

TOWARDS COORDINATED CARE: HEALTHCARE PAYMENT REFORM

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“We’ve got to change how healthcare is delivered... so that doctors are being paid for the quality of care, not the quantity of care. We’ve got to make information technology more effective. We’ve got to have the medical system work in teams so that people don’t go through five different tests.”

— President Barack Obama,
July 22, 2009¹

Introduction

Ideas and proposals for healthcare payment reform represent a significant departure from today’s mix of flat fee, diagnosis-related group, per diem, and percent of fee-schedule reimbursement toward a system that ties payments to high-quality, tightly coordinated care. We believe that healthcare quality improvement and cost containment will not occur without payment reform, but that the appetite for real reform in this area remains limited. In the near term we expect experimentation with varying alternatives that couple fee-for-service with new models of payment linked to results, and in the long term a generational shift to a new structure for reimbursement.

The purpose of this paper is to outline the underlying concepts behind payment reform proposals, examine evidence of the impact of proposed payment models, and discuss how provider organizations should prepare to succeed with these new models.

The Concepts Behind Payment Reform

Central to the intent of payment reform is to move away from “piece-work” payments, which compensate providers for individual units of work and towards comprehensive payments that reward quality and health outcomes. The goal of these efforts is to slow the rate of healthcare cost inflation — some target the desired rate to be at the consumer price index (CPI) level. The tactics for achieving this include resource redistribution toward early diagnosis and prevention, using evidence as the driver for treatment, chronic care management, avoidance of duplicative or unnecessary tests and procedures, capacity adjustments, and transparency of results to support clinical process improvement. In the end, the successful implementation of these efforts at the national and regional levels rests on the introduction of a new payment system that rewards outcomes rather than activity.

The mechanisms behind emerging models of payment reform are conceptually consistent with approaches tried in the past that never reached widespread implementation. Some, such as the idea of an accountable care organization (ACO), reflect the evolution of existing pay-for-performance (P4P) programs to emphasize quality and responsibility across care settings. Others, such as the global payment plan under development in Massachusetts, incorporate ideas from capitation-based payment approaches used in the 1980s and 1990s.

The greatest barrier to broadly introducing payment reform will be the fragmentation of provider health delivery and the independence that the majority of physicians prize. The models of healthcare that are considered most effective — such as Kaiser Permanente, the Cleveland Clinic, and the Mayo Clinic — all have a highly structured organizational model that has taken decades to develop. While there is a long history of alternate forms of physician organization and physician-hospital organization, these have generally been more oriented to protecting the income, market share, and interests of their constituents than to introducing innovations in healthcare delivery that lower costs and improve quality.²



Therefore, to achieve the goals of health delivery transformation will require new payment models for providers coupled with organizational change that aligns providers' interests with the objectives of quality improvement and cost containment.

While the details of pilots and proposals vary, there are four underlying concepts for payment reform. These concepts are not mutually exclusive; indeed, most comprehensive payment reform proposals include aspects of all of them.

Table 1. The Four Underlying Concepts of Payment Reform

Tying payment to evidence and outcomes rather than per unit of service	"Bundling" payments for physician and hospital services by episode or condition
Reimbursement for the coordination of care in a medical home	Accountability for results — patient management across care settings

Other programs, such as the Integrated Healthcare Association (IHA) pay-for-performance initiative in California, are also now tying bonus payments to outcome measures. The IHA program consists of 68 measures across five categories ("clinical quality," "patient experience," "IT-enabled systemness," "coordinated diabetes care," and "resource use and efficiency") developed collaboratively by the eight participating California health plans, including outcomes measures for HbA1c control and LDL control for patients with diabetes and cardiovascular disease. Payment is based on scores calculated using aggregate data from multiple health plans (as opposed to data from one payer). In 2007, incentive payments under the IHA program represented roughly 2 percent of the total compensation paid to the more than 200 participating physician groups over the course of the year.³

Tying Payment to Evidence and Outcomes

The quality improvement imperative continues to be a primary motivation for healthcare reform. Whereas initial efforts to improve quality have focused on reporting quality measures, recent initiatives are increasingly tying payment to evidence-based process and outcome measures. The government took steps towards transitioning beyond pay-for-reporting by including a provision in the Deficit Reduction Act of 2005 that required the Centers for Medicare & Medicaid Services (CMS) to implement a value-based purchasing (VBP) program. VBP program goals include improving clinical quality and patient safety, encouraging patient-centered care and avoiding unnecessary costs. The formalized program will likely include process-based measures that focus on heart attack, heart failure, pneumonia, and surgical care activities, and outcome-based measures such as 30-day heart failure mortality and 30-day acute myocardial infarction mortality.⁴

The rising costs associated with a reimbursement system that pays providers based on volume and intensity of services rather than quality has made the government and private insurers intent on avoiding payment for poor performance such as the treatment of preventable medical errors, readmissions due to preventable factors, and "never events." In 2005, HealthPartners in Minnesota became an early adopter of nonpayment of "never events," refusing to pay for 27 preventable occurrences identified by the National Quality Forum. Examples include wrong side surgery, stage 3 or 4 pressure ulcers (bed sores) acquired after admission to a facility, and complications or death due to preventable falls.⁵ CMS has also adopted a "never event" payment policy with its hospital-acquired condition (HAC) payment adjustment provision, which denies Medicare payment upgrades for selected HACs, such as pressure ulcers and catheter-associated urinary tract infections, that were not documented and coded as present on admission (POA).

Overall, the results of P4P have not consistently demonstrated that incentives for enhanced quality produce the desired result. Some programs, such as CMS' Premier Hospital Quality Incentive Demonstration have shown positive returns. Participants reported that the median hospital cost per patient decreased by \$1,000 during the first three years, while the median mortality rate decreased by 1.87 percent.⁶ Others, such as PacificCare Health Systems' P4P initiative that awarded its California medical groups bonuses according to whether they met or exceeded ten quality targets, have demonstrated only modest gains in quality for the money spent.⁷ The mixed results partially stem from the fact that many programs have been focused on individual providers or groups and have involved only a small percentage of overall payment, making significant gains in quality and cost savings difficult to achieve. The authors of a 2006 meta-analysis of 17 studies of financial incentives concluded that, while there are positive impacts of P4P, there are also unintended consequences due to the incentive design (such as enhanced documentation rather than improvement in outcomes), and that more careful research is needed into and design of incentive programs.⁸

The President's 2010 budget request to Congress cited the prospect of bundling Medicare payments for hospitalizations as a key component in realizing \$26 billion in savings over the next 10 years. The bundled payment would cover services associated with the inpatient stay, as well as post-acute care delivered 30 days after discharge.⁹

CSC's experience is that few hospitals have implemented the quality infrastructure necessary to improve quality results across a broad spectrum of diseases. One of the threshold barriers is the lack of an electronic medical record; without it, the institution must rely upon manual medical record abstraction. Successful institutions have also developed a culture that places a high priority on quality, and an organizational structure that supports it. Such a structure includes a quality committee of the board (separate from the medical staff committee) and a dedicated physician quality officer with sufficient clinical and organizational insight to lead the effort to identify and address root causes of gaps in safety and quality.

"Bundled" Payments

Under a "bundled" payment model, providers receive a single payment for a defined set of services (e.g., all inpatient and outpatient services associated with a hip replacement including a 30-, 60-, or 90-day period post-discharge). By bundling payments for associated services together, the goal is to foster systemic process improvement across the episode of care so as to improve the outcome and reduce re-work such as readmission.

CMS began the Acute Care Episode (ACE) demonstration in early 2009 to test the use of a single, bundled payment to physician-hospital organizations (PHOs) for 28 cardiac and nine orthopedic inpatient surgical services and procedures with historically high volumes and readily available and clearly defined quality metrics.¹¹ In addition to any services associated with the actual procedure, the bundled payment also covers expected pre-admission testing and post-discharge services. The amount included in the bundled payments is based on the bids participants submitted as part of the application process. Although CMS is giving participating PHOs the opportunity to share in savings achieved through bundling payments, no additional reimbursement is paid should any complications (such as a hospital-acquired infection) arise during the inpatient stay.

The five PHO organizations selected to participate in the Medicare ACE demonstration project are:

- Baptist Health System in San Antonio, Texas
- Oklahoma Heart Hospital in Oklahoma City, Oklahoma
- Exempla Saint Joseph Hospital in Denver, Colorado
- Hillcrest Medical Center in Tulsa, Oklahoma
- Lovelace Health System in Albuquerque, New Mexico

Participating organizations must have at least one physician group and one hospital that regularly performs a minimum volume of hip/knee replacement surgeries and/or coronary artery bypass graft (CABG) surgeries in order to qualify.¹⁰

Models for episode-based payment vary. In the Prometheus payment model, developed by a non-profit group and supported through a grant from the Robert Wood Johnson Foundation, bundled payment rates are based on standards for recommended care.¹² These so-called evidence-informed case rates (ECRs) are risk-adjusted amounts that account for patient co-morbidities, with an additional contingency fund available if complications arise. Unlike the ACE demonstration project, there is no requirement that providers be financially aligned: participants negotiate ahead of time the services they will provide in exchange for a percentage of the ECR. Between 10 and 20 percent of a provider's payment is contingent on achieving minimum scores on the model's comprehensive scorecard for conditions associated with an ECR. The scorecard consists of established outcome and process measures from organizations such as the Joint Commission, Leapfrog, CMS, and Bridges to Excellence. What makes the Prometheus approach unique is that 30 percent of a provider's score is based on care delivered by other providers during the episode of care.¹³ For example, the final score of an individual physician who refers a patient with coronary artery disease to a local hospital would partially reflect that hospital's score on coronary artery bypass graft surgery care.

Under **Geisinger Health System's ProvenCare** model, also billed in the media as "surgery with a warranty," providers charge a bundled rate for coronary artery bypass surgery. The rate covers not only pre- and post-operative care, but also any complications that result in hospital re-admission with 90 days of discharge. As part of offering this "90 day guarantee," the health system has developed a checklist of 40 best practices that must be completed prior to the procedure.¹⁴

In controlled settings involving integrated provider organizations, episode-based bundled payment pilots have shown promise. Early data from Geisinger Health System's ProvenCare program, which pays providers a bundled fee for coronary artery bypass surgery, found that the average hospital stay for ProvenCare patients was 16 percent shorter than a control group, while hospital readmission rates 30 days after discharge were 44 percent lower.¹⁵ To date, the pilot has been limited only to enrollees of Geisinger's own health plan, but Geisinger plans to extend the model to other insurers it contracts with.

Reimbursement for Care Coordination

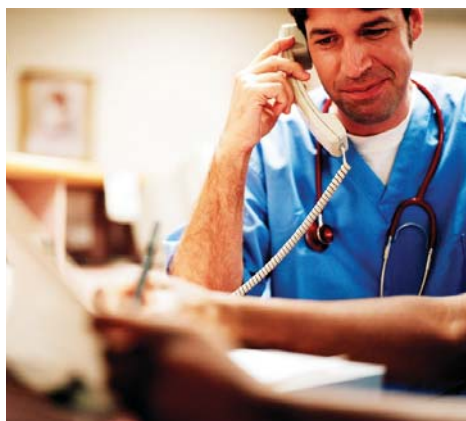
The goal of reimbursing for care coordination is to achieve better care management among providers and across all settings, especially for patients with one or more chronic illness. A particular goal is to improve the transitions between care settings — primary to acute to long-term care — and to support a patient-centered, rather than a provider- or episode-centric, approach. This concept includes patient participation in the care process. The model that has gained the most traction is the patient-centered medical home (PCMH).

In the medical home model, providers are typically paid an additional fee to coordinate the care of each patient enrolled in the program. Providers are typically still paid for any care delivered, often on a fee-for-service (FFS) basis. For example, physicians could receive FFS payments that include discrete new codes for care management services, such as BCBS Michigan's use of T Codes for patients with chronic illnesses.¹⁶ The medical home payment model may also include bonus payments for reaching specified quality targets. Cigna and Dartmouth-Hitchcock Healthcare System's medical home initiative, for example, evaluates the quality of physician care using 39 evidence-based-measure rules. For physicians to be eligible for a bonus, the quality results must be improved or maintained at a better-than-market average.¹⁷

Employers are also showing interest in the medical home. In Arizona, United Health and IBM are collaborating on a pilot to test the model at seven medical groups that treat IBM employees, as well as Medicare and Medicaid beneficiaries covered by United Health. Participating physicians will receive a quarterly payment for coordinating their patients' care in addition to traditional reimbursement for services. Additional bonuses will be available for providers who demonstrate high patient satisfaction, adherence to established quality measures, and reductions in hospital admissions.¹⁸

The medical home model has demonstrated early promise in some settings. Initial results of Geisinger Health System's ProvenHealth Navigator program showed improvements in quality outcomes, increased efficiency, and reduced admission and re-admission rates. Key components of the program are a patient-centered team practice, integrated population management, care systems management, a quality outcomes program and a value reimbursement model.¹⁹ Geisinger's Epic electronic health record (EHR) system plays a key role in making the program possible by allowing providers to electronically exchange information such as a visit summary or test result. Providers are also able to use the system to identify high-risk patients and receive alerts and reminders for overdue services. Patients can actively participate in their care by using the MyGeisinger.org online portal to access their clinical information and care plans, make appointments, and communicate with their physician.²⁰

Community Care of North Carolina (CCNC), a program that has established 14 networks of community providers across North Carolina and manages care for almost 80 percent of the state's Medicaid population, leads a medical home initiative that employs a per-member-per-month (PMPM) payment model. Through reduced ER visits, hospitalizations, and unnecessary medical costs, the program saved more than \$231 million in Medicaid costs for fiscal years 2005 and 2006.²¹ More recently, CMS has launched a five-year pilot with CCNC to extend the medical home and care management program to dual-eligible



The 10 large medical groups participating in the Medicare PGP cover all four census regions of the country:²⁴

- Dartmouth-Hitchcock Clinic (New Hampshire/Eastern Vermont)
- Billings Clinic (South-Central Montana/Northwestern Wyoming)
- Geisinger Clinic (Central-Northeast Pennsylvania)
- Middlesex Health System (South-Central Connecticut)
- Marshfield Clinic (North-Central Wisconsin)
- Forsyth Medical Group (Northwest North Carolina)
- Park Nicollet Clinic (South-Central Minnesota)
- St. John's Clinic (South-Central Missouri/Northwest Arkansas)
- The Everett Clinic (West-Central Washington)
- University of Michigan Faculty Group Practice (Southeastern Michigan)

(residents eligible for both Medicare and Medicaid) and Medicare-only beneficiaries.²² Program officials see the pilot as an opportunity to obtain more complete information on dual-eligible beneficiaries and better manage overall care. However, with the inclusion of the dual-eligible population (more than half of which have three or more chronic diseases), CCNC has had to transition from a model that focused on a single disease, such as diabetes, to a multi-disease approach that relies on a more patient-centric medical home and tighter integration between providers.²³

Accountability for Results

Historically, pay-for-performance programs have been targeted to individuals or institutions and have reinforced siloed healthcare delivery. An independent physician might be incented for administering a specific test to a patient, but not for coordinating with another provider to ensure the test had not already been done. Furthermore, P4P models do not address the fundamental need to reallocate resources and capital from inpatient care to primary care, diagnostics, patient education, and early intervention where they can have the greatest benefit.

Payment models now being considered focus on offering provider organizations the opportunity to share in the benefits achieved through greater efficiency. One such example is the Medicare Physician Group Practice (PGP) demonstration project, which began in 2005 with ten large medical groups nationwide. Under the program, a participating physician group agrees to assume responsibility for the care of a defined population of Medicare beneficiaries. The physician group is still paid according to Medicare's fee schedule, but has the opportunity to share a percentage of the efficiency gains with Medicare if spending for the patient group is below a pre-established threshold and certain quality measures are met. Although quality measures are primarily focused on the ambulatory care provided by the physician groups, spending targets include both inpatient and outpatient expenditures. As a result, participants have an explicit financial incentive to limit unnecessary or duplicate care and reduce avoidable hospital admissions, readmissions, and ED visits for their assigned Medicare beneficiaries.²⁵

In the first year of the demonstration, all participants improved the clinical management of their diabetes patients. In year two, all participating groups achieved benchmark performance levels on at least 25 of the 27 quality measures for patients with diabetes, coronary artery disease, and congestive heart failure.²⁶

The emerging model of an accountable care organization (ACO), which has generated a significant amount of attention in Washington of late,²⁷ takes the ideas behind the PGP demonstration one step further. In the ACO model, a provider system or group of providers (including a hospital, a network of primary care physicians, and specialists) assumes responsibility for the quality and cost of care provided to a defined population of patients. Participants in an ACO could include providers from the same health system, or independent physician practices organized to share accountability with a local hospital. For the defined group of patients, the ACO will be responsible for achieving certain quality benchmarks and for keeping spending below defined thresholds. Proposed models vary, but in one widely discussed approach, providers are paid on a FFS basis, with a portion of payment (sometimes a percentage of FFS reimbursement withheld, or a bonus on top of existing payment for services) based on metrics met by the ACO as a whole, and shared by all participants.²⁸

Most proposed models for an ACO require that some type of formal entity within the ACO be established to coordinate responsibilities and distribute shared bonuses and payments. Other proposed models for an ACO may rely on episode-based or global reimbursement. Another approach is to integrate financing and delivery with the ACO bearing full risk for the budgeted costs of serving the defined population. This will require a financing entity to be established if one does not already exist, and represent a next generation of provider-sponsored managed care.

A potential ACO could include any combination of a hospital's and primary care physicians:

- Hospital and multi-specialty groups from the same integrated delivery system
- Academic medical center or community hospital and independent physician practices
- A formally aligned physician hospital organization (PHO)

As the likely effects of these models are not well researched, there are likely to be pilots and experiments to define the best approaches. The Association of Academic Medical Colleges (AAMC) has recently proposed demonstration pilots for Health Innovation Zones that focus on population management across the continuum, with an emphasis on leveraging the unique education, research, and clinical capabilities of academic health centers and teaching hospitals. A bill initiated by the AAMC that would direct HHS to establish a Health Innovation Zone grant and demonstration program was recently proposed in Congress.²⁹

With the states under pressure to keep Medicaid costs under control, an ACO type model may first be implemented at the state level. For instance, Massachusetts has a plan under consideration which combines the concepts of bundled annual payments and shared accountability. The proposal calls for a five-year transition to a statewide system where the “predominant form of reimbursement would be global payments to ACOs.”³⁰ In an effort to manage the transition, the plan would establish an independent board, responsible for developing a standard global payment methodology and defining what specifically constitutes an ACO.³¹

The challenge that ACOs will face is achieving integrated care delivery. Loose provider and service agglomerations are not likely to be able to successfully realize the promise of coordinated care and may indeed expose their participants to significant financial and delivery system risk in the absence of the organizational culture, procedures, and systems that often take decades to build. Overcoming the tradition of siloed care delivery will require visionary leadership, committed and tenacious management attention to process improvement, and investment in the systems and technology capabilities needed to tie disparate providers together.

Recommendations for Provider Organizations

The changes in payment structures discussed in this white paper will have profound organizational and cultural effects on hospitals and physicians and their relationships with each other, with payers and with patients. With the exception of the few, oft-cited integrated financing and delivery systems, accountable care will require developing entire new organizations that can effectively deliver care across settings, produce good cost and quality outcomes, take on and distribute risk, and receive and distribute payments.

These new organizational entities, however, will be substantially different from those of the past. To begin with, their primary leadership intent will be on coordination of care across the continuum and their central measures of success will be health outcomes and cost growth. They will need to include well-organized primary care physicians and affiliated clinicians working in a medical home model and utilizing information technology to share information and coordinate patient care delivery. Systems to support patient self-management and enhanced communications will be necessary. Specialists and primary care practitioners will need to work much more closely together than they have in the past. The key mindset change is to design all processes and outcomes within the context of a population health framework.

There will be several paths to this end. Some organizations will move towards the models pioneered by Mayo, Cleveland Clinic, and others — a staff model structure. Others will take the leadership in their states to build provider and payer coalitions and establish accountable care organizations with long-term contracts with Medicaid and commercial insurers. And others will establish new affiliation, contracting, and technology sharing relationships with a broad array of providers so as to be able to deliver next-generation services including bundled care episodes, medical home, and chronic care programs. All will require the ability to capture and share clinical information across settings.

The goal of accountable care is to ensure that all required services are delivered while eliminating duplicate or unnecessary services and investing resources in lower cost settings of care including the home, ambulatory, and sub acute care. It will also require taking resources currently being invested in the inpatient setting and reallocating them to primary care.





Resource reallocation will require that the accountable care organization define what constitutes appropriate care, and that every provider have access to all relevant information about the patient so that they can deliver that care. For example, if a diabetic patient appears in an orthopedic office, the provider should receive a reminder if the patient is overdue for a flu shot. Before scheduling a diagnostic procedure, the provider needs to be able to see whether the same procedure was recently ordered or performed. Care will also need to move from reacting to patients who come in for treatment to proactively seeking out patients who should be receiving care but who have not been seen. One provider needs to be designated to take on that responsibility for every patient, and be equipped with the tools to make the outreach process efficient and effective.

Because quality outcomes are required for payments in all of the proposed financing reform proposals, the processes for documenting outcomes of care need to be agreed to and the data to monitor outcomes need to be collected as a by-product of care delivery. Data on outcomes needs to be available to the providers so that they know where improvements are needed. This requires having comprehensive data that are reliable and an effective feedback loop.

As bundled payment, shared accountability models, and global payment become widespread, processes for coordinating responsibilities and distributing risk and payments across all participating entities will need to be established. This will require actuarial competency to ensure that the assignments are fair and that the payments will cover the costs of care. It will also require building a stronger relationship of trust between provider organizations and payers, linked by new types of long-term contracts that create the incentive to invest in “delivering value, not volume.” Some organizations will expand their own managed care plans and others will launch new ones so as to provide integrated financing and delivery.

Every provider organization should assess their ability to provide the leadership for delivering services to a defined population. This assessment will include determining what organizational vehicle is necessary to use or put in place, and moving forward with an implementation plan that prepares the organization to accept increasing levels of accountability for a population’s health across the continuum. While accountable care might seem too far off to worry about, the amount of change requires that organizations start to build the organizational infrastructure to move forward now. Begin with targeted programs, for example, to improve cross-continuum care for congestive heart failure patients, to improve chronic care for diabetics, or to attack childhood obesity in the community. Experiment with bundled payments to address high-cost cases and reduce readmissions, while learning to work with affiliated physicians in a new model. All of these will be tests of the organizational changes that will be needed in the future.

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References

1. "News Conference by the President." http://www.whitehouse.gov/the_press_office/News-Conference-by-the-President-July-22-2009/. July 23, 2009.
2. Burns, Lawton Robert and Ralph W. Muller. "Hospital-Physician Collaboration: Landscape of Economic Integration and Impact of Clinical Integration." *Milbank Quarterly*, 86.3 (2008): 375-434.
3. The California Pay for Performance Program. The Second Chapter: Measurement Years 2006-2009, California HealthCare Foundation, June 2009.
4. "Transforming the Health Care Delivery System: Proposals to Improve Patient Care and Reduce Health Care Costs." Senate Finance Committee. April 29, 2009.
5. "HealthPartners Hospital Payment Policy." <http://www.healthpartners.com/portal/866.html>. Accessed June 4, 2009.
6. "Hospitals Participating in Medicare Pay-for-Performance Pilot Project Improving Quality, Reducing Costs, CMS Says." Kaiser Family Foundation. February 2008.
7. Rosenthal, Meredith B.; Richard G. Frank, Zhonghe Li, et al. "Early Experience with Pay-For-Performance: From Concept to Practice." *The Journal of the American Medical Association*. 294 (2005): 1788-1793.
8. Petersen, Laura A. et al. "Does Pay-for-Performance Improve the Quality of Health Care?" *Annals of Internal Medicine*. 145.4 (2006): 265-272.
9. "A New Era of Responsibility: Renewing America's Promise." Office of Management and Budget. 2009 http://www.whitehouse.gov/omb/assets/fy2010_new_era/a_new_era_of_responsibility2.pdf
10. "CMS Announces ACE Demonstration Sites." CMS Press Release. January 2009. <http://news.aapc.com/index.php/2009/01/cms-announces-ace-demonstration-sites/>
11. CMS Announces Sites for a Demonstration to Encourage Greater Collaboration and Improve Quality Using Bundled Payments." Centers for Medicare and Medicaid Press Release. January 6, 2009.
12. Gosfield, Alice G. "Making Prometheus Payment Real: Ya' Gotta Start Somewhere." Robert Wood Johnson Foundation. June 2008.
13. Gosfield, Alice G. and Francois de Brantes. "Prometheus Payment: What's the Score?" Robert Wood Johnson Foundation. 2008.
14. AARP Bulletin Today, April 1, 2009
15. "The New Face of Healthcare." AARP Bulletin Today. April 1, 2009.
16. "Blue Cross Blue Shield of Michigan Reimbursement Policy." 2008. [http://www.hvpa.com/Office Staff/billing_coding/TCode Policy_mar08.pdf](http://www.hvpa.com/Office%20Staff/billing_coding/TCode%20Policy_mar08.pdf). Accessed June 15, 2009.
17. "Innovations in Recognizing and Rewarding Quality." America's Health Insurance Plans. March 2009.
18. "UnitedHealth and I.B.M. Test Health Care Plan." *New York Times*, 7 February 2009: B3.
19. Davis, Duane; Tomcavage, Janet. "ProvenHealth Navigator: A Patient Centered Primary Care Model." <http://www.allhealth.org/briefingmaterials/DavisPresentation-1302.ppt>. Accessed May 27, 2009.
20. McCarthy, Douglas; Kimberly Mueller and Jennifer Wrenn. "Geisinger Health System: Achieving the Potential of System Integration Through Innovation, Leadership, Measurement, and Incentives." The Commonwealth Fund. June 2009.
21. Arvantes, James. "North Carolina Primary Care Program Continues to Save Millions." *AAFP News Now*. October 11, 2007.
22. Wade, T. "The Medicare Health Care Quality Demonstration Program: The Promise and Opportunity of the 646 Waiver." *North Carolina Medical Journal* 70.3 (2009): 245-7
23. Ibid
24. Kautter, et al. "Medicare Physician Group Practice Demonstration Design: Quality and Efficiency Pay-for-Performance" *Health Care Financing Review* 29.1 (2007): 15-29
25. Ibid
26. "Physician Groups Earn Performance Payments for Improving Quality of Care for Patients with Chronic Illnesses." CMS Press Release. August 14, 2008.
27. Glass, David and Jeff Stensland. "Accountable Care Organizations." MedPAC. April 9, 2009.
28. Fisher, Elliot S., et al. "Fostering Accountable Health Care: Moving Forward In Medicare." *Health Affairs* 28.2 (2009): w219-w231
29. "Healthcare Innovation Zone Program Act of 2009." The Library of Congress. July 8, 2009. <http://thomas.loc.gov/cgi-bin/query/z?c111:H.R.3134>: Accessed July 22, 2009.
30. Bailit, Michael. "Cost Control: Strategies for Reform." *Bailit Health*. June 5, 2009.
31. Ibid



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