findings brief

By Cyanne Demchak

Physician Payment: Is There a Better Way to Pay?

The health care system is a constantly changing environment; its payment system should be flexible so that it can adjust to include improved technologies and changes in the delivery system. Much reform is necessary to make the current system sustainable, as it does not currently motivate physicians to provide high quality health care.

key findings

Over the past few years, the need to redefine the goals of physician payment has become increasingly apparent through repeated examination of the Medicare physician payment formula and the recurring debate on annual updates. Following Congressional hearings examining potential reforms in 2006, more than ten bills were introduced relating to changes in physician payment reform. One such bill was passed in December 2006 freezing physician payment rates for 2007, but adding bonus payments for physicians who voluntarily report quality measures.1 This legislation also included a Medicare Medical Home demonstration, which aims to provide incentives to beneficiaries who require regular medical monitoring.2 The addition of financial incentives that are not tied to volume of services suggests a movement away from strictly paying for services rendered. While Congress has shown an interest in transforming the current method of physician payment, the changes they have initiated are only minor improvements to a system that is in need of a major overhaul.

Redefining the Goals of Physician Payment Payment systems provide implicit and explicit incentives both to physicians and patients. Recognizing the effects of these incentives, and their underlying goals, are important components to evaluate potential reforms. Currently, the physician payment system rewards physicians for the volume of services they provide, which has been criticized because it does not ensure quality care, control costs, or promote appropriate service use.^{3,4} Theoretically, appropriate service use by physicians will promote better quality care, and reduce costs associated with overuse and underuse.⁵ There is not, however, a single definition of what is appropriate for all providers or patients, adding additional complexity to the development of a payment system based around guidelines for care.

A new payment system should create incentives for providers to seek improved quality, lower costs, provide more efficient care, and maintain or improve access to care for consumers. It would reward the "right" behavior, and would not penalize physicians for using cost-effective treatments and services.



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Establishing such a system that appropriately values and reimburses for services has proven difficult for all payers. Attempts to reform the legacy fee-for-service (FFS) system have been unable to limit growth in service volume, contain soaring costs, or improve quality for all patients. Nevertheless, lessons learned from each of these attempts can prove helpful in further reforming the system. While payment is not a perfect tool for influencing physician behavior, physicians respond to economic incentives.6 These responses are conditional on many other factors including local market conditions, and professionalism, among others. In addition, while the method of payment can be an important tool, the amount of payment is also important. An updated vision of payment policy, based upon knowledge gleaned from past efforts, and informed by new research, can lead to the development of a payment system that is flexible and sustainable.

This brief discusses approaches to physician payment, both tried and evolving, in terms of their ability to help redefine the goals of reimbursement. In simple terms, these goals are to improve quality of care, contain health care costs, and maintain or improve access to care. With a growing number of payment systems being proposed by stakeholders, gaps in research are becoming increasingly apparent; this brief outlines some of the important research needed to inform the development and implementation of future reform, although it does not describe all of the existing gaps in knowledge.

Review of Major Payment Approaches

Fee-for-Service

Medicare and private payers have struggled to find a way to make FFS a sustainable method of paying for health care. The current system does not offer the infrastructure physicians and practices need to adequately provide the coordinated care necessary to improve quality and efficiency, and reduce costs.⁷ Physicians are paid explicitly for services rendered, but the management

of chronic disease and coordination of care are undervalued.⁸ With a focus on services, rather than appropriateness, efficiency, or quality, the current system provides perverse incentives to increase service provision, especially high-cost services, as opposed to improve quality care.⁹

While FFS may increase overuse of services, it also combats the underuse of services associated with prepayment structures, such as capitation. In this respect, FFS may provide better quality care in some circumstances; however, there may be significant variation, suggesting that a reliance on FFS to improve quality is unjustifiable.

Typically, FFS has not significantly increased or decreased access to care, however, critics of the current system have warned of reduced access to care for Medicare beneficiaries due to scheduled fee cuts. As the need for physicians to care for Medicare beneficiaries rises due to aging baby boomers, the number of medical students choosing to specialize in primary care is declining. The impending shortage resulted from frustration among primary care physicians over the financial and administrative demands of the current system.

Capitation

As the building block of the managed care payment system, capitation provides physicians with a specific amount per patient per month, regardless of services provided. Thus, the payment amount is independent of the number or types of services provided to an individual patient. For this reason, capitation proved an effective incentive to physicians to limit the number of services provided.14 Providers who have a very sick patient population may not be adequately compensated, however, because the payment amount is based on an average cost per patient, typically adjusted only for age and gender. While recent advances in risk adjustment based on patient health status may improve rate-setting, they are not adequate to balance the financial risks associated with capitated payments to the individual physician.15

While this presumably allows physicians the flexibility to provide the right mix of services without regard to the individual payments assigned to each service, it also carries the risk of underutilization. As with fee-for-service, the incentives for physicians to perform services are misaligned; this can result in inefficient, poorer quality care.

Research suggests that capitation may improve access to a usual source of care, yet, it has the potential to decrease access and other services. Health maintenance organizations (HMOs), the payer that most commonly utilizes capitation, have been heavily criticized by consumers for limiting access to care. These critiques, however, are based on the administrative barriers HMOs also use to limit costs, such as, setting strict networks, requiring referrals, and prior authorizations for costly services.

Salary

Much like other professionals, salaried physicians receive a set compensation per pay period. A benefit, and burden, of the salary system is that it removes the link between the individual patients and physician performance. Salary systems provide no incentives for physicians to either overuse or underuse services, but neither does it offer them incentive to provide quality care. Lack of a financial benchmark, either high or low, eliminates a physician's need to set a performance level for him or herself and discourages any consideration of cost-effectiveness when determining treatment plans. Critics also suggest that salary systems are not responsive to rapid environment changes; salaried physicians have no incentive to change their caseload or service provision if demand for care changes.¹⁷

While salary systems do not explicitly involve benchmarks for service volume or performance, the person or organization providing the salary has the ability, as in other professions, to set individual or organization-wide performance goals. These performance goals can be tied to a number of incentives, or disincentives,

such as bonuses, annual or semi-annual raises, or termination. Research has shown that organization-wide performance goals or incentive structures, independent of the reimbursement model, can affect the practice style of a physician.¹⁸

Limited research exists on the effect of salary systems on access to care for consumers because it is not a widespread payment system. Based on its characteristics, however, it can be deduced that like FFS, salary systems do not significantly alter access for consumers. Further evaluation of those systems that do exist is necessary to better understand their effect on access.

Administrative tools

While payment methods provide strong behavioral incentives for physicians, other administrative options can mitigate or aggravate financial incentives. For example, managed care organizations attempt to utilize limited networks, identifying and choosing providers that charge lower rates or practice more efficiently, to reduce costs through diminished utilization. Utilization review and prior authorization have also been used to reduce the use of certain services. While there is some limited evidence that these administrative options can mitigate the incentives to increase service use, and therefore limit service costs, they can also increase administrative costs and engender ill will by physicians and patients.19 By design, these kinds of administrative tools limit access to specific services, but their overall effect on access is unknown.

In the age of consumer-directed health care, administrative tools may or may not provide the same incentives to increase or reduce utilization of services. Recent literature suggests that while cost-saving incentives are being focused on the consumer, often in the form of cost-sharing and benefit exclusions, some incentives to providers, such as withholds or bonuses, will remain viable to promote high-quality care.²⁰ Research has shown that consumers will utilize some forms of care regardless of price, and some physicians will perform particular services

on all patients with a particular condition without regard to the size or form of reimbursement.21 The effect of the cross-over between consumer and provider incentives is still unknown, because in many cases, the incentives have not been implemented on a large-scale or over a long enough period to provide adequate data analysis opportunities.22 There is some indication that engaging consumers in health care decision-making will improve quality of care. However, there is insufficient research to determine whether this is accurate.²³ Theoretically, consumer-driven health care products are designed without restrictions to providers or services, enabling increased access to care. To date, there has been no research detailing how these new products or administrative tools affect access to care for the overall population.

It is important to keep in mind that the administrative tools and payment methods used by insurers are not always readily apparent to individual physicians. Physicians practice in a multitude of environments, including large group practices, which can often mitigate financial incentives provided by insurers. In such instances, physician compensation may be different from the payment method. In fact, some groups may blend payments to physicians and provide a combination of efficiency incentives and other incentives. Some would argue that the newer approaches to payment discussed below may not be an effective way to induce individual physicians to change performance, but are in fact a way of inducing groups of physicians to implement organized processes to improve quality and control costs.²⁴ While physician groups can influence health care costs through negotiation of prices paid, insurers can also change the culture of physician groups by rewarding those groups that perform high quality services efficiently.²⁵ In addition to their ability to impact quality, traditional HMO administrative tools, in addition to capitation, when used in a group practice has shown to improve access to care more than individual physician capitation, implying that the group has a level of control over the actions of the individual physicians.26

Options for Expansive Reform

Although none of the existing payment methods appears to produce the right set of incentives for all types of care, a number of innovative reforms are being developed and tested. It is important to recognize, however, that expansive reform will not happen overnight and that the culture surrounding the delivery of health care must also change for major quality adjustments to occur. In its report on transforming health care quality, the Institute of Medicine noted that "redesigning the health care delivery system... will require changing the structures and processes of the environment in which health professionals and organizations function."27 Major transformation is an evolutionary process, however, and is not likely to occur in one step. A sustainable payment system must include the flexibility to adjust and adapt as the environment changes. While striving to improve quality and restrict the growth in health care costs are desirable goals of a payment system, it is also important to construct a system that will produce changes in the way care is provided, which includes improving access to high-quality care.

Pay for Performance

The Bush Administration has promoted price and quality transparency in health care, encouraging consumers to take charge of their health care decision-making. Pay for performance (P4P) provides payments to providers who meet or exceed certain care quality measures, as determined by the payer. Initiatives, both in private insurance and Medicare, are on the rise, yet little research has been done to evaluate their effect on overall health care quality. Payon Inconsistencies among evaluations of pay-for-performance initiatives suggest that a simple P4P system may reduce costs or improve quality.

Research has indicated that P4P as an independent payment system may not improve quality, or control health care costs as much as anticipated, at least not initially. ^{31,32} In its current state, P4P seems best suited to increase the adoption of preventive services, including recurring care for chronic illnesses, because it relies on administrative

claims data to determine physician performance. In addition, some question whether the incentives under P4P will be sufficient to counteract the incentives that exist under the current payment system; can a small payment at the margin reward behavior that is not income maximizing?

Even before implementation, research and evaluation must be funded to develop and test the validity of quality measures before judging physician performance and connecting it to reimbursements. Important decisions regarding the size of incentives, how to deal with patients with chronic conditions, and how to account for patient behavior must be included in the development of a successful system, yet little evaluation of these aspects of P4P has been done. Equally important is the method of determining attribution. Recent research indicates this will be a significant obstacle for Medicare, as beneficiaries tend to visit multiple physicians.33

Strict P4P models could reduce access for already underserved areas because lowperforming providers are often located in areas with vulnerable populations. Minorities are more likely to live with and die of chronic illnesses and receive care in emergency rooms, and are less likely to have health insurance, increasing the challenge to improve their quality of care.34 Research has suggested that quality improvement efforts could actually increase disparities that already exist in health care, noting that in order to avoid this unintended consequence, quality efforts must specifically target minorities.³⁵ Providing quality care to all without affecting access for any will prove difficult under a pure P4P system.

Medicare has tested P4P in several demonstrations, and most recently began the Physician Group Practice Demonstration. The demonstration attempts to encourage coordination between Part A and Part B, promote efficiency by supporting administrative structures and processes, and reward physicians for improving

health outcomes.³⁶ The ten groups that are participating in the demonstration have at least 200 physicians, and are being evaluated on 32 quality measures that were developed with the help of physician and specialty associations and were reviewed by the National Quality Forum.³⁷ CMS plans to use the demonstration to evaluate how physician groups respond to financial incentives based on performance and use these findings to develop broader physician payment initiatives in Medicare.

Private payers have had success in utilizing measurement and reporting, some with financial incentives, to improve performance. In particular, UnitedHealthcare developed a multifaceted strategy to improve performance – including promoting and disseminating information, analyzing variations in care practices and identifying and promoting providers with superior quality – that incorporate the use of payment systems that support innovation and flexibility (including P4P).³⁸

Combining P4P with more comprehensive payment change could provide the necessary incentives to both control costs and improve quality. For example, if the base payment system were to contain strong incentives for efficiency and cost control, then measures could be developed to monitor specific performance targets and ensure quality.

Bundled Payments

In other parts of Medicare, reimbursement policies have moved toward bundled payments, which elicit little concern over unwarranted volume increases for the services that have been "bundled" and paid for together.³⁹ In the Coronary Artery Bypass Graft (CABG) sugery demonstration, bundled payments encouraged coordination of care between hospitals and physicians, which resulted in lower costs and higher quality of care.⁴⁰ Creating bundles of services for high-cost DRGs, usually associated with chronic conditions, could help to facilitate care coordination and improve quality for these conditions.⁴¹

MedPAC, in an analysis of potential changes to the current Medicare physician payment system, has begun to examine the use of episode groupers to assess physician efficiency, which they define as the "interaction between resource use and quality of care."42 As noted in the June 2006 Report to Congress, "many private health plans already measure and compare physicians' resource use using episode groupers."43 Initial analyses show that groupers attribute care to a single physician in most cases, which could help to identify efficient physicians for payment purposes.44 While further analysis is being done to examine accuracy at the individual physician level, the use of episode groupers to determine physician efficiency could minimize the need for analysis of individual claims.⁴⁵ Tying payments to efficient care would promote appropriate utilization levels of services, helping to control costs while providing quality care.

In 2006, PROMETHEUS Payment, Inc. released a white paper describing a new payment system based upon evidencebased care.46 Evidence-based case rates (ECRs) will serve as the base payment to physicians, which are being developed using evidence-based guidelines. Payments based on these case rates are financed from a portion of payment withheld in a "performance contingency fund" tied to provider performance on process and outcomes, patient experience of care, and cost efficiency. A portion of the score is tied to clinical integration, although each provider, from the physician to the pharmacist, is reimbursed for the portion of the episode for which they are responsible.⁴⁷ Because providers are also responsible for the referrals they make, quality and efficiency scores are provided openly, promoting the use of high quality specialty services.⁴⁸ There is some concern that there is not currently enough evidence to develop ECRs for every condition or combination of conditions that a physician may encounter. While the proposal is in the early developmental stages and many details need to be addressed, it offers an interesting per

spective on bundled payments. Certainly, assessing the impact of this model on costs and quality of care through in real world settings should be considered.

Medical Homes

As improving health care quality becomes a larger policy discussion, there has been increased focus on coordination of care. Exploring the barriers to delivering quality health care, the Institute of Medicine described the American health care system as "a highly fragmented delivery system that largely lacks even rudimentary clinical information capabilities, resulting in poorly designed care processes characterized by unnecessary duplication of services and long waiting times and delays." The current system is not designed to properly care for the growing number of chronically ill Americans; it provides little support for care coordination, the provision of evidence-based medicine, or long-term preventive medicine.49

Over the past several years, two major physician groups, the American Academy of Family Physicians, and the American College of Physicians, have developed a proposal for major reform in the health care delivery and payment systems.⁵⁰ The proposal focuses on coordination and quality of care, with one physician serving as a "medical home" for each patient.51 Payments would include a prospective, bundled component, a fee-for-service per visit component, and a performance-based incentive component, each risk-adjusted for case-mix, which will increase reimbursement to account for increased administrative burdens associated with the overall management of patient care to those serving as medical homes.⁵² Financial incentives are provided to physicians who provide appropriate care including referrals to other efficient providers. In its most recent position paper, the ACP posits that the proposal will "facilitate a sustainable environment in which physicians are provided adequate incentives for furnishing care appropriate to the patient population."53

Differentiated payment systems

Researchers are beginning to look into the feasibility of designing separate payment systems, with separate goals, for various providers or services. Developing separate payment systems for different providers could promote appropriate service use by providing financial incentives for specific specialties, such as primary care. For example, a family physician who serves as the primary care provider for a patient could help improve quality and control costs for a diabetic patient by checking in on a weekly basis, however, this takes time and is not usually reimbursed. If primary care providers were offered financial incentives to provide these additional services, they would likely provide them. On the other hand, a radiologist would not need to provide this kind of personalized service, and should not be compensated to do so, warranting a different kind of payment system. The differentiation of services, by cost, difficulty, and cost-effectiveness, in addition to differentiation of providers (primary care vs. specialty), could help to control costs by more accurately paying for services, and controlling inappropriate service use. To date, there are no specific proposals for such a complicated system, and research is limited on the best way to differentiate between services and providers.

While a method to differentiate, and therefore pay, different types of providers exists, there is no empirical way to differentiate between types of services provided by any type of provider. The current method for coding services provided in administrative claims data may provide guidance. However, this would likely provide a system no different than the current, relative value-based system in fee-for-service.

Harold S. Luft, Ph.D., University of California, San Francisco, is doing research to develop a system which combines the differentiation of services and providers. Still in early development, this system includes: lump-sum payments for acute episodes; annual payments for managing chronic conditions; fee-for-service payments

for minor acute episodes; fee-for-service payments for preventive care; and annual payments for serving as a medical home.⁵⁴

Research Gaps

To ensure viability of any potential changes to current Medicare payment policies, research and evaluation must be completed. Policy changes require extensive development prior to implementation, and a number of research questions remain unanswered. While the discussion below includes only a few of the numerous physician payment issues meriting further research, its topics are integral to the evaluation of current demonstrations and initiatives, and therefore are key to the long-term sustainability of any reformation of the physician payment system.

Making Data Available for Researchers

For a complete analysis, research and evaluation of potential policy changes often require significant data. Although some data are available for use by researchers, much of the data necessary to complete a thorough analysis remains unavailable, and much of the data that are available have significant limitations. These limitations include prohibitively high costs to obtain the data, and restrictions on linking data. For example, aggregating data from multiple payers to the physician level to obtain a complete picture of a physician's practice style is difficult. In addition, privacy concerns inhibit sharing of data. Because Medicare is the largest purchaser of health care in the United States, its data provides information on a vast majority of patients and providers. Increasing accessibility to more of Medicare's clinical and claims data would provide researchers the ability to fully examine large-scale potential changes and demonstration projects. Additionally, providing researchers the ability to link Medicare data with private payer data could increase the information available to fully assess changes in physician payment and quality measurement.

Measurement

Physician performance measurement is part of most reform options that have been discussed. While a number of specialty societies and quality organizations have been developing performance measures for a large number of conditions and services, they have not been universally accepted, and there is no infrastructure in place to collect or analyze the data necessary to provide informative results to physicians. Questions about performance measurement remain, and will require additional research and evaluation to answer them.

Definitive research has not been done determining whether process or outcome measures are best for determining performance. Research is needed to conclude which presents a better measure of quality. More specifically, evidence is needed to support either process or outcome measures as the primary method of performance measurement, moreover, a combination of process and outcome measures may be most appropriate if specific services lack process measures. When gauging the best method of performance management, it is important to evaluate expectations. How should casemix be accounted for with performance measurement? Should measures be risk adjusted, or will quality account for differences in patient health? Can we expect to measure patient preferences? If so, how can they be measured and reported? While many opinions exist on these questions, little research evidence exists to determine exactly how these questions will be addressed.

Because there is not currently a strong infrastructure for reporting quality metrics, the administrative burdens on physicians and their office staff must also be taken into account. Will there be increased payment for investing in the infrastructure? Will additional payments be made to support administrative staffs who submit the metrics? Before quality measures can be fully implemented in a payment system, these questions must be examined to determine the best method of payment.

Physician Responses to Payment Incentives

When striving to reform the broad goals of a payment system, it is important to evaluate how physicians respond to various payment incentives. Aligning these incentives with the goals will ensure that not only will changes occur, but that they will last. Most physicians have contracts with more than one insurance carrier. The financial incentives of one carrier are in competition with those of another. Understanding how incentives drive action to produce desired results is important in designing a system that will have an effect, regardless of the incentives being provided by other carriers. Medicare, as a large payer, can drive the payment systems of other carriers, and create a significant change in physician behavior with positive incentives. The extent to which Medicare's effect on physician behavior is definitive is unknown. Examining these effects will be important in assessing the success of any changes in payment incentives.

Equally important is the effect that incentive adjustments have on physician organizations. For example, medical groups often re-distribute payments from insurance companies to their physicians. They may use an entirely different payment approach, e.g., receiving a capitated payment from a health plan and paying physicians in the group on salary. If a payment system is performance-based, how would the incentives be distributed, and would this ultimately change the way the incentives work? Additionally, medical groups could provide incentives that counteract the incentive payments set up by the insurance carrier. Is it possible that performance-based incentives from the insurance carrier are lost when distributed among medical groups? Is there a system of incentives that could counterbalance the distribution within medical groups?

While we know that an expenditure target in Medicare encourages physicians to increase the volume of services they provide, labeled the "behavioral offset," research is lacking about more specific relationships between payment incentives and resource use.⁵⁵ Research has also indicated that there is significant variation in Medicare payments by geographic location.⁵⁶ This research, however, does not explore the relationship of payment incentives to individual physicians and resource use, and it is limited to geographic location. Other characteristics

beyond geographic location could have an effect on the ultimate resource use of a physician, due to or regardless of the payment incentives. Race, gender, and socioeconomic status of the patients receiving services could all have an impact on physician resource use. Understanding the motivations for physician resource use could provide the information necessary to develop payment structures to correspond to more appropriate utilization overall. It is also important to examine how the point of service for a patient affects the services provided, helping to identify high-utilization provider locations, such as individual practices, multi-specialty groups, or specialty providers.

While pay-for-performance is being touted as a cost containment method, little research has been completed to support this claim. It is essential to better understand the ability of pay-for-performance to affect the way in which a physician practices. Research should address its effect on the quality of care provided as well as its ability to control costs. A new payment system must address all of the goals set, and a full examination of potential changes is needed.

Access to Care

Research suggests that the socioeconomic rift in access to health care is becoming increasingly apparent.⁵⁷ Health care is becoming more centered in affluent areas, leaving those in low-income areas, often areas with large concentrations of minorities, with reduced access to care.⁵⁸ Little research exists to determine how changes in payment policies could affect access to care, especially for already vulnerable populations. Much of the research on physician responses to changes in payments exists in the literature on Medicaid.⁵⁹ Although not definitive, research suggests that states with lower reimbursement rates also have lower rates of physicians who are willing to accept new Medicaid patients.60

Medicare beneficiaries are fortunate to have nearly unrestricted access to providers, however, Congressional testimony from MedPAC Executive Director, Mark E. Miller, Ph.D., suggests that failure to increase payments to physicians, either overall or for specific services, could, over time, reduce access to care. 61 Understanding the potential decline in access to physicians for beneficiaries due to changes in payment systems is an extraordinarily important aspect of evaluating demonstrations prior to full implementation. It is especially important to evaluate its effects because the potential for quality improvement through performance measurement could be diminished by reduced access to care.

Conclusion

Given the constantly changing environment of the health care system, it is important that a new system is flexible, enabling reevaluation and adjustments as technology changes. It is clear that major changes are necessary to the current physician payment system, however, research and evaluation must be done before implementation of any new system. Conducting targeted research and evaluation on specific options for reform can provide insight into the sustainability of any changes that are made. While the current system may not provide incentives to provide high-quality care, it is important that all factors, such as the impact on access to care, be considered before undertaking reform efforts.

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Endnotes

- 1 Public Law No. 109-432 "Tax Relief and Health Care Act of 2006." Signed December 20, 2006. http://frwebgate. access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_ public_laws&docid=f:publ432.109.pdf.
- 2 Ibid.
- 3 MedPAC. "Payment Basics: Physician Services Payment System." September 2006. http://www.medpac.gov/ publications/other_reports/Sept06_MedPAC_Payment_ Basics_Physician.pdf. Accessed December 19, 2006.
- 4 Guterman, S. Medicare Physician Payment: Are We Getting What We Pay For? Are We Paying for What We Want?, Invited Testimony, Energy and Commerce Committee, Subcommittee on Health Hearing, "Medicare Physician Payment: How to Build a Payment System That Provides Quality, Efficient Care for Medicare Beneficiaries," July 25, 2006
- 5 Agency for Healthcare Research and Quality. "Fact Sheet: Improving Health Care Quality." AHRQ Pub. No.

- 02-P032, September 2002. http://www.ahrq.gov/news/qualfact.pdf. Accessed December 20, 2006.
- 6 Rosenthal, M. B., et al. "Early Experience With Pay-for-Performance: From Concept to Practice." Journal of the American Medical Association, 294(14), 2005, pp. 1788-1793.
- 7 "The Advanced Medical Home: A Patient-Centered, Physician-Guided Model of Health Care." American College of Physicians Policy Monograph. 2006. http://www.acponline.org/hpp/adv_med.pdf. Accessed April 13, 2007.
- 8 "A System in Need of Change: Restructuring Payment Policies to Support Patient-Centered Care." American College of Physicians Position Paper. 2006. http://www.acponline.org/hpp/statehc07_5.pdf. Accessed April 13, 2007.
- 9 Ibid.
- 10 Robinson, J.C. "The Alignment and Blending of Payment Incentives within Physician Organizations." Health Services Research, Vol. 39, No. 5: October 2004.
- 11 Miller, M. "Medicare Payment to Physicians." Testimony before the Health Subcommittee of the House Energy and Commerce Committee. July 25, 2006.
- 12 "A System in Need of Change: Restructuring Payment Policies to Support Patient-Centered Care." American College of Physicians Position Paper. 2006. http://www.acponline.org/hpp/statehe07_5.pdf. Accessed April 13, 2007.
- 13 Ibid
- 14 Robinson, J.C. "The Alignment and Blending of Payment Incentives within Physician Organizations." Health Services Research, Vol. 39, No. 5: October 2004.
- 15 This risk is especially high for individual physicians, or those practicing in small group practices. If a physician has a larger caseload, in a large group practice, for example, the risk of an unusually costly case could be reduced.
- 16 Zuvekas, S.H., and S. C. Hill. "Does Capitation Matter? Impact on Access, Use and Quality." Inquiry Journal, Vol. 41, No. 3, Fall 2004.
- 17 Ogrod, E. S. "Compensation And Quality: A Physician's View." Health Affairs, 16(3), 1997, pp. 82-86.
- 18 Reschovsky, J.D., J. Hadley, and B. E. Landon. "Effects of Compensation Methods and Physician Group Structure on Physicians' Perceived Incentives to Alter Services to Patients." Health Services Research, Vol. 41, No. 4, Part I. August 2006.
- 19 Greenfield, S., et al. "Variations in resource utilization among medical specialties and systems of care. Results from the medical outcomes study." Journal of the American Medical Association, Vol. 267, No. 12, March 25, 1992.
- 20 Flynn, K. E., M.A. Smith, and M. K. Davis. "From Physician to Consumer: The Effectiveness of Strategies to Manage Health Care Utilization." Medical Care Research and Review, Vol. 59, No. 4, December 2002.
- 21 Robinson, J. C. "Managed Consumerism in Health Care." Health Affairs, Vol. 24, No. 6, November/December 2005.
- 22 Fendrick, A.M., and M.C. Chernew. "Value-based Insurance Design: Aligning Incentives to Bridge the Divide Between Quality Improvement and Cost Containment." The American Journal of Managed Care, Vol. 12, Special Issue, December 2006.
- 23 Buntin, M.B., et al. "Consumer-Directed Health Care: Early Evidence on the Effects on Cost and Quality." Health Affairs, Web Exclusive, October 2006.
- 24 Casalino, L. P. "Advantages and Disadvantages of Different Payment Systems: A Basic Framework." Presented at AcademyHealth meeting November 2, 2006.
- 25 Casalino, L. P., H. Pham and G. Bazzoli. "Growth Of Single-Specialty Medical Groups." Health Affairs, Vol. 23, No. 2, 2004.

- 26 Zuvekas, S.H., and S. C. Hill. "Does Capitation Matter? Impact on Access, Use and Quality." Inquiry Journal, Vol. 41, No. 3, Fall 2004.
- 27 Institute of Medicine. "Report Brief: Crossing the Quality Chasm: A New Health System for the 21st Century." National Academies Press: March 2001. http://www.iom.edu/Object.File/Master/27/184/Chasm-8pager.pdf. Accessed December 28, 2006.
- 28 White House Office of the President. "Promoting Quality and Efficient Health Care in Federal Government Administered or Sponsored Health Care Programs." Executive Order 13410. August 22, 2006. http://www.whitehouse.gov/news/releases/2006/08/20060822-2.html. Accessed December 28, 2006.
- 29 Rosenthal, M. B., et al. "Early Experience With Pay-for-Performance: From Concept to Practice." Journal of the American Medical Association, 294(14), 2005, pp. 1788-1793.
- 30 Dudley, R. A. "Pay-for-Performance Research: How to Learn What Clinicians and Policy Makers Need to Know." Journal of the American Medical Association, 294(14), 2005, pp. 1821-1823.
- 31 Rosenthal, M. B., et al. "Early Experience With Pay-for-Performance: From Concept to Practice." Journal of the American Medical Association, 294(14), 2005, pp. 1788-1793.
- 32 Rosenthal, M. B., et al. "Paying For Quality: Providers' Incentives For Quality Improvement." Health Affairs, 23(2), 2004, pp. 127-141.
- 33 Pham, H.H., et al. "Care Patterns in Medicare and Their Implications for Pay for Performance." The New England Journal of Medicine, Vol. 356, No. 11, March 15, 2007.
- 34 Institute of Medicine. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. National Academies Press: 2003. http://www.nap.edu/catalog/10260.html#toc. Accessed December 28, 2006.
- 35 Casalino, L. P. "Individual Physicians or Organized Processes: How Can Disparities in Clinical Care Be Reduced?" National Academy of Social Insurance Working Paper, March 2005. http://www.nasi.org/usr_ doc/Casalino.pdf. Accessed December 28, 2006.
- 36 Centers for Medicare and Medicaid Services. "Medicare Physician Group Practice Demonstration." Department of Health and Human Services. January 31, 2005. http:// www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/ PGP_Fact_Sheet.pdf. Accessed December 28, 2006.
- 37 Ibid.
- 38 Sandy, L.G. "Driving Quality and Affordability in a Consumer-Focused World: The Role of Physician Payment." Presented at AcademyHealth meeting, November 2, 2006.
- 39 Wilensky, G. Testimony before the Subcommittee on Health of the House Committee on Ways and Means. March 6, 2007.
- 40 Ibid.
- 41 Ibid.
- 42 MedPAC. Report to the Congress: Increasing the Value of Medicare. June 2006. http://www.medpac.gov/publications/congressional_reports/Jun06_EntireReport.pdf. Accessed December 29, 2006.
- 43 Ibid.
- 44 Ibid
- 45 Thomas, J.W., K. L. Grazier, and K. Ward. "Comparing Accuracy of Risk-Adjustment Methodologies Used in Economic Profiling of Physicians." Inquiry Journal, Vol. 41, No. 2, 2004.
- 46 To learn more about the detailed payment model, see the published white paper at http://www.prometheuspayment.org/assets/documents/pdf/PROMETHEUS%20W P%20Draft%20May2006%20(5).pdf.

- 47 PROMETHEUS Payment, Inc. "PROMETHEUS Payment™, Inc. Evidence-based Case Rate™
 Development." http://www.prometheuspayment.org/
 assets/Documents/PROMETHEUSECRDevelopmentSu
 mmaryfinal.pdf. Accessed December 29, 2006.
- 48 Ibid.
- 49 "A System in Need of Change: Restructuring Payment Policies to Support Patient-Centered Care." American College of Physicians Position Paper. 2006. http://www.acponline.org/hpp/statehc07_5.pdf. Accessed April 13, 2007.
- 50 For more detailed information please refer to the position paper produced by the American College of Physicians: http://www.acponline.org/hpp/statehc07_4.pdf.
- 51 American Academy of Family Physicians. "The Future of Family Medicine: A Collaborative Project of the Family Medicine Community." Annals of Family Medicine, 2 (Supp. 1), 2004, pp. S3 S32. http://www.annfammed.org/cgi/reprint/2/suppl_1/s3. Accessed December 29, 2006. American College of Physicians. "The Advanced Medical Home: A Patient-Centered, Physician-Guided Model of Health Care." 2006. http://www.acponline.org/hpp/adv_med.pdf. Accessed December 29, 2006.

- 52 American College of Physicians. "A System in Need of Change: Restructuring Payment Policies to Support Patient-Centered Care." Philadelphia: American College of Physicians. 2006: Position Paper.
- 53 Ibi
- 54 Luft, H. S. "Changing How We Pay for Clinical Care." Presented at AcademyHealth meeting, November, 2006.
- 55 Congressional Budget Office. "The Sustainable Growth Rate Formula for Setting Medicare's Physician Payment Rates." CBO Economic and Budget Issue Brief: September 6, 2006. http://www.cbo.gov/ftpdocs/75xx/doc7542/09-07-SGRbrief.pdf. Accessed December 27, 2006.
- 56 Elliot Fisher and colleagues published several articles indicating this in the Annals of Internal Medicine, 2003, Vol. 138, No. 4. MedPAC's research on episode groupers, released in it June 2006 Report to the Congress: Increasing the Value of Medicare, also showed significant variation in payment and resource use by geographic location. In December 2006, HCFO funded Jack Hadley and colleagues to further examine variations in spending in the Medicare population. For more information on this grant, please visit http://hcfo.net/grantees/grant.asp?GrantNo=59057.

- 57 Hurley, R. E., et al. "A Widening Rift in Access and Quality: Growing Evidence of Economic Disparities." Health Affairs, December 6, 2005, Web Exclusive – W5.
- 58 Ibid
- 59 Zuckerman, S., et al. "Changes in Medicaid Physician Fees, 1998-2003: Implications for Physician Participation." Health Affair, Web Exclusive, June 2004.
- 60 Ibio
- 61 MedPAC. "Medicare Payment to Physicians." Testimony of Mark. E. Miller, Ph.D. to the Subcommittee on Health, Committee on Energy and Commerce, U.S. House of Representatives. July 25, 2006. http://www.medpac.gov/publications/congressional_testimony/072506_Testimony_physician.pdf. Accessed January 2, 2007.