model. The pilot:
  — Opened up important lines of dialogue between health care payers and providers about the best ways to improve care
  — Made sites more aware of their measurement needs and led to changes in their electronic health record systems. A common barrier to overcome is the lack of shared data between outpatient and inpatient settings, even within a single health care system.
  — Spurred efforts to improve care and enhance coordination. For example, all three sites recognized hospital readmissions as an opportunity for improvement.
  — Made participants more aware that they can reduce costs and improve quality by changing how care is delivered. All of the sites were interested in changing the design of their benefits—for example, by lowering the costs to consumers who use providers being paid via the bundled payment rate.

FINDINGS FROM SIMULATION MODELING

Based on their comparisons of fee-for-service payments against simulated PROMETHEUS payments, the Harvard researchers reported the following findings in an unpublished manuscript:

● Individual providers tend to have relatively few patients with any given condition. For example, only 16 percent of practices the researchers examined had more than 10 diabetes patients.

● There is wide variation in the cost of episodes of care for any given condition. The variation is greater for chronic conditions than for acute conditions.

● The combination of a few patients and large cost variability means that any bundled payment system based on average costs will cause wide variation in monetary gains and losses. In particular, providers with more patients, sicker patients, and higher rates of potentially avoidable complications are more likely to lose money under the PROMETHEUS model, even with adjustments made for
severity of illness and outlier provisions. In the specific sample used for the simulations, practices that lost money under a hypothetical bundled payment tended to lose a lot of money.

- **Contracting with larger provider entities**—such as large multispecialty practices or health care systems—*can ameliorate this concern*. “If I had 100 asthma patients, the risk associated with taking episode-based payments for all my asthma patients would be much less than if I had 10,” evaluator Rosenthal said.

- **If contracting is done at the individual provider level, reimbursement formulas should include significant “stop-loss” provisions to protect providers from major losses.** A phased implementation approach would give providers time to adopt cost-cutting strategies.

### CONCLUSIONS OF THE IMPLEMENTERS

Based on its experiences with the pilot sites, the Health Care Incentives Improvement Institute identified “five key ingredients” for implementing bundled payments:

- **Full engagement of senior leadership of participating organizations**—including the chief executive officer. Commitment from senior leaders, and their active role in developing and implementing the pilot, sends a signal throughout the organization that facilitates the project’s launch and sustainability.

- **Active and balanced commitment from both payer and provider.** The difficulties inherent in modifying payment incentives demand collaboration, and won’t work unless both parties are willing to come to the negotiating table.

- **Clean and complete claims and eligibility data for individual plan members.** Deficient or incomplete claims data was a recurring challenge during the pilot, with some datasets allowing tracking only at the level of all members within a family. “If you can’t differentiate family members, it won’t work,” emphasizes de Brantes. “There is no such thing as a bundle that includes breast cancer for the mom and diabetes for the dad…. You can’t calculate savings with any accuracy.” (RWJF’s Painter concurs.)

- **Electronic medical records systems.** Providers need electronic records that allow them to collect, submit, and review clinical data to track the health of their patients and improve outcomes.

- **A sense of urgency.** Without a clear sense of urgency to move forward aggressively and efficiently, implementation will likely stall and lose momentum.

### SIGNIFICANCE OF THE PROJECT

The demonstration project highlighted the complexity of the effort and provided important insights about reforming payment systems, according to RWJF’s Painter. “The
point is how difficult it is to design and implement a rational payment system, [which is] also a sign of how bad and dysfunctional the current system is.”

“This is a Herculean task, but the sites continue to make progress,” Painter said.

In their *Health Affairs* article, the evaluators observed that any significant reforms in health care payment and delivery (for example, the development of Accountable Care Organizations) likely will encounter similar challenges, and take a substantial amount of time and effort to implement. In Ridgely’s words, “Here is what happened to the very first people who tried it, here are the strengths and weaknesses. It doesn’t mean you should drop bundled payment and go looking for some other innovation, because anything that attempts to do this kind of work is likely to face these kinds of problems.”

“What the Institute and these pilot sites did was trailblazing—they were the first ones out there—and they got hit with about every problem that could possibly happen.”

Added RWJF’s Painter. “Any payment reform that tries to rationalize the current state of misaligned incentives and data dysfunction is going to run into a horrendous buzz saw of problems.”

**LESSONS LEARNED**

1. **Don’t underestimate the complexity of implementing new financing and delivery mechanisms.** “It is really hard to implement payment reform. There are significant barriers to the field,” said Claire Gibbons, PhD, RWJF senior program officer in its research & evaluation department. “It’s important for policy-makers and health administrators and providers to understand that this kind of work takes a commitment of years. They need to understand the costs of updating their systems, collecting more data, interpreting the data.”

2. **Understand that a project implementer may be more reluctant to acknowledge challenges than the evaluator.** “If you are an advocate, it is hard to hear about barriers and hard to hear that something isn’t easy,” commented RWJF’s Gibbons. “You only want to talk about where you were successful.”

3. **Bringing the pilot sites together would have been a useful way to help them share experiences.** “There were missed opportunities in which the sites could have learned from one another. Unfortunately, the sites told us they were never encouraged to communicate with each other,” Ridgely said.

4. **Appreciate the force of determination and tenacity in implementing a difficult project.** “The PROMETHEUS team has been one of the most task oriented, most accountable, and most transparent [of our grantees],” said RWJF’s Painter. “What makes the day is dogged determination and staying with it and making the case and getting out there and defending it. The team was passionate about what they were doing and stuck with it over years.”
5. **Introducing new terminology can complicate the adoption of a new idea.** “When you create a new language around an intervention, it makes it more difficult to grasp,” Ridgely said. Although the PROMETHEUS concepts were fairly straightforward to the sites, she found “the language used to describe PROMETHEUS was unfamiliar.”

**AFTERWARD**

In June 2012, at least 19 pilots in the United States were implementing bundled payment programs with public- and private-sector payers, with nearly half using the PROMETHEUS Payment model.  

The Institute continues to provide technical assistance to the three initial pilot sites as they implement PROMETHEUS and to support other payers and health care organizations attempting to adopt the model, including ones in Colorado, Missouri, New Jersey, New York, North Carolina, South Carolina, and Wisconsin. Local funders, including the New York State Health Foundation and the Colorado Health Foundation, are supporting some of the newer efforts.

In general, the sites launched after the initial three pilots went from concept to full implementation of bundled payments in less than a year. For example, Blue Cross Blue Shield of North Carolina went from concept to implementation for total knee replacements in less than 90 day, he says.

The Institute is also providing technical assistance on the PROMETHEUS approach to some sites in RWJF’s **Aligning Forces for Quality**, which are now required by RWJF to include payment reform in their work.

**PROMETHEUS and Health Care Reform**

The 2010 Affordable Care Act included provisions promoting changes in how health care is paid for, with an emphasis on shifting from volume-based to quality-based reimbursement. This has prompted a number of federal initiatives.

- The Center for Medicare & Medicaid Innovation, created under the health reform legislation, awarded two contracts:
  - In 2011, the Institute received a one-year contract to develop a prototype episode-of-care grouper for Medicare.
  - In February 2012, a team of individuals from several organizations, including the Institute, received a contract to build out a full public domain episode of care

---


7 Aligning Forces for Quality: Improving Health and Health Care in Communities Across America is RWJF’s signature effort to improve the quality of care in the United States. Read more online.
system, with an initial emphasis on inpatient care. Led by representatives from Brandeis, the team also included members from the American Board of Medical Specialties Research and Education Foundation, the American Medical Association’s Physician Consortium for Performance Improvement, and Booz Allen Hamilton.

As required by the Affordable Care Act, the system is to be used for physician-resource-use reports and physician fee-schedule-value-modifiers in the coming years.

- The Center for Medicare & Medicaid Innovation also launched a bundled payment pilot project in 2011. According to de Brantes, the Institute is helping some of the pilot sites “go through the analytic process” necessary to submit proposals to the center for accepting bundled Medicare payments for certain episodes of care. “That means that our investment in these projects will inform the underlying payment logic and performance measurement for all bundled payments across the country,” noted RWJF’s Painter.

- RAND and the Integrated Health Association have a three-year grant from the Agency for Healthcare Research and Quality to implement and evaluate a bundled episode payment demonstration project in California. The agency has also commissioned RAND to conduct a systematic, evidence-based review of the empirical literature on the effects of bundled payment on spending and quality, to be published as part of the Comparative Effectiveness Reviews survey in 2012.

A different group of RAND investigators have been funded under a separate RWJF grant (ID# 68277) to design episode-based performance measure sets for high-priority clinical conditions, which can be applied within value-based purchasing models.

---

Prepared by: Karyn Feiden
Reviewed by: Robert Narus and Molly McKaughan
Program Officers: Michael Painter (ID#s 58918, 63066, 67366) and Claire Gibbons (ID#s 67335, 67384)
Program Area: Quality/Equality
Grant ID #s 63066, 58918, 67335, 67366, 67384
Project Director ID#s 63066 and 67366: Francois de Brantes (203) 270-2906; Francois.deBrantes@bridgestoexcellence.org
Project Director ID# 58918: Peter S. Reed (916) 930-9200
Project Director ID# 67335: Meredith Rosenthal (617) 432-3418; Meredith_rosenthal@harvard.edu
Project Director ID# 67384: M. Susan Ridgely (310) 393-0411; ridgely@rand.org

---

8 A separate RWJF initiative has funded the American Board of Medical Specialists to develop episode-of-care cost measures. Read more about the High-Value Health Care project in the RWJF Program Results.

9 Read more about the Center for Medicare & Medicaid Innovation’s bundled payment pilot online.
APPENDIX

About the Grantees and the Grant Structure

Starting in 2007, RWJF provided five grants totalling some $6.5 million for the PROMETHEUS Project.

The first grant was a six-month planning grant of $374,428 to PROMETHEUS Payment, Inc., a not-for-profit group created to further the development and implementation of the PROMETHEUS model (Grant ID# 63066 from October 2007 through March 2008).

RWJF then awarded a $6.4 million grant to the Center for Health Improvement in Sacramento (Grant ID# 58918, March 2008 through February 2011) to serve as grant administrator and provide technical assistance to the project, with the center and PROMETHEUS Payment, Inc. working together under contract to complete the work.

A number of subcontractors worked with the team during this grant period, among them performance improvement organizations, software companies and technical experts who developed tools necessary for the model. Subcontractors included: Bridges to Excellence (at that point an independent organization), Innovative Resources for Payors, Claimshop, MASSPRO, and Gennius.

When RWJF ended the grant to the Center for Health Improvement in January 2010, $3,607,396 had been expended. RWJF transferred the remaining funds to the Health Care Incentives Improvement Institute, RAND, and the Harvard School of Public Health.

The Health Care Incentives Improvement Institute, created by a merger of Bridges to Excellence and PROMETHEUS Payment Inc., continued to refine and test the PROMETHEUS model with a $2.077 million transfer grant from RWJF (ID# 67366, January 2010 through February 2011).

RAND had begun an evaluation of the PROMETHEUS pilots as a subcontractor under the earlier grant to the Center for Health Improvement. It completed the work with a $336,123 transfer grant (ID# 67384, January 2010 through August 2011).

Harvard University School of Public Health conducted simulation modeling of PROMETHEUS with a $110,059 transfer grant (ID# 67335, January 2010 through September 2011).
BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

Articles

Journal Articles


Non-Journal Articles


**Books or Chapters**


**Reports**

**Case Studies**

*How We’re Helping a Large Department of Health Fight Back Against Avoidable Complications.* Health Care Incentives Improvement Institute, 2009. Available online.


*Raising the State of Care: A Custom Program to Target Six Chronic Illnesses and Reward Top-Performing Doctors.* Health Care Incentives Improvement Institute, 2009. Available online.

**Fact Sheets**


*What’s the Most Rational and Sustainable Pathway to a New Health Care Payment System?* Health Care Incentives Improvement Institute, 2009. Available online.

**Issue or Policy Briefs**


Reports


Building a Case for Payment Reform. 2010. Available online.


Gosfield AG and Brush JE. Accountable “Care Organization” or “Accountable Care” Organization. Health Care Incentives Improvement Institute, 2009. Available online.


The Progression of Prometheus Payment: That Was Then, This is Now. Health Care Incentives Improvement Institute, 2009. Available online.

Communications or Promotions


www.hci3.org. Website created to facilitate public access to information about rewarding excellence, and controlling costs. Newtown, CT: Health Care Incentives Improvement Institute.


Education or Toolkits


Meetings or Conferences

“All Roads Lead To Payment: Squeezing Value from Health Reform.” Presented at a lunch briefing to explain ideas currently being discussed to reform the way providers are paid, June 10, 2009, Washington. Available online.
