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The Next Stage of Health Care Reform: Controlling Costs by Paying Health Plans Based on Health Options

Dale B. Thompson

THE NEXT STAGE OF HEALTH CARE REFORM: CONTROLLING COSTS BY PAYING HEALTH PLANS BASED ON HEALTH OUTCOMES

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I. INTRODUCTION

In the health care debate, one of the targets that critics have focused on has been health insurance plans. Some critics point to large profits for the industry, at a time when many individuals are having difficulty affording insurance.[1] Others point to enormous rate hikes, such as Anthem Blue Cross of California's much publicized proposed increase of rates by up to thirty-nine percent.[2]

Another favorite target has been the Medicare Advantage (MA) program. MA is the part of Medicare in which Medicare beneficiaries select a private health plan for their coverage (Part C).[3] Large health plans such as UnitedHealthcare, Humana, and Kaiser are participants.[4] Critics frequently point to the "overpayments" that MA plans receive, in comparison to the costs under the traditional Medicare program.[5] As

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1. *See* Nicole Gaouette, *Humana's Profit Criticized by Senate Leader's Aide*, BLOOMBERG (Nov. 2, 2009), http://www.bloomberg.com/apps/news?pid=20601103&sid=ahuWRmei0TW0 (quoting Jim Manley, aide to Senate Majority Leader Harry Reid, "It's no wonder why Humana has been misleading seniors about health insurance reform . . . . They saw their profits rise 65 percent last quarter and want to make sure the gravy train doesn't end."); *Health Insurance Industry Profits Surge Again*, HEALTH CARE FOR AM. NOW (2010), http://hcfan.3cdn.net/ d605c2281191ac1f04_kam6bn3ga.pdf (subtitled "*Fewer Members, Skimpier Benefits, Lower Spending on Care Add Up for Investors While Consumers Suffer*").

2. *See* Nadja Popovich, *Insurer's Rate Hike Becomes Administration Talking Point*, NAT'L PUB. RADIO (Feb. 9, 2010, 9:12 AM), http://www.npr.org/blogs/health/2010/02/ insurers_rate_hike_becomes_adm.html. This proposed increase was later rescinded when it was found that Anthem had made actuarial errors in determining its projected costs. *See* Scott Hensley, *California Insurer Drops Rate Hikes After Errors Are Found*, NAT'L PUB. RADIO (Apr. 30, 2010, 9:15 AM), http://www.npr.org/blogs/health/2010/04/california_insurer_drops_rate.html.

3. OFFICE OF HEALTH POL'Y, OFFICE OF THE ASSISTANT SEC'Y FOR PLANNING & EVALUATION, U.S. DEP'T OF HEALTH & HUMAN SERVS., PAYMENT FOR MEDICARE ADVANTAGE PLANS: POLICY ISSUES AND OPTIONS v (2009), *available at* http://aspe.hhs.gov/health/reports/09/ medicareadvantage/report.pdf [hereinafter PAYMENT FOR MA PLANS].

4. Marsha Gold, Dawn Phelps, Gretchen Jacobson & Tricia Neuman, *Medicare Advantage 2010 Data Spotlight: Plan Enrollment Patterns and Trends*, KAISER FAMILY FOUND., 5 (June 2010), http://www.kff.org/medicare/upload/8080.pdf.

5. *See* Jill Wechsler, *Medicare Advantage Plans Under Attack*, MANAGED HEALTHCARE EXEC., Mar. 1, 2007, http://managedhealthcareexecutive.modernmedicine.com/mhe/Politics+and+Policy/ Medicare-Advantage-plans-under-attack/ArticleStandard/Article/detail/409178 (noting that "MA plans are 'vastly overpaid,' according to Rep. Pete Stark (D-Calif.), chairman of the House Ways & Means Health subcommittee."); Philip Rucker, *Hidden Costs of Medicare Advantage: Plans' Free Perks Are Subsidized By Government*, WASH. POST, Oct. 15, 2009, *available at* http://www.washingtonpost.com/ wp-dyn/content/article/2009/10/14/AR2009101403953_pf.html (quoting Sen. John D. Rockefeller IV (D-W.Va.), "[Medicare Advantage is] a wasteful, inefficient program and always has been. . . . [It is]

determined by the Medicare Payment Advisory Commission (MedPAC), "MA payments per enrollee are projected to be 114 percent of comparable FFS [fee-for-service] spending for 2009."[6]

There are two problems in "demonizing"[7] health insurance plans and MA.[8] One is that it diverts attention from perhaps the most important long-term problem for health care: the need to control rising costs. Recent estimates say that expenditures on health care have grown from approximately seven percent of gross domestic product (GDP) in 1970, to nine percent in 1980, twelve percent in 1990, fourteen percent in 2000, and sixteen percent in 2008.[9] Expenditures are projected to be over nineteen percent of GDP in 2019.[10] While it is certainly true that health care insurance plans are not perfect and that there have been "wasteful"[11] benefits offered by MA plans, simply addressing these will not effectively control future health care costs.

Rising costs are primarily a function of inappropriate incentives in the delivery of health care. As Adam Smith noted in *The Wealth of Nations*, prices are the "invisible hand" that guides market participants.[12] In most markets, prices act as signals to both producers and consumers. However, in health care in the United States, prices simply do not work.

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stuffing money into the pockets of private insurers, and it doesn't provide any better benefits to anybody."); Ezra Klein, *The Medicare Advantage Scam*, WASH. POST, Oct. 15, 2009, *available at* http://voices.washingtonpost.com/ezra-klein/2009/10/the_medicare_advantage_scam.html.

6. MEDICARE PAYMENT ADVISORY COMM'N, REPORT TO THE CONGRESS: MEDICARE PAYMENT POLICY xix (Mar. 2009), *available at* http://www.medpac.gov/documents/ Mar09_EntireReport.pdf [hereinafter MARCH 2009 MEDPAC REPORT].

7. *See* Press Release, America's Health Insurance Plans, AHIP Statement on Status of Health Care Reform (Aug. 4, 2009), *available at* http://www.ahip.org/content/ pressrelease.aspx?docid=27953 (claiming that "a campaign has been launched to demonize health plans"). *See also Relapse: The Battle Between Politicians and Insurers Is Not Over*, ECONOMIST, May 15, 2010, at 74 (noting that "the administration is demonising insurers in an effort to transform the new health law from an electoral liability into an asset").

8. The Wall Street Journal editorial board also recently noted the dual attacks on health plans and MA. *See Farewell, Medicare Advantage*, WALL ST. J., June 11, 2010, at A18 (noting that "[t]his terror explains why Democrats are so intent on killing Medicare Advantage, and on blaming someone else [health plans] for destroying a program that millions of seniors prefer").

9. *National Health Expenditure Data*, CTRS. FOR MEDICARE & MEDICAID SERVS., tab.1 (2009), http://www.cms.gov/NationalHealthExpendData/downloads/tables.pdf [hereinafter *NHE Data*].

10. *NHE Fact Sheet,* CTRS. FOR MEDICARE & MEDICAID SERVS., http://www.cms.gov/NationalHealthExpendData/25_NHE_Fact_Sheet.asp (last visited Mar. 30, 2011) [hereinafter *NHE Fact Sheet*].

11. Rucker, *supra* note 5.

12. ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS IV.2.9 (Edwin Cannan ed., 5th ed. 1904), *available at* http://www.econlib.org/library/ Smith/smWN13.html.

The health care system has created a number of distortions that impede the ability of prices to perform their signaling function. The predominant mode of compensating doctors is through "fee-for-service," in which a doctor receives compensation based on a list of services performed.[13] The "price" for each service is based on a "cost-plus" model,[14] where the doctor receives essentially the marginal cost of the service plus an additional amount, which is designed to be enough to cover a certain percentage of fixed costs and provide income for the doctor. This system provides a strong incentive for doctors to over provide services because their profits (based on the "plus" part of the "cost-plus" model) increase consistently with greater quantities. Furthermore, there is a stronger incentive to provide more costly services because their "plus" part is larger than lower cost services.

Many have pointed to inefficient incentives created under the "fee-for-service" system as being the primary cause of the rising costs of health care.[15] In response, a number of recommended changes to the health care payment system have been suggested.[16] These include pay-for-performance, competitive pricing, accountable care organizations, and bundled payments.[17] Each of these plays a role in the landmark health care reform legislation signed by President Barack Obama, the

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13. Exec. Office of the President, Council of Econ. Advisors, *The Economic Case for Health Care Reform*, 14 (2009), http://www.whitehouse.gov/assets/documents/CEA_Health_Care_Report.pdf. [hereinafter COUNCIL ECON. ADVISORS]. The other predominant form of payment is via a "capitation rate" in which a health plan receives a fixed amount per person (per head) enrolled in the plan. *See* MARCH 2009 MEDPAC REPORT, *supra* note 6, at 13.

14. *See* Bryan E. Dowd, Robert F. Coulam, Roger Feldman, & Steven D. Pizer, *Fee-for-Service Medicare in a Competitive Market Environment*, 27 HEALTH CARE FIN. REV. 113, 113 (2005-06), *available at* https://www.cms.gov/HealthCareFinancingReview/downloads/05-06Winpg113.pdf.

15. *See infra* Part II. This article focuses on the problems associated with the pricing system for payment for medical service providers, which is primarily done via federal programs such as Medicare and Medicaid, along with payment by health insurance plans. However, other literature examines problems with payment systems on the other side of the equation: the consumers of medical services. *See, e.g.*, Stephen P. Paschall, *Health Care, the Price System and the Conflict Between Access to Care and Cost-Containment*, 43 J. ECON. ISSUES 403 (2009). In the opinion of this author, pricing reform on the supplier-side will be more effective than on the demand side, due to difficulties with individual consumers' ability to correctly quantify the value of a specific medical service. For more on the problems of valuing esoteric goods such as environmental goods, see Dale B. Thompson, *Valuing the Environment: Courts' Struggles with Natural Resource Damages*, 32 ENVTL. L. 57 (2002). For these reasons, this article will not address pricing reforms on the health consumer side.

16. *See infra* Part II.

17. *See infra* Part III.A-D.

Patient Protection and Affordable Care Act[18] and the Health Care and Education Reconciliation Act of 2010.[19] The package also regulates health plans and reduces payments under MA.[20] Nonetheless, while these approaches should improve the delivery of health care, they will not lead to any fundamental changes in health care incentives. In order to address rising health care costs, we will need a new approach, a new metric for health care payments.

The other problem in "demonizing" health insurance plans and MA is that, in thinking that they are the problem, we lose track that they may be part of the solution to the long-term need to control costs. In fact, this article argues that health care insurance plans participating in MA offer the best opportunity to transform incentives in health care.

This article proposes a systemic change to the payment system used by the MA program. Under this new system, health plans would be rewarded, not on the basis of how much care was provided, but rather on the effectiveness of the care. In other words, these plans will receive payments based on their delivery of "health outcomes," not their delivery of health services. Health outcomes include measures of survival, data "derived from symptoms or even the results of physical examinations," and "the results of simple tests, like blood levels, or more complex physiological measures."[21] They also include "information collected from patients, . . . reflect[ing] how they have experienced the illness and the effects it has had on their lives."[22] A number of obstacles have hindered the consideration of using health outcomes alone as the basis of a practical payment system,[23] but this article argues that these obstacles can and should be overcome.

When their payments depend on health outcomes, health insurance plans will have incentives to improve the quality and cost effectiveness of health care, and these improvements will spread throughout these organizations to the individual doctor level and also on to their patients.

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18. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010) [hereinafter PPACA].

19. Health Care and Education Reconciliation Act, Pub. L. No. 111-152, 124 Stat. 1029 (2010) [hereinafter HCERA].

20. Anne Tergesen, *Changes to Medicare Advantage*, WALL ST. J., May 9, 2010, *available at* http://online.wsj.com/article/SB127336164057988979.html (noting that "the new health-care law will divert some $132 billion from Medicare Advantage").

21. ROBERT L. KANE, UNDERSTANDING HEALTH CARE OUTCOMES RESEARCH 5 (2d ed. 2006).

22. *Id.*

23. Some have proposed using health outcomes to determine whether providers are eligible for bonus payments. *See infra* Part III.C.

This approach has the benefit of using decentralized enforcement, with flexible incentives tailored to individual contexts.[24]

The rest of this article is as follows. We begin with an analysis of the improper incentives generated under the fee-for-service system, and then examine alternatives previously suggested.[25] We also examine how the landmark health care reform legislation of 2010 addresses these incentives.[26] We then present a different payment system based on health outcomes, explaining how it would be implemented and examining some of the challenges in doing so.[27]

Drawing on previous research on environmental policies and federalism, we find that, in order to be implemented properly, this payment system should be directed at the level of health care plans.[28] We then examine the opportunity for implementing this system at the level of health plans afforded by MA.[29] We conclude with an analysis of the obstacles and opportunities of this approach.[30]

II. IMPROPER INCENTIVES UNDER FEE-FOR-SERVICE

In the past forty years, health care expenditures have risen from seven percent of GDP to over sixteen percent.[31] Within the next ten years, they are expected to reach approximately one-fifth of GDP.[32] As a cause of this rise, a number of authorities have pointed to significant problems with the fee-for-service payment system. These problems derive from the incentives generated under this system. These incentives lead to too much care being provided, with a significant portion of that care being of dubious value.

For example, the Medicare Payment Advisory Commission (MedPAC) explained, in its June 2009 Report to the Congress, that we are "not buying enough recommended care" but are instead "buying too much unnecessary care, much of it at very high prices, resulting in a system that costs significantly more per capita than in any other

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24. It will be difficult to develop these tailored incentives over large and diverse networks of physicians, but over time, we may expect improvements in the management of these networks. *See infra* Part VI.C.

25. *See infra* Part II.

26. *See infra* Part IV.

27. *See infra* Part V.

28. *See infra* Part VI.

29. *See infra* Part VII.

30. *See infra* Part VIII.

31. *NHE Data*, *supra* note 9, at tab.1.

32. *NHE Fact Sheet*, *supra* note 10.

country."[33] The principal reason cited by MedPAC is that "Medicare's fee-for-service (FFS) payment systems reward more care—and more complex care—without regard to the quality or value of that care."[34]

Health care expert David Cutler of Harvard has noted a similar conundrum, where "the marginal value of many services is low and many people go without valuable care."[35] He gives examples of the overuse of "high-tech medical services," and notes that "Medicare spending, for example, varies by a factor of two between different regions of the country, with the gap typically associated with differential use of very expensive procedures."[36] Despite these spending disparities, "[p]eople appear no healthier in regions that spend more compared to regions that spend less."[37] On the other hand, Cutler also notes that an important example of the under-provision of health care is for prescription drugs: "Less than half of patients who would benefit from beta blockers after a heart attack receive these drugs . . . despite the fact that such drugs cut the mortality risk in half." [38] For the cause of these inefficiencies, Cutler points to both the fee-for-service system and the low out-of-pocket costs for patients with strong insurance coverage, causing them to "demand care with any medical value."[39] He concludes that "[o]n both the demand and supply sides of the market, the incentives are to overconsume high-tech care."[40]

President Obama's Council of Economic Advisors described these and other inefficiencies of fee-for-service in *The Economic Case for Health Care Reform*.[41] In addition to the incentives to increase volume under fee-for-service, the FFS system also may "reward poor quality of

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33. Medicare Payment Advisory Comm'n, *Report to the Congress: Improving Incentives in the Medicare Program*, xi (June 2009), http://www.medpac.gov/documents/Jun09_EntireReport.pdf [hereinafter *June 2009 MEDPAC Report*].

34. *Id.*

35. David M. Cutler, *Walking the Tightrope on Medicare Reform*, 14 J. ECON. PERSPECTIVES 45, 51(2000); Donald A. Brand, Lee N. Newcomer, Anne Freiburger & Hao Tian, *Cardiologists' Practices Compared with Practice Guidelines: Use of Beta-Blockade After Acute Myocardial Infarction*, 26 J. AM. COLL. CARDIOLOGY 1432, 1435 (1995); Stephen B. Soumerai, Thomas J. McLaughlin, Donna Spiegelman, Ellen Hertzmark, George Thibault & Lee Goldman, *Adverse Outcomes of Underuse of β-Blockers in Elderly Survivors of Acute Myocardial Infarction*, 277 JAMA 115, 119-20 (1997); Thomas J. Wang & Randall S. Stafford, *National Patterns and Predictors of β-Blocker Use in Patients with Coronary Artery Disease*, 158 ARCHIVES INTERNAL MED. 1901, 1903-05 (1998).

36. Cutler, *supra* note 35, at 51.

37. *Id.*

38. *Id.* at 52.

39. *Id.*

40. *Id.*

41. COUNCIL ECON. ADVISORS, *supra* note 13, at 14.

care by paying for the costs associated with additional medical care necessary to fix errors that could have been prevented."[42] Also, the FFS system generates "strong financial incentives to compete on the basis of technology adoption rather than price, leading to an excess supply of high technology equipment and services (for example, MRI machines and minimally invasive vascular diagnostic and procedure suites) and accelerated replacement of hospital beds in local markets."[43] Another significant problem is due to the lack of incentives under the FFS system "for effectively managing patients with chronic illnesses or educating patients about preventing disease through lifestyle changes such as exercise, improved nutrition, and smoking cessation."[44]

Harold Miller, another "national expert on health care reform,"[45] makes similar critiques. He notes, "Payment systems for health care today are based on rewarding volume, not value for the money spent."[46] Meanwhile, he explains, "Current payment systems often penalize providers financially for keeping people healthy, reducing errors and complications, and avoiding unnecessary care."[47]

Thus, we see that the fee-for-service system creates incentives by rewarding volume but not quality or outcomes. This leads to a number of problems: provision of a substantial amount of care with little value, under-provision of other care with higher value, perverse incentives for poor quality care as services to correct for earlier errors lead to higher levels of compensation, excessive use of high technology equipment, an oversupply of hospital beds, and insufficient incentives for managing and educating patients through low-cost ways of improving their health. In the end, this payment system rewards health care providers more if their patients are less healthy.

III. ALTERNATIVES TO FEE-FOR-SERVICE

As Stuart Guterman and others have noted, "To change the way health care is organized and delivered, we need to change the way it is

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42. *Id.* (citing David Studdert, Michelle Mello, William M. Sage, Catherine M. DesRoches, Jordan Peugh, Kinga Zapert, & Troyen A. Brennan, *Defensive Medicine Among High-Risk Specialist Physicians in a Volatile Malpractice Environment*, 293 JAMA 2609, 2616 (2005)).

43. COUNCIL ECON. ADVISORS, *supra* note 13, at 14.

44. *Id.*

45. Sarah A. Rigg, *An Interview with Harold Miller*, DETROIT BUS. NEWS, July, 29, 2009, *available   at* http://www.mlive.com/business/detroit/index.ssf/2009/07/an_interview_with_harold_mille.html.

46. Harold D. Miller, *From Volume to Value: Better Ways to Pay for Health Care*, 28 HEALTH AFF. 1418, 1418 (2009).

47. *Id.*

paid for—mov[ing away] from FFS payments."[48] One way to do this would be to adopt a capitation model, where providers are paid a specified amount (which may be risk adjusted) for each beneficiary they service.[49] This is the model adopted by the MA program, prior to the modifications under the health reform legislation.[50] However, the capitation model also leads to inappropriate incentives. As noted by Robert Mechanic and Stuart Altman, "capitation creates financial incentives for physicians to withhold care."[51]

Instead, in order to combat the perverse incentives created by the fee-for-service system, scholars have suggested a variety of other approaches. These include a pay-for-performance (frequently referred to as either P4P or value-based purchasing) system, competitive pricing, accountable care organizations, and bundled payment systems. After examining these, we will see how these alternatives were incorporated into the health care reform legislative package.

A. *Pay-for-Performance*

Pay-for-performance is a payment system in which providers of health services receive bonuses for meeting certain performance targets.[52] Much of the time, the measures used to determine pay for performance are simply whether certain treatment guidelines are followed.[53] For example, measures to assess the quality of ambulatory care include the use of certain screening tests, vaccinations, and therapies.[54] The recent interest in pay-for-performance began with two reports issued by the Institute of Medicine in 1999 and 2001.[55]

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48. Stuart Guterman, Karen Davis, Stephen Schoenbaum & Anthony Shih, *Using Medicare Payment Policy to Transform the Health System: A Framework for Improving Performance*, 28 HEALTH AFF. 238, 239 (2009).

49. PAYMENT FOR MA PLANS, *supra* note 3, at 7.

50. *Id.*

51. Robert E. Mechanic & Stuart H. Altman, *Payment Reform Options: Episode Payment Is a Good Place to Start*, 28 HEALTH AFF. 262, 266 (2009).

52. Kathleen J. Mullen, Richard G. Frank & Merideth B. Rosenthal, *Can You Get What You Pay For? Pay-for-Performance and the Quality of Healthcare Providers* 2 (Rand Labor and Population, Working Paper No. WR-680, 2009), *available at* http://www.rand.org/ pubs/working_papers/2009/RAND_WR680.pdf.

53. *Id.*

54. *See* INST. OF MED., PERFORMANCE MEASUREMENT: ACCELERATING IMPROVEMENT, 204-06 tbl.G-1 (2006), *available at* http://books.nap.edu/ openbook.php?record_id=11517&page=204.

55. JIM HAHN, PAY-FOR-PERFORMANCE IN HEALTH CARE 3 (2006), *available at* http://www.policyarchive.org/handle/10207/bitstreams/3009.pdf (citing INST. OF MED., TO ERR IS HUMAN: BUILDING A SAFER HEALTH CARE SYSTEM (1999); INST. OF MED., CROSSING THE QUALITY CHASM: A NEW HEALTH SYSTEM FOR THE 21ST CENTURY (2001)).

A number of pay-for-performance experiments were tried in the early 2000s. The results were not promising. Meredith Rosenthal notes, "Both the enthusiastic adoption and somewhat lackluster early results of pay for performance have given rise to a broader payment-reform movement."[56]

In an early study of pay-for-performance, Rosenthal and others found little improvement from the adoption of a pay-for-performance program: "Paying clinicians to reach a common, fixed performance target may produce little gain in quality for the money spent and will largely reward those with higher performance at baseline."[57] In a more recent study, Rosenthal and others similarly conclude, "[W]e fail to find evidence that a large P4P initiative either resulted in major improvement in quality or notable disruption in care."[58]

However, some have suggested that there have been some limited successes. Francis J. (Jay) Crosson notes that "the modest pay-for-performance (P4P) incentives in the CMS Premier Hospital Quality Incentive Demonstration and the Physician Group Practice Demonstration have succeeded."[59]

A number of reasons have been suggested for the poor performance of pay-for-performance. Some point to the inappropriate metrics utilized by pay-for-performance systems, i.e., the use of a particular treatment as recommended by the guidelines. Consequently, these payment systems create incentives to follow these guidelines, without any direct connection to whether these guidelines are successful for individual patients.

Elliott Fisher and others have criticized pay-for-performance (P4P) mechanisms because they provide incentives at the wrong level—the individual doctor level.[60] This focus is inappropriate because, as they

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56. Meredith B. Rosenthal, *Beyond Pay for Performance—Emerging Models of Provider-Payment Reform*, 359 NEW ENG. J. MED. 1197, 1197 (2008) (describing a number of payment reform models, including refusing payment for "avoidable complications," "primary care payment reform" such as payment under capitation, "episode-based payment," and "shared savings"). *See* also Mechanic & Altman, *supra* note 51, at 264 (2009) (stating that "few programs have been formally evaluated, and those that have show mixed results").

57. Meredith B. Rosenthal, Richard G. Frank, Zhonghe Li & Arnold M. Epstein, *Early Experience with Pay-for-Performance: From Concept to Practice*, 294 JAMA 1788, 1788 (2009).

58. Mullen et al., *supra* note 52, at 28.

59. Francis J. Crosson, *Medicare: The Place to Start Delivery System Reform*, 28 HEALTH AFF. 232, 233 (2009) (noting however that "there is little evidence that small (2-5 percent) payment incentives are likely to drive individual specialists").

60. Elliott S. Fisher, Douglas O. Staiger, Julie P.W. Bynum & Daniel J. Gottlieb, *Creating Accountable Care Organizations: The Extended Hospital Medical Staff*, 26 HEALTH AFF. 44, 44 (2007), *available at* http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2131738/.

note, "The provision of high-quality care for any serious illness requires coordinated, longitudinal care and the engagement of multiple professionals across different institutional settings."[61]   The focus on individual doctors is also problematic because "many of the most serious gaps in quality can be attributed to poor coordination and faulty transitions."[62]

Another part of the problem with pay-for-performance is that, as it is currently designed and implemented, it provides incentives to improve quality but without regard for cost. As James Robinson and others have noted, "The turn toward quality improvement and away from cost moderation improved quality but helped fuel the resurgence of cost inflation."[63]   Thus, pay-for-performance, similar to fee-for-service, creates a disincentive to adopting cost-effective treatments that are not specifically designated under the treatment guidelines.

A policy paper issued by researchers at the U.S. Department of Human Services examines whether pay-for-performance should be applied to MA.[64] They note a number of difficulties in applying pay-for-performance to MA. These difficulties include:

> [A] lack of sufficient health outcomes measures (as opposed to process and satisfaction measures that are captured by HEDIS [Healthcare Effectiveness Data and Information Set] and CAHPS [Consumer Assessment of Healthcare Providers and Systems]), and that this would be an important limiting factor in the ability to accurately measure and reward plan performance.[65]

Similar to the arguments above, they note that "while there are reasons to believe that these types of programs can improve beneficiaries' health while reducing costs, there is not definitive evidence that they will lead to improved performance."[66]

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61. *Id.* at 45.

62. *Id.*

63. James C. Robinson, Thomas Williams & Dolores Yanagihara, *Measurement of and Reward for Efficiency in California's Pay-for-Performance Program*, 28 HEALTH AFF. 1438, 1439 (2009). *See also* Mechanic & Altman, *supra* note 51, at 264 (noting that "P4P programs are unlikely to affect spending trends as long as their primary emphasis is rewarding providers for delivering 'underused' services rather than for judicious use of potentially 'overused' treatments"); Robert Galvin, *Pay-for-Performance: Too Much of a Good Thing? A Conversation with Martin Roland*, 25 HEALTH AFF. 412 (2006) (discussing a P4P plan in the United Kingdom with actual payments that exceeded expected payments by almost 40%: $2.5 billion instead of $1.8 billion).

64. PAYMENT FOR MA PLANS, *supra* note 3, at 24.

65. *Id.* at 25.

66. *Id.*

B.   Competitive Pricing

Robert Berenson notes that the traditional Medicare FFS benchmarks used for establishing MA payments are inappropriate, due to differential market settings.[67]   Berenson notes that "in areas with the highest traditional Medicare spending, health plans' bids are about 10 percent below traditional Medicare spending, while in the lowest-spending traditional Medicare areas, plans' bids are about 21 percent above traditional program spending."[68]   This is because the benchmarks "do not reflect cost differences faced by local plans as a result of local market factors."[69]

To address these concerns, Bryan Dowd, Robert Berenson, and others have suggested using a competitive pricing model.[70]   Under a competitive pricing model, health plans submit bids for servicing their enrolled beneficiaries.   These bids would be to provide a "'community norm' [benefit] package that [would] include supplementary benefits."[71]   These bids are based on the expected costs of servicing these beneficiaries.   These bids would then be used to determine benchmarks for establishing how much of the plans would be paid by Medicare.[72]   Plans whose bids exceeded the benchmarks would be required to collect the difference in the form of premiums from beneficiaries.

In February 2009, the Obama administration proposed the adoption of competitive pricing for MA plans.[73]   Bryan Dowd, Robert Coulam, and Roger Feldman have proposed extending the competitive pricing model to all Medicare plans, not just MA ones.[74]   However, competitive

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67.   Robert A. Berenson, *From Politics to Policy: A New Payment Approach in Medicare Advantage*, 27 HEALTH AFF. 156, 160 (2008).

68.   *Id*. at 160.

69.   *Id.*

70.   *Id. See also* Dowd et al., *supra* note 14, at 117.

71.   Robert A. Berenson & Bryan E. Dowd, *Medicare Advantage Plans at A Crossroads—Yet Again*, 28 HEALTH AFF. 29, 31 (2009).

72.   One approach suggested by Bryan Dowd and others is to set the benchmark at the lowest bid for the geographical area.   *See* Robert F. Coulam, Roger Feldman & Bryan E. Dowd, *Competitive Pricing for All Medicare Health Plans*, AM. ENTER. INST. FOR PUB. POL'Y RESEARCH (2009), http://www.aei.org/outlook/100060 (noting that this would have benefits for low bidders through increased enrollments and penalties for high bidders).   Other approaches to setting the benchmark based on these bids are also possible, such as a second-price auction, which reduces incentives to inflate bids.

73.   *See* OFFICE OF MGMT. & BUDGET, A NEW ERA OF RESPONSIBILITY: RENEWING AMERICA'S PROMISE   28 (2009), *available at* http://www.gpoaccess.gov/usbudget/fy10/pdf/fy10-newera.pdf.

74.   Coulam et al., *supra* note 72, at 1.

pricing proposals have faced significant political opposition.[75] In the past twenty-five years, attempts to utilize competitive pricing have been frequently scuttled as a result of this opposition.[76]

This history repeated itself in the current health reform legislation. Section 3201[77] of the Patient Protection and Affordable Care Act mandated that MA benchmarks would be based on competitive bids.[78] However, section 1102 of the Health Care and Education Reconciliation Act repealed section 3201, replacing the Competitive Bidding structure with one based on Medicare FFS rates.[79]

C. Accountable Care Organizations (ACOs)

Another significant proposal has been a call for "Accountable Care Organizations" (ACOs). Elliott Fisher and others have suggested that significant improvements can be made by shifting payment systems away from the level of the individual doctor, and instead creating a payment system directed at "accountable care organizations comprising local hospitals and the physicians who work within and around them."[80] They note a number of advantages to this approach.[81] One is related to performance measures.[82] They cite a need for "measures that focus on the longitudinal experience of Medicare beneficiaries (including measures of total costs and health outcomes), as well as measures that directly address the current fragmentation of care."[83] They conclude, "Aggregating performance measurement to the level of large physician groups is the only approach, we believe, to achieving this dual

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75. *See* PAYMENT FOR MA PLANS, *supra* note 3, at vi (noting that "in the past, . . . health plans and their supporters have resisted such a bidding approach"); *id.* at 18 ("[A competitive bidding] system, as in any competitive market, means increased uncertainty about the chances for reward and the risk of financial loss for participants. Previous experience with Medicare's competitive pricing demonstrations, which were opposed by the insurance industry, suggests that health plans are reluctant to participate under such pricing uncertainty.") (citing Berenson et al., *supra* note 71, at 30-32).

76. *See id.* at 29; Robert F. Coulam, Roger Feldman & Bryan E. Dowd, *Don't Forget to Save Medicare: Competitive Pricing, Not Price Controls*, AM. ENTER. INST. FOR PUB. POL'Y RESEARCH, http://www.aei.org/docLib/Handout%20on%20Medicare%20Competitive%20Pricing%20Attempts. pdf. *See also* Dowd et al., *supra* note 14, at 117 (describing how demonstration projects were "blocked" by Congress, with the aid of a Federal judge).

77. Unless otherwise noted, all section references of the PPACA refer to TITLE III— Improving the Quality and Efficiency of Health Care.

78. PPACA, Pub. L. No. 111-148, § 3201(a), 124 Stat. 119 (2010).

79. HCERA, Pub. L. No. 111-152, § 1102(a), 124 Stat. 1029 (2010).

80. Fisher et al., *supra* note 60, at 45.

81. *Id.* at 51.

82. *Id.* at 52.

83. *Id.*

objective."[84]   They also note that "physicians' resistance to public reporting could be mitigated by aggregation to these larger entities."[85] Finally, there are economies of scale in collecting this information: "The administrative complexity of data collection methods and auditing procedures for 5,000 hospitals would be much less daunting than those required to collect and audit data on the 500,000 physicians practicing in the United States."[86]

Another advantage of a payment system at the level of an ACO would be to "establish accountability for local decisions about capacity."[87] Their final advantage is due to another economy of scale:

> Larger organizations [have the] capacity to invest in improving quality and lowering costs. Most physicians remain in solo or small group practices and have neither the capital nor organizational capacity to invest in health information systems, the implementation of care management protocols, or ongoing quality improvement initiatives. Hospitals or large medical groups are much better positioned to invest in such systems and to provide financial and technical support to physicians aligned with their institution.[88]

In another article, Elliott Fisher and others lay out how the ACO system would operate.[89]   They would utilize a "clear and specific spending benchmark for each ACO"[90] based upon "the most recent three years of per beneficiary total parts A and B spending for beneficiaries assigned to the ACO."[91]   They would also utilize performance measures.[92]   Currently, the measures would be quality-based, but might extend to outcomes in the future: "[W]e believe that these measures should rapidly move from the current generation of technical quality measures to focus on patient-level health outcome and experience measures that reflect ACOs' ability to deliver patient-centered care that is well coordinated across providers and improves outcomes for patients."[93]   However, the payment mechanism recommended here still

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84. *Id.*

85. *Id.*

86. *Id.*

87. *Id.* at 53.

88. *Id.*

89. Elliott S. Fisher, Mark B. McClellan, John Bertko, Steven M. Lieberman, Julie J. Lee, Julie L. Lewis & Jonathan S. Skinner, *Fostering Accountable Health Care: Moving Forward in Medicare*, 28 HEALTH AFF. 219, 219 (2009) [hereinafter *Fostering Accountable Health Care*].

90. *Id.* at 223.

91. *Id.*

92. *Id.* at 221.

93. *Id*. at 223.

creates a binary incentive: those ACOs that meet the performance standards are entitled to "shared savings,"[94] but the amount of this payment is not adjusted based upon an individual ACO's specific report of these statistics. In other words, as long as the performance targets are met, an ACO receives no additional savings for better performance.

In its June 2009 Report to Congress, MedPAC advocated the use of ACOs.[95] This was because "financial incentives would lead the ACO to judiciously constrain the use of health care services and capacity in contrast to the incentive in FFS payment systems to always increase the volume of services."[96] This report also explained how this would be implemented: "Providers in voluntary ACOs would continue to be paid standard FFS Medicare payment rates. Bonuses would depend on meeting both spending and quality targets."[97]

One study of the effects of coordination of care on health outcomes had discouraging results. Deborah Peikes and others concluded that essentially there were no differences in hospitalization rates: "Thirteen of the 15 programs showed no significant . . . differences in hospitalizations; however, Mercy had 0.168 fewer hospitalizations per person per year . . . and Charlestown had 0.118 more hospitalizations per person per year."[98] They also found that "none of the 15 programs generated net savings," and that "[t]hese programs had favorable effects on none of the adherence measures and only a few of many quality of care indicators examined."[99] Their results suggested that cost savings were unlikely, but that some cost-neutral improvements in "patients' well-being" could be possible.[100] Thus, while there are significant theoretical advantages in an ACO model, additional evidence is needed to determine their actual effects.

The Patient Protection and Affordable Care Act contains two sections directed at ACOs: Section 2706 of title II, the "Pediatric Accountable Care Organization Demonstration Project,"[101] and section

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94. PPACA, Pub. L. No. 111-148, § 3022, 124 Stat. 119, 395(2010) (amending title XVIII of the Social Security Act (42 U.S.C. §§ 1395-1395iii) by adding at the end § 1899, § 1899(a)(1)(B) (codified as amended at 42 U.S.C. § 1395jjj(a)(1)(B) (2010))).

95. *June 2009 MEDPAC Report*, *supra* note 33, at xiii.

96. *Id.*

97. *Id.* at 44.

98. Deborah Peikes, Arnold Chen, Jennifer Schore & Randall Brown, *Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care Expenditures Among Medicare Beneficiaries*, 301 JAMA 603, 603 (2009).

99. *Id.*

100. *Id.* at 615.

101. PPACA, Pub. L. No. 111-148, § 2706, 124 Stat. 119, 325 (2010).

3022 of title III, the "Medicare Shared Savings Program."[102] These will be discussed more below.

D. Bundling Payments for Episodes of Care

Other pricing reforms include "[c]hanging the method of payment for hospital care from reimbursement for individual services to prospectively set prices per case" on the basis of "diagnosis-related groups (DRGs)."[103] Extensions of this include "bundl[ing] payments for episodes of care," as advocated by Robert Mechanic and Stuart Altman,[104] and Stuart Guterman and others.[105]

The intention of this system would be to "encourage greater integration in the organization of health care delivery and the provision of more coordinated care to beneficiaries."[106] Under this system, "physician group practices," "hospital systems," and "integrated delivery systems (IDSs)" would receive a bundled payment.[107] These bundled payments could either be a "global fee for primary care," a "global DRG [diagnosis-related group] case rate for hospitalization," or a "global payment per enrollee [a risk adjusted, pure capitation model]."[108] To be entitled to receive these payments, providers would need to demonstrate that they meet certain quality standards, shown by "obtain[ing] category-specific certification or accreditation by organizations such as the Joint Commission or NCQA."[109] They would also include "[r]ewards for provider performance," for "providers who perform well and show improvement on relevant sets of performance metrics."[110]

They do note, however, certain impediments to implementing this system, including concerns about "the assumption of risk for large losses" and "the need to implement new systems to meet the requirements for participation and accreditation/certification—such as better implementation of evidence-based guidelines and rapid

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102. PPACA § 3022 (amending title XVIII of the Social Security Act (42 U.S.C. §§ 1395-1395iii) by adding at the end § 1899, § 1899 (codified as amended at 42 U.S.C. § 1395jjj (2010))).

103. S. E. Berki, *DRGs, Incentives, Hospitals, and Physicians*, 4 HEALTH AFF. 70, 70 (1985). *See also* RICK MAYES & ROBERT A. BERENSON, MEDICARE PROSPECTIVE PAYMENT AND THE SHAPING OF U.S. HEALTH CARE 40 (2006).

104. Mechanic & Altman, *supra* note 51, at 264.

105. Guterman et al., *supra* note 48, at 238.

106. *Id.*

107. *Id.* at 240.

108. *Id.* at 242-43.

109. *Id.* at 241.

110. *Id.* at 244.

performance reporting."[111]   The Patient Protection and Affordable Care Act contains one section directed at this alternative, section 3023: the "National Pilot Program on Payment Bundling."[112]

IV. REFORMS UNDER THE PATIENT PROTECTION AND AFFORDABLE CARE ACT AND THE HEALTH CARE AND EDUCATION RECONCILIATION ACT

All of these previous proposals play a significant role in the landmark health reform legislation package.[113] Pay-for-performance, under its "value-based purchasing" name, plays a prominent role in many sections.   Following up on provisions of the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) which "require[d] the Secretary of the Department of Health and Human Services to develop a plan to transition to a value-based purchasing program for Medicare payment,"[114] sections 3001, 3006, and 3007 of the Patient Protection and Affordable Care Act respectively require the establishment of pay-for-performance programs for hospitals,[115] "skilled nursing facilities and home health agencies,"[116] and individual physicians.[117]   These programs again reward medical service providers for the use of tests, vaccinations, and therapies specified by performance standards.[118]

Accountable care organizations (ACOs) are featured in sections 2706 of title II[119] and 3022 of title III[120] of the Patient Protection and Affordable Care Act. Section 2706 sets up a demonstration project for ACOs providing pediatric services. ACOs must meet "guidelines to

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111.   *Id.* at 247-48.

112.   PPACA, Pub. L. No. 111-148, § 3023, 124 Stat. 119, 399 (2010) (amending title XVIII of the Social Security Act (42 U.S.C. §§ 1395-1395iii) by inserting § 1866D (codified as amended at codified as amended at 42 U.S.C. § 1395cc-4 (2010))).

113.   As noted above, competitive pricing initially was part of the reform legislation, but was repealed by the second act.

114.   U.S. DEP'T HEALTH & HUMAN SERVS., DEVELOPMENT OF A PLAN TO TRANSITION TO A MEDICARE VALUE-BASED PURCHASING PROGRAM FOR PHYSICIAN AND OTHER PROFESSIONAL SERVICES 3 (2008), *available at* http://www.cms.gov/physicianfeesched/downloads/physicianvbp-plan-issues-paper.pdf.

115.   PPACA § 3001(o)(1)(A).

116.   *Id.* § 3006(a)(1).

117.   *Id.* § 3007(p)(1).

118.   *See generally* Mullen et al., *supra* note 52, at 16.

119.   PPACA § 2706.

120.   *Id.* § 3022 (amending title XVIII of the Social Security Act (42 U.S.C. §§ 1395-1395iii) by adding at the end § 1899, § 1899(a)(1) (codified as amended at 42 U.S.C. § 1395jjj(a)(1) (2010))).

ensure that the quality of care"[121] is high, and meet an "annual minimal level of savings"[122] in order to receive an incentive payment. Section 3022 sets up a "Medicare Shared Savings Program"[123] for ACOs.[124] In a similar manner, an ACO is entitled to "shared savings" if it "meets quality performance standards,"[125] and "if the estimated average per capita Medicare expenditures under the ACO for Medicare fee-for-service beneficiaries for parts A and B services, adjusted for beneficiary characteristics, is at least the percent specified by the Secretary below the applicable benchmark."[126]

It is important to note that, while these ACOs must meet a certain level of quality based on prescribed measures, this is only a threshold test. Once the ACO meets these measures, their incentive payment is completely unrelated to quality or outcomes of patient health, but rather is related to spending levels.[127] Consequently, this cost-based mechanism fails to provide a significant incentive to improve quality beyond the threshold levels or to specifically improve patient health outcomes.

Section 3023 sets up a "National Pilot Program on Payment Bundling."[128] This program makes payments for "integrated care during an episode of care provided to an applicable beneficiary around a hospitalization."[129] Providers eligible for this program include "a hospital, a physician group, a skilled nursing facility, and a home health agency."[130] These providers are paid "for the furnishing of applicable services and other appropriate services, such as care coordination, medication reconciliation, discharge planning, transitional care services, and other patient-centered activities."[131] These providers will also be required to report information on "quality measures" including a number

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121. PPACA § 2706(c)(1).

122. *Id*. § 2706(c)(2).

123. *Id.* § 3022.

124. It should be noted that health plans providing services under MA are not eligible for this program. PPACA § 3022 (amending title XVIII of the Social Security Act (42 U.S.C. §§ 1395-1395iii), § 1899(a)(1) (codified as amended at 42 U.S.C. § 1395jjj(a)(1)(2010))).

125. PPACA § 3022 (amending title XVIII of the Social Security Act (42 U.S.C. §§ 1395-1395iii), § 1899(d)(1)(A)(i) (codified as amended at 42 U.S.C. § 1395jjj(d)(1)(A)(i) (2010))).

126. PPACA § 3022 (amending title XVIII of the Social Security Act (42 U.S.C. §§ 1395-1395iii), § 1899(d)(1)(B)(i) (codified as amended at 42 U.S.C. § 1395jjj(d)(1)(B)(i) (2010))).

127. *June 2009 MEDPAC Report*, *supra* note 33, at 44.

128. PPACA § 3023.

129. *Id.* § 3023. In a similar manner, beneficiaries participating in MA are not eligible for this program. *Id.*

130. *Id.*

131. *Id.*

of measurements of health outcomes.[132] However, payments will not be adjusted according to performance on these quality measures.

The reform legislation includes a number of other provisions, including the "[r]equirement to maintain minimum essential coverage" by all individuals,[133] "employer responsibilities,"[134] and regulations of health insurance plans.[135] Many provisions relate to the financing of these policy changes. One such provision is the change to payment formula for MA, section 1102 of the Health Care and Education Reconciliation Act.[136] This provision modifies the amount paid to MA plans based upon Medicare fee-for-service rates.[137] It establishes a new benchmark that is equal to one hundred percent of the FFS rate for the area, multiplied by a factor that varies inversely with the relative costliness of the area.[138] It also provides for "percentage quality increases," i.e., bonus payments, for plans that meet certain quality standards, namely a ranking of four stars or higher (on a five-star scale).[139]

One more section of the health reform legislation should be addressed: Section 3021 of title III of the Patient Protection and Affordable Care Act.[140] This section "establish[es a] . . . Center for Medicare and Medicaid Innovation within" the Centers for Medicare & Medicaid Services.[141] The purpose of this Center would be "to test innovative payment and service delivery models to reduce program expenditures . . . while preserving or enhancing the quality of care."[142] This section perhaps provides an avenue for implementing the proposal presented in this article below.

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132. *Id.* (specifying specific measures including "(i) Functional status improvement; (ii) Reducing rates of avoidable hospital readmissions; (iii) Rates of discharge to the community; (iv) Rates of admission to an emergency room after a hospitalization; (v) Incidence of health care acquired infections; (vi) Efficiency measures; (vii) Measures of patient-centeredness of care; (viii) Measures of patient perception of care.").

133. *Id.* § 1501.

134. PPACA §§ 1511-1515.

135. PPACA , §§ 1001-1304.

136. HCERA, Pub. L. No. 111-152, § 1102, 124 Stat. 1029 (2010).

137. *Id.* § 1102 (c)(3)(B)(iii).

138. *Id.* § 1102(n)(2)(C)(ii) (amending title XVIII of the Social Security Act (42 U.S.C. § 1395w-23), § 1853(n)(2)(C)(ii)).

139. *Id.* § 1102 (c).

140. PPACA § 3021.

141. PPACA § 3021(a) (amending title XI of the Social Security Act (42 U.S.C. §§ 1301-1320e-2), § 1115A(a)(1)).

142. *Id.*

V. DETERMINING THE EFFICIENT METRIC FOR
HEALTH CARE PAYMENTS

In this section, we begin by explaining why our health care payment metric should be based solely on health outcomes and not include quality measures. We then examine obstacles to using health outcomes as the sole metric. Resolving these, we present a specific proposal where compensation depends on risk adjusted payments based solely on health outcomes.

A.   *Why We Need to Base Payments Solely on Health Outcomes*

With the elimination of the competitive pricing reform, all of the remaining payment system reforms in the health care reform legislation emphasize the use of quality measurements to improve incentives. In many cases, they combine this emphasis on quality with measures to reduce costs. These cost measures, however, are derived via a comparison with the costs under the inappropriate incentives of the fee-for-service system.

At first glance, these reforms seem pretty good. Better quality at lower cost—who would not want that? Unfortunately, further introspection reveals that these reforms continue to distort incentives.

The main problem is similar to what we saw before with pay for performance: these payment systems based on quality measurements create strong incentives to follow the guidelines without a direct connection as to whether they are appropriate for an individual patient. More often than not, these guidelines probably present the best approach to treating the patient. But individual variations are significant factors in practicing medicine. These quality measurements, however, may provide a disincentive for adaptations based on an individual patient's particular situation. Researchers recommending the use of ACOs recognize the fundamental incompleteness of quality measures because, as noted above,[143] they recommend transitioning in the future from "technical quality measures"[144] to greater incorporation of measures of health outcomes.

Instead of quality measurements, we will be better off moving exclusively to health outcomes metrics right away. As Robert Kane explains, "The 'outcomes' examined in outcomes research are more likely to approximate what one ultimately wants health care to achieve—

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143. *See supra* Part III.C.
144. *Fostering Accountable Health Care*, *supra* note 89, at 223.

improvements in functional status and quality of life."[145]   If these outcomes are our ultimate objective, then rewarding providers based on health outcomes themselves will generate appropriate incentives. Providers will still have an incentive to consult quality guidelines because those will lead to the best health outcomes in most cases. Meanwhile, for more idiosyncratic cases, providers will have the incentive to match the best treatment approach to their individual patient.

The other problem with these reforms is that, while they might not increase overall costs as much as a fee-for-service system, the continued use of the FFS cost structure as their ultimate frame of reference means that the path of overall costs will continue to rise, without any ceiling. As we will see later, a system based on health outcomes might provide an opportunity—though it will be politically contentious—to place a ceiling on this trend.

B.   Obstacles to Using Health Outcomes as the Metric

There are a number of obstacles to health outcomes as the determinant of how health providers are rewarded. Doing this will place significant risks on providers, frequently for factors upon which they may have little control.[146] We will address this problem more below,[147] but its solution depends upon applying these metrics to the appropriate level of providers.

Another significant obstacle is the deficiency of relevant current data on health outcomes. Some have noted a "lack of meaningful, actionable performance measures."[148] Mechanic and Altman note that although "process measures" such as the HEDIS data are available, "clinical outcome measures such as death and complication rates associated with surgery are more meaningful but are technically problematic."[149]

There may be a simple explanation for this lack of data: there simply has been no incentive to produce it.[150] With payments not dependent upon health outcomes, there is a strong disincentive for any single health provider to offer this data because, without a wide enough frame of reference, this data might open the provider up to criticism for

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145.   KANE, *supra* note 21, at 3.

146.   *Id.* at 6.

147.   *See infra* Part V.C.

148.   Mechanic & Altman, *supra* note 51, at 264.

149.   *Id.*

150.   Note that some of the reforms in the legislation do require the collection and reporting of health outcome data.

poor performance in health outcomes. This suggests that the provision of this information is a coordination problem, which might only be solved by a mandate under which all providers must provide this information.

There is a similar problem in environmental protection. Under a command-and-control environmental protection program, individual firms face disincentives to innovate in reducing pollution. If any firm innovates, the improvement may become one of the technologies required of each firm in that industry. In the end, the innovating firm is left with no advantage vis-à-vis its competitors, but faces possibly higher costs associated with the innovation.

In order to solve this problem, environmental regulators sometimes must impose "technology-forcing" regulations. These are regulations that require the adoption of environmental control technologies that reduce pollution below the amount possible at the time of the enactment of the regulations. As a result, "technology-forcing" regulations must have required implementation dates far into the future beyond the date of enactment.

This structure generates incentives for the development of improved control technologies. In the time between the date of enactment and the date of implementation, an external vendor (supplier) of control technologies may develop an improved technology that meets the future standard. Without the technology-forcing regulation, no individual firm would have had the incentive to purchase this technology, as noted above. On the other hand, the availability of the technology means that firms will be unable to get the requirement for future implementation reversed (which might happen if the technology does not develop). Consequently, individual firms will have strong incentives to purchase the innovative technology. This in turn means that the technology vendor will have a significant incentive to develop this technology, under the condition of the technology-forcing regulation.[151]

In a similar manner, compensating health providers on the basis of health outcome measurements would generate strong incentives to improve these measures. A particular health plan may feel that current measures are inappropriate indicators of its performance. With better measurements, it may expect to receive additional compensation for its

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151. In essence, this is a reversal of Say's law (which says that "Supply Creates its Own Demand"): here, demand generates its own supply.

performance. These expectations will provide an incentive for that plan to invest in improvements in health outcome measurements.

Our experience with quality measurements for health care suggests that these improvements may be feasible. As noted above, some suggested that the lackluster results of early pay-for-performance initiatives were due to inappropriate guidelines. Nonetheless, the continued use of these initiatives generated incentives to develop improved methods of evaluating quality. In a 2006 article, David Cutler noted:

> The most famous quality measurement initiatives are programs run by state governments that rate the quality of bypass surgery performed in their state. . . . Hospitals are required to submit to the state government information about the clinical risk factors of all patients receiving bypass surgery, and to indicate whether the patient died in the hospital or not. The state then estimates a regression model to adjust death for the severity of condition. Based on these regression models, hospital or physician residuals are calculated and reported.[152]

Just as with quality measurements, we can expect these incentives to lead to significant improvements in measurements of health outcomes.

Yet another obstacle with transitioning to a health-outcomes-based system would be the difficulty in determining specifically how such a system would operate. While it might seem simple to "reward outcomes," doing so in practice is complicated by the need to do risk adjustments and identify progress in outcomes. In the next section, we present a specific proposal that lays out one methodology in rewarding providers based on outcomes. In doing so, we discover an additional problem that was alluded to earlier: political opposition to policy choices embedded in the reward structure.

C. Proposal

In this section, we propose one methodology for creating a payment system that rewards health providers for their effects on health outcomes. In doing so, we need to ensure that our proposal includes risk adjustment.[153]   Risk adjustment factors adjust the amount of compensation a plan receives depending on the initial health

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152. David M. Cutler, *The Economics of Health System Payment*, 154 DE ECONOMIST 1, 13 (2006).

153. Risk adjustment is necessary to prevent "cherry-picking" by health plans. Cherry-picking is where a health plan selectively enrolls only healthier beneficiaries.

characteristics of their enrollees. These adjustments are essential. Cutler notes,

> If insurers know that some elderly persons are healthy and others are sick, they will attempt to select the healthy and repel the sick. This may be more attractive than managing care more efficiently. I would attempt to limit risk selection by age-adjusting premiums and implementing more general risk adjustment methods.[154]

Similarly, Berenson and Dowd have noted, "Initially, the AAPCC adjusted only for beneficiaries' age, sex, disability, and institutional and Medicaid Status, and their county of residence," but leaving out "health status variables" created opportunities for selection bias by health maintenance organizations (HMOs).[155] The methodologies of risk adjustment have been developed for almost twenty years.[156] Medicare has been using risk adjustment in consultations with health plans for over ten years,[157] and risk adjustment also is included in many sections of the health reform legislation.[158]

To provide proper incentives, this health payment system should reward providers for their differential effect on health outcomes. In order to construct an estimate of this differential effect, we need to compare the specific providers' set of health outcomes with some baseline. To develop this baseline, we can turn to "comparative effectiveness" research in medical practice.[159] This research examines

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154. David M. Cutler, *Cutting Costs and Improving Health: Making Reform Work*, 14 HEALTH AFF. 161, 166 (1995). *See also* Cutler, *supra* note 35, at 54 (citing Michael Rothschild & Joseph E. Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information*, 90 Q. J. ECON. 629 (1976); David M. Cutler & Richard Zeckhauser, *The Anatomy of Health Insurance*, (Nat'l Bureau of Econ. Research, Working Paper No. 7176, 1999), *available at* http://www.nber.org/papers/w7176.pdf.

155. Berenson et al., *supra* note 71, at 31 (citing Randall S. Brown, Dolores Gurnick Clement, Jerrold W. Hill, Sheldon M. Retchin & Jeanette W. Bergeron, *Do Health Maintenance Organizations Work for Medicare?*, 15 HEALTH CARE FIN. REV. 7 (1993).

156. *See, e.g.*, RANDALL S. BROWN, JEANETTE W. BERGERON, DOLORES GURNICK CLEMENT, JEROLD W. HILL & SHELDON M. RETCHIN, THE MEDICARE RISK PROGRAM FOR HMOS –FINAL SUMMARY REPORT ON FINDINGS FROM THE EVALUATION (1993), *available at* http://aspe.hhs.gov/pic/reports/cms/4934.pdf.

157. Risk adjustment became part of Medicare policy under the Balanced Budget Act of 1997. *See* Joel S. Weissman, Melissa Wachterman & David Blumenthal, *When Methods Meet Politics: How Risk Adjustment Became Part of Medicare Managed Care*, 30 J. HEALTH POL. POL'Y & L. 475 (2005).

158. *See* PPACA, Pub. L. No. 111-148, § 1343, 124 Stat. 119, 212 (2010).

159. *See, e.g.*, PETER R. ORSZAG, CONG. BUDGET OFFICE, RESEARCH ON THE COMPARATIVE EFFECTIVENESS OF MEDICAL TREATMENTS: ISSUES AND OPTIONS FOR AN EXPANDED FEDERAL ROLE, Preface (2007), *available at* http://www.cbo.gov/ftpdocs/88xx/doc8891/12-18-ComparativeEffectiveness.pdf.

the evidence from published research reports on the effectiveness of medical treatment options.[160] Some have used this research to develop models of treatment options. One such model is the Archimedes Model, developed by David Eddy and others.[161] This Model is a "full-scale simulation model of human physiology, diseases, behaviors, interventions, and healthcare systems."[162] As a model, the Archimedes Model takes inputs such as populations and health care systems; it then can determine the effects of interventions; and finally, it can then predict optimal health outcomes across these different interventions.[163] Consequently, this model can then be used to develop a baseline for the prediction of health outcomes for a given population.[164]

With these considerations in mind, we will now specify a new payment model for health care. We begin with some definitions of mathematical variables. Let Q_i be the quantity of individuals served by a particular health care provider, i. Let P_i be a vector representing the characteristics of this population. It will be of dimension Nx1, where N is the number of characteristics. These characteristics will include particular characteristics utilized for risk adjustment. Let Ω_i be a vector representing the health outcomes experienced by this population over a particular time period. It is of dimension Mx1, where M is the number of outcomes measured. V will represent the assessed valuation of outcomes, and will be of dimension 1xM. A will be a matrix representing the baseline treatment parameters, as determined by a comparative effectiveness model such as Archimedes, and will be of dimension MxN. δ_i will be a matrix representing the differential treatment parameters of health care provider i (as contrasted with the baseline model), and will be of dimension MxN. This matrix is not directly observed. Finally, RABP will be a vector representing risk-adjusted base payments to providers, and will be of dimension 1xN, i.e., one component corresponding to each population characteristic.

Average health outcomes observed for provider i will follow this equation:

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160. *Id.*

161. Archimedes—Founders, ARCHIMEDES, http://archimedesmodel.com/about-archimedes-incorporated.html (last visited Mar. 31, 2011).

162. What is the Archimedes Model?, ARCHIMEDES, http://archimedesmodel.com/archimedesmodel.html (last visited Mar. 31, 2011).

163. *See generally id.*

164. *See generally id.*

$$\Omega_i = A * P_i - \delta_i * P_i$$
$$(1)$$

This equation states that the health outcomes observed for provider i will be diminished by the deviations of provider i as compared with the baseline.[165]

Health care providers will be paid a base amount (RABP), and then the payment will be diminished according to a valuation in the deviation in treatment:

$$\text{Average Payment to Provider i} = RABP * P_i - V * \delta_i * P_i$$
$$(2)$$

Although we do not observe δ_i, we can use the equation (1) to solve for an observable formula:

$$\delta_i * P_i = A * P_i - \Omega_i \quad =>$$
$$\text{Average Payment to Provider i} = RABP * P_i - V * (A * P_i - \Omega_i)$$
$$(3)$$

Thus, the total payment to provider i will be:

$$\text{Total Payment to Provider i} = Q_i * [RABP * P_i - V * (A * P_i - \Omega_i)]$$
$$(4)$$

Thus, providers will receive a payment that depends on the number of people serviced by them, a baseline amount, the particular risk characteristics of their population, and the health outcomes achieved by them. Providers observe all of the variables in equation (2),[166] including the providers' own choice of δ_i. They therefore can make optimal decisions for δ_i, balancing their costs with their payment benefits.

D.   *Political Considerations Embedded in Vector V*

While this payment mechanism makes logical sense, we need to examine one component further: vector V. V specifies payment levels for each outcome from 1 to M. In essence, each element of this vector then is a political decision: How much should each outcome be

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165. Note the provider may also have beneficial deviations which could lead to improved health outcomes.

166. And in effect, equation (4).

rewarded? As we saw before with "competitive pricing," specification of V may face significant political opposition. Some may question the morality of placing a dollar value on a particular health outcome, while others may question why some outcomes are worth more than others.

Nonetheless, it is essential to recognize that health care resources are scarce, and eventually, some choices must be made in allocating them. As a result, there must be tradeoffs between achieving some outcomes instead of others. Although contentious, specifying V will improve the transparency of these tradeoffs. Doing so may also provide an opportunity to limit total expenditures on health care.

VI. IDENTIFICATION OF APPROPRIATE SCALE

In addition to specifying the payment formula, we also need to designate the individuals and institutions responsible for different stages of this payment reform policy. These decisions are closely related to concerns about federalism in health care policy.

A. Federalism and Economies of Scale

While Michael Leavitt was Secretary of Health and Human Services (HHS), he described the essential federalist character of health care: "Efforts to improve the quality and cost of health care start with national standards, but end with local control."[167] To enable this, Leavitt and HHS created "Chartered Value Exchanges" (CVEs) in which local community health care leaders would collaborate to improve performance and efficiency in the delivery of health care.[168]

The need for these national standards is shown by the literature examining "geographic variation" in Medicare costs.[169] This research finds significant geographic variations in per capita spending by Medicare: "Per capita Medicare expenditures vary almost three-fold between the highest and lowest spending areas."[170] This research tries to determine the causes of this variation, to see whether it is "due to

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167. *The Cornerstone: Building a Value-Driven Health-Care System for America*, DEP'T HEALTH & HUMAN SERVS. (2007), http://archive.hhs.gov/valuedriven/cornerstone9.pdf.

168. *See id.*; *Chartering Value Exchanges*, DEP'T HEALTH & HUMAN SERVS., http://archive.hhs.gov/valuedriven/communities/valueexchanges/exchanges.html (last visited Mar. 31, 2011).

169. *See, e.g.*, Marsha Gold, *Geographic Variation in Medicare per Capita Spending: Should Policy-Makers be Concerned?*, SYNTHESIS PROJECT RESEARCH REP. NO. 6, Introduction (2004), http://www.rwjf.org/files/research/RWJF%20Medicare%20SYNTHESIS%20July04.pdf.

170. *Id.* at 4.

differences in population mix and prices across areas,"[171] or whether it is something else. This research concludes that "less than half the variation in spending across areas is explained by population mix and differences in the price of individual services."[172] Instead, this research finds that "[m]ore than half the variation in spending reflects differences in the use of services."[173] Nonetheless, while certain areas are spending more than others, "existing research indicates that people in higher spending areas do not receive better care."[174]

However, the question then becomes, how can we enable local control if we have national standards? This is essentially a question of whether decentralized enforcement is possible. In previous research on water quality, it was found that decentralized enforcement may only be feasible when "some metric can be found that is directly related to the enforcement actions of the decentralized agencies."[175] These metrics are available for health plans, and hence we may be able to capture some of the benefits from decentralized enforcement.

In order to determine whether this is the optimal approach for this new payment reform policy, we will apply a federalism framework from an earlier article.[176] To simplify analysis, this framework divides the examination of the appropriate locus across three institutions: enactment, implementation, and enforcement.[177] Assessing the

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171. *Id.* at 5.

172. *Id.*

173. *Id.* at 7.

174. *Id.* at 9. *See also* Elliott S. Fisher, David E. Wennberg, Thérèse A. Stukel, Daniel J. Gottlieb, F. L. Lucas & Étoile L. Pinder, *The Implications of Regional Variations in Medicare Spending, Part 1: The Content, Quality and Accessibility of Care*, 138 ANNALS INTERNAL MED. 273 (2003) [hereinafter *Implications of Regional Variations*]; John E. Wennberg, Elliott S. Fisher & Jonathan S. Skinner, *Geography and the Debate over Medicare Reform*, 21 HEALTH AFF. 96 (2002).

175. Dale B. Thompson, An Examination of the Consequences of Political, Administrative, and Legal Institutions on the Implementation and Performance of Environmental Policies 63 (1998) (unpublished Ph.D. dissertation, Stanford University) (on file with author). This chapter analyzed "whether a centralized or decentralized enforcement body is most appropriate for a policy directed at farming practices of members of irrigation districts." *Id.* at 59. A decentralized enforcement policy for irrigation districts was possible, because these "districts typically collect the runoff of their members in a system of pipes and canals, and then discharge the collective runoff into water bodies at a few particular points," thereby enabling monitoring of the collective discharge. *Id.* at 60. An individual district could then receive incentives based on its collective discharge, which would in turn provide an incentive for the district to encourage and possibly enforce best management practices by its members. *Id.*

176. Dale B. Thompson, *Optimal Federalism Across Institutions: Theory and Applications from Environmental Policies and Health Care*, 40 LOY. U. CHI. L.J, 437, 437 (2009).

177. *Id.*

appropriate scale is then done by "examining economies and diseconomies of scale inherent in each of these institutions."[178]

For a health care payment system paid with public funds, enactment would mean drafting the legislation that would set the general objectives and payment mechanisms, and providing the funding for these mechanisms. Implementation would include determining the precise variables that will be utilized in this mechanism, overseeing the application of these mechanisms, and then adjusting the variables as needed to achieve the objectives of the legislation. Enforcement would mean utilizing the payment scheme to affect the delivery of health care, i.e., identifying what type of parties are paid under this payment scheme. For each of these components, we then examine economies and diseconomies of scale to determine the appropriate locus.

B.   Locus of Enactment, Implementation, and Enforcement

We now examine the optimal scale for each of these stages. For enactment, there are significant economies of scale. Implementing large scale programs such as Medicare is significantly costly.[179] Due to large differences in incomes across different localities, financing these programs at a national level will be more feasible, and involve fewer disincentives due to higher taxes.[180]

Also, we may desire to have consistency in the objectives for this health policy: we may want to maintain and possibly improve the health status of eligible individuals across the country, regardless of where they live. As noted above, many have pointed to the problems of significant geographic disparities in spending on health care and the delivery of health services.[181] Having a consistent policy across the country would significantly reduce many of these geographic disparities. Consistency in objectives would therefore lead to economies of scale in enactment.[182]

On the other hand, some may argue that we have inconsistencies in objectives: in allocating scarce resources, one area may prefer to devote more resources to health care than to other goods and services. Despite this possibility, the ability of a state or locality to supplement spending on health care if it chooses means that this possible diseconomy will be less significant. Consequently, we conclude that, overall, these

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178. *Id.*

179. *Id.* at 451 ("The cost of a policy is minimized by having as small a scale as possible.").

180. For more on this economy, see generally *id.*

181. *See* GOLD, *supra* note 169, at 9; *Implications of Regional Variations*, *supra* note 174, at 285; Wennberg et al., *supra* note 174, at 96.

182. *See generally* Thompson, *supra* note 176.

economies suggest that this policy should be enacted at the federal level rather than at a state or local level.

If enactment is done at the federal level, this policy could be implemented either at the federal level or at a state level.[183] There can be diseconomies of scale in implementation, because of the possible benefits of experimentation across different states, i.e., the laboratories of democracy.[184] However, one of the problems noted earlier was the significant geographic variation in Medicare spending.[185] Again, to enable more consistency in the application of this payment system, implementation should also be done at the federal level, with a federal agency, Centers for Medicare and Medicaid Services (CMS), determining the specific variables to be used for assessing quality and outcomes and the parameters related to these variables.

Enforcement is a key concern here. We could enforce at the lowest level—the level of the individual doctor. Other choices include practice level (groups of some doctors) payment, a level similar to an accountable care organization, the level of a health plan, or possibly a state-wide level. There is an inherent tradeoff between flexibility and risk in enforcing these policies. A policy that rewards a particular set of health care actions such as P4P involves very little risk for doctors, but the net effect of this policy is to diminish flexibility as it rewards that particular set of actions and by extension discourages others.

On the other hand, an outcomes-based policy enables a wide array of health care actions, as long as these actions achieve the desired outcomes. Nonetheless, these policies bring with them significant risks. Health outcomes are dependent on a number of factors outside the control of individual doctors. While risk adjustment can correct for some of these factors, a number of other factors will remain. Hence, in an outcomes-based payment system, the health providers will necessarily face significant risks that their payment depends on factors outside of their control. Larger organizations can bear risk more effectively, and so there is an economy of scale here.

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183. A federal policy can be implemented at the state level by requiring states to develop implementation plans, with the provision that if a state fails to develop an appropriate plan, a federal agency will then be responsible for implementing the policy in the state. This provides a significant incentive for states to develop their own implementation plan.

184. *See* New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) ("It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."). *See also* Thompson, *supra* note 176.

185. *See* GOLD, *supra* note 169, at 9; *Implications of Regional Variations*, *supra* note 174, at 285; Wennberg et al., *supra* note 174, at 96.

Another consideration is the ability of the enforcement body to utilize decentralized enforcement. As noted above, decentralized enforcement can be ineffective without a metric that depends on the enforcement actions of the decentralized body. However, in this case, we do have such a metric in the measures of health outcomes. While decentralized enforcement is possible here, we still need to examine related economies and diseconomies.

In the end, individual patients in consultation with their personal doctors make the ultimate decisions on health care. These decisions consist of choices on the application of particular medical procedures and treatments, along with lifestyle choices. Providing an incentive to improve health outcomes will therefore generate incentives to determine appropriate medical procedure and treatment options, provide informed recommendations over these options based on the individual patient's particular circumstances, and to encourage beneficial lifestyle choices. The first two of these acts are done directly by individual doctors, and the third frequently involves acts of individual doctors. Consequently, any payment system whose enforcement locus is above the individual doctor level will necessarily depend on decentralized enforcement, with corollary incentive systems directed at individual doctors and individual beneficiaries.

Assessing the desirability of treatment options and lifestyle choices may vary depending on locality, custom, and other individual aspects. As a result, these corollary incentive systems will need to be appropriately tailored to the individual circumstances of doctors and beneficiaries. As the number of doctors and beneficiaries increases, this tailoring becomes more complex. Consequently, this will lead to a diseconomy of scale in enforcement. In the next section, we will balance these economies and diseconomies in enforcement and conclude that the appropriate locus of enforcement will be at the plan level.

C. *Why Enforce at Plan Level*

Enforcement could take place at a number of different levels. It could be done at the level of individual doctors or group practices. Accountable care organizations could also be the focus, directly receiving the payments based on health outcomes, and then using decentralized enforcement to create incentives among its practitioners to improve outcomes. Focusing on ACOs would provide many benefits for both effectiveness and efficiency, as this would enable coordination of care. Finally, we could enforce at the health insurance plan level, again relying upon decentralized enforcement.

We would face a number of problems if we chose to enforce at the level of individual doctors or group practices. Doctors are significantly concerned about the risks they may face under non fee-for-service payment mechanisms. Ronald Castellanos, a commissioner on MedPAC, noted:

> [P]roviders recognize a need to change Medicare fee-for-service incentives and some inquiries into ACOs have been made in his area. "But then the doctors in my community look at me and say, 'Why do you want to do this? Why do you want to move away from what we call a very robust, perhaps overly funded in some respects, less-risk program to go into something like this? They say what's the incentive that I have just to improve quality and resource use?"[186]

As Elliott Fisher and others noted, individual doctors do not want to face risks associated with external factors: "[P]roviders [prefer] to be held accountable only for care that is within their direct control."[187] This is also related to doctors' preference for autonomy: "Physician practice and professional identity in the United States have long been characterized by a high degree of professional autonomy and a culture of individual responsibility . . . . Many physicians will resist the notion of accepting a degree of responsibility for the care of all patients within their local delivery system."[188]

Instead of directing a policy at individual doctors because of the risks entailed, we need to direct the policy at a larger organization. There are certainly a number of variables affecting health outcomes that are not in the control of individual doctors. While some of these may be accounted for through the use of risk adjustment, many will remain. However, these individual risks can be balanced out when a large enough sample size is used.[189] Within these large samples, individuals with unobserved negative characteristics are balanced by other individuals with unobserved positive characteristics. The larger the

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186.   Jane Norman, *MEDPAC Probes Effectiveness of Accountable Care Organizations*, WASH. HEALTH POL'Y WK. IN REV., Apr. 13, 2009, *available at* http://www.commonwealthfund.org/Content/Newsletters/Washington-Health-Policy-in-Review/2009/Apr/April-20-2009/MEDPAC-Probes-Effectiveness-of-Accountable-Care-Organizations.aspx.

187.   Fisher et al., *supra* note 60, at 44. *See also* KANE, *supra* note 21, at 5.

188.   Fisher et al., *supra* note 60, at 54. *See also* Thomas P. Miller, Troyen A. Brennan & Arnold Milstein, *How Can We Make More Progress in Measuring Physicians' Performance to Improve the Value of Care?*, 28 HEALTH AFF. 1429, 1429 (2009) (noting that "many physicians resist individual attribution").

189.   *See* KANE, *supra* note 21, at 7 ("Outcomes are essentially probability statements. Because outcomes can be influenced by many different factors, one should not try to judge the success of any single case; instead outcomes are addressed in the aggregate.").

sample size, the greater the probability that this balancing can occur.[190] While physician groups may service many more patients than individual doctors, we have seen that even large physician groups do not provide a sufficiently large sample size: "Two years' experience by the California P4P program, however, reveals that the requisite claims data often are incomplete or poorly coded and that even large physician groups have too few patients experiencing most types of episodes to permit statistically valid measurement for public reporting and incentive payment."[191]

ACOs may be sufficiently large enough to enable this sharing of risks. The minimum size for an ACO recommended in the June 2009 MedPAC report was "at least 5,000 patients."[192] It is more likely that health insurance plans would meet this need. Health plans carry a very large number of enrollees. In a survey conducted by America's Health Insurance Plans in 2001, the average number of "HMO/POS enrollees per health insurance plan was 161,186 while the average number of Medicaid HMO enrollees was 93,698, and the average number of Medicare HMO enrollees was 58,822."[193] For this economy of scale, health insurance plans' significantly larger size than even ACOs gives them an advantage.

In addition to large sample sizes, we will also need to look to organizations that are prepared to respond to changes in financial incentives. Charles Kahn notes that "payment reform succeeds in achieving its intended result only when the targets of that reform are organizationally and culturally able to meet the mandate of reformed payment."[194] These organizations will need the flexibility to adjust and adapt to what their data implies for their effectiveness at achieving desired health outcomes.

ACOs should be ready to adapt to changes in incentives. They are designed, in particular, to be large enough to enable the coordination in health care needed to achieve better outcomes.[195]

Health plans also should be prepared to respond to changes in financial incentives. As profit-driven organizations, there will be no

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190.   *See id.* ("Because outcomes rely on group data, there must be enough cases to analyze.").

191.   Robinson et al., *supra* note 63, at 1438.

192.   *June 2009 MEDPAC Report*, *supra* note 33, at 40.

193.   AMERICA'S HEALTH INS. PLANS, 2002 AHIP SURV. HEALTH INS. PLANS 3 (2004), *available at* http://www.ahipresearch.org/pdfs/2_2002SurvChartBook.pdf. These averages were over the 338 health plans in the sample. *Id.*

194.   Charles N. Kahn III, *Payment Reform Alone Will Not Transform Health Care Delivery*, 28 HEALTH AFF. 216, 217 (2009).

195.   *See June 2009 MEDPAC Report*, *supra* note 33, at 51-52.

stigma attached to responding to these direct financial incentives. Furthermore, health plans have significant flexibility. Bryan Dowd and Robert Berenson explain many of the benefits of private plans:

> Private plans face no such constraints; like any private industry, plans have full discretion to spend to improve efficiency or respond to consumers' preferences, and they do not have to live within arbitrarily separate administrative and service budgets. Not only can private plans increase administrative spending when there is a positive return on that investment, they can spend even more if doing so provides services for which their enrollees are willing to pay. For example, a private plan might add more staff to its telephone or Internet helplines to reduce waiting times, if enrollees were willing to pay higher premiums for the improved service. The incentive for private health plans to make such investments is fairly clear: the threat of reduced enrollment. The government's incentive is less clear.
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> . . . .
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> Private health plans, on the other hand, enjoy considerable freedom to negotiate contracts with providers and to test innovative care management and payment strategies. Private plans also may be more successful at some types of innovation than the CMS.[196]

This ability of plans to adopt innovative care management tools is echoed by researchers at the U.S. Department of Human Services: "Many believe that private coordinated care plans are in a position to implement such programs and better tailor care to individual beneficiaries' needs."[197]

While both organization types may be prepared to respond to changes in financial incentives, ACOs may have some advantages over health plans due to a diseconomy of scale related to decentralized enforcement. The capability to use decentralized enforcement to develop appropriately tailored incentives will depend on the organizations' familiarity with the particular environment. An ACO would be located in a single locality, whereas health insurance plans will frequently be spread across multiple localities. Informational needs to develop decentralized incentives will mean that it will be easier to tailor incentives for doctors participating in an ACO than for a health plan.[198]

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196. Berenson et al., *supra* note 71, at 36.
197. PAYMENT FOR MA PLANS, *supra* note 3, at 25.
198. The difficulties of managing large networks of doctors can be seen by examining the challenges faced by diversified health organizations such as UnitedHealth Group.

On the other hand, ACOs' more localized nature can also be a disadvantage. There are likely to be significant unobservable[199] regional differences that affect health outcomes. In an article about the controversy surrounding the possible overstatement of achievable health-care cost savings published in the Dartmouth Atlas of Health Care, the authors stated, "But the real difference in costs between, say, Houston and Bismarck, N.D., may result less from how doctors work than from how patients live. Houstonians may simply be sicker and poorer than their Bismarck counterparts."[200] Consequently, ACOs who are located in a single locality will then face higher risks than health plans due to these unobservable regional differences.

These risks and other risks associated with unobservable causes of health outcomes are likely to be amplified in the nascent development of health outcomes metrics. As argued above, the dependency of payments on health outcome metrics should lead to the refinement and improvement of these metrics. As a result, these risks will be reduced. However, at this point in time, these measures remain incomplete, and the significantly larger size of health plans compared with ACOs gives health plans an important advantage in being able to spread these risks.

When all of these economies and diseconomies of scale are considered, it seems that, at this point in time, health insurance plans' better ability to spread these risks outweighs ACOs' easier task of tailoring decentralized incentives. As a result, for now, we should direct enforcement of this new payment system based on health outcomes to health insurance plans.

VII. APPLYING THIS PAYMENT SYSTEM TO MEDICARE ADVANTAGE

Thus, we have seen that this payment system should be enacted and implemented at the federal level, with the payments directed to health insurance plans. Health plans will then utilize decentralized enforcement to provide direct incentives to their participating health providers to improve health outcomes. The question then arises, where could we apply this payment system? A natural application of this system would be to MA.

MA is the program under which Medicare beneficiaries can choose a private health plan to supply their medical care.[201] The private plan

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199. I.e., differences that cannot be accounted for in risk adjustments.

200. Reed Abelson & Gardiner Harris, *Study Cited for Health-Cost Cuts Overstated Its Upside, Critics Say*, N.Y. TIMES, June 1, 2010, at A1, A18.

201. *See* PAYMENT FOR MA PLANS, *supra* note 3, at v.

then contracts with doctors and hospitals to provide health care services.[202] The MA program had its beginning as the "Medicare + Choice" program, which was started under the Balanced Budget Act of 1997.[203] Under the Medicare Modernization Act of 2003, the name of the program was changed to MA.[204] The reach of the program is now fairly extensive: "About 22 percent of Medicare beneficiaries were enrolled in MA plans in 2008 and all beneficiaries have access to an MA plan in 2009."[205] Given that Medicare spending itself represents twenty-two percent of the entire national spending on health care in 2007,[206] MA on its own is responsible for approximately four to five percent.

Prior to the recent health reform legislation package, health plans were paid using a capitation model under MA: "The annual per capita rate of payment for each class of Medicare enrollees is equal to 95 percent of the AAPCC [adjusted average per capita cost] (as determined under the provisions of §417.588) for that class of Medicare enrollees."[207] Under a capitation payment, a plan is paid a certain amount for each enrollee, but then the plan bears the risk if average spending exceeds the capitated amount. MA does adjust these payments based on risk adjustment factors, such as geographic, enrollment, age, sex, disability status, and "welfare and institutional status."[208]

These capitation rates are determined through a bidding process.[209] Plans submit bids for their expected average costs, and then the bids are compared with county-level benchmarks.[210] If the bids exceed the benchmark, then the plan's enrollees must be charged the excess as a premium.[211] If bids are lower than the benchmark, the "plan receives 75% as a rebate, which must be returned to enrollees in the form of additional benefits or reduced premiums."[212]

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202. Participating plans must offer a defined bundle of benefits, but may provide additional ones.

203. *Medicare Advantage Fact Sheet*, KAISER FAMILY FOUND. 1 (2009), http://www.kff.org/medicare/upload/2052-12.pdf [hereinafter *MA Fact Sheet*].

204. *See* Ctr. for Medicare Advocacy, *Summary of Medicare Act of 2003*, (2004), http://www.nls.org/conf2004/summary-medicare-act-2003.htm.

205. MARCH 2009 MEDPAC REPORT, *supra* note 6, at xix.

206. MEDICARE PAYMENT ADVISORY COMM'N, A DATA BOOK: HEALTHCARE SPENDING AND THE MEDICARE PROGRAM 5 (2009), *available at* http://www.medpac.gov/chapters/ Jun09DataBooksec1.pdf.

207. CMS Payment to HMOs Rule, Determination of Rate, 42 C.F.R. § 417.584(b)(1) (2010).

208. CMS Computation of Adjusted Average Per Capita Cost Rule, 42 C.F.R. § 417.588 (2010).

209. *See* PAYMENT FOR MA PLANS, *supra* note 3, at 7.

210. *Id.*

211. *Id.*

212. *MA Fact Sheet*, *supra* note 203, at 2.

Large plans play a significant role in MA: "Three firms—UnitedHealthcare, Humana, and Kaiser—plus firms affiliated with BCBS [Blue Cross Blue Shield] account for more than half (53 percent) of MA enrollment at the end of 2007."[213] In addition to these large plans, there have been many new entrants recently: "The number of firms offering PFFS plans has more than quadrupled over the past three years."[214] However, some of these recent entrants provide lower quality care than more established plans: "Quality is not uniform among MA plans. . . . More recent plans have lower rankings on many measures."[215]

Payment rates for MA plans have exceeded the average costs under the traditional fee-for-service structure of traditional Medicare:[216] "MA payments per enrollee are projected to be 114 percent of comparable FFS spending for 2009." [217] These higher payments in turn allow the plans to "offset cost sharing for Medicare benefits and cover additional services that traditional Medicare is not authorized to offer."[218] These benefits have had a significant effect on the growth of MA.[219]

MedPAC recently advocated payment system reforms for MA.[220] MedPAC was concerned that the payment rates for MA were set too high: "Instead of encouraging innovative plans, the current MA payment system encourages inefficient plans, because the benchmarks used as bidding targets are set too high, and plan payments are not linked to performance."[221] Consequently, many, including the Obama Administration, recommended reducing payments to MA plans.[222] MedPAC suggested a variety of revised methods to calculate MA benchmarks.[223]

Included in these options was the use of competitive bidding. A policy paper issued by researchers at the U.S. Department of Human Services suggested, "For a number of reasons, moving away from

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213. Marsha Gold, *Medicare Advantage in 2008*, KAISER FAMILY FOUND., ii (2008), http://www.kff.org/medicare/upload/7775.pdf [hereinafter *MA in 2008*].

214. *Id.*

215. MARCH 2009 MEDPAC REPORT, *supra* note 6, at 252.

216. *See MA in 2008*, *supra* note 213, at iii-iv.

217. MARCH 2009 MEDPAC REPORT, *supra* note 6, at xix.

218. *MA in 2008*, *supra* note 213, at iv.

219. *Id.*

220. *June 2009 MEDPAC Report*, *supra* note 33, at 155.

221. *Id.* at 202.

222. *See* OFF. MGMT. & BUDGET, *supra* note 73, at 69. *See also* PAYMENT FOR MA PLANS, *supra* note 3, at vi (describing five options for changing the benchmarks used to pay MA plans).

223. *June 2009 MEDPAC Report*, *supra* note 33, at 184-99. *See also* PAYMENT FOR MA PLANS, *supra* note 33, at 21 (noting three other rationales for MA plans receiving a higher average payment than fee-for-service plans).

administered benchmarks to ones set through a competitive bidding process would be a preferred method for modifying current payments."[224]

As noted above, the health care reform legislation package included a number of changes to MA. Payment rates are scheduled to be reduced, and a number of new regulations apply to health plans participating in MA. Nonetheless, the basic structure remains: health plans still receive a risk-adjusted per-capita payment for each beneficiary that enrolls with them.

The proposal presented by this article would require additional amendments to part C of title XVIII of the Social Security Act.[225] Under this proposal, large health plans participating in MA would be required[226] to submit health outcomes data, and then receive their compensation solely on the basis of these health outcomes metrics, after appropriate risk-adjustments. Health plans under MA already submit much of the data needed here: "MA plans are required to submit several types of data on quality measures, including: Healthcare Effectiveness Data and Information Set (HEDIS), Consumer Assessment of Healthcare Providers and Systems (CAHPS), and Health Outcomes Survey (HOS)."[227] Population data is also collected to determine risk adjustment factors, under the current Centers for Medicare and Medicaid Services Hierarchical Condition Category (CMS-HCC) risk adjustment system.[228]

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224. PAYMENT FOR MA PLANS, *supra* note 3, at vi (noting, however, that "there are a number of important policy questions to address with regard to the exact structure of the bidding process and potential competition with the traditional program").

225. 42 U.S.C. §§ 1395W-21-1395w-28 (2010).

226. While a voluntary approach could work, the uncertainties involved imply that many plans might choose to continue in the more certain per capita payment system. Significant participation would probably be needed in order to get advancements in health outcomes metrics. As a result, a mandatory approach may be necessary to make the program achievable in the long run.

227. PAYMENT FOR MA PLANS, *supra* note 3, at 7. *See also* memorandum from Cynthia G. Tudor, Director, Medicare Drug Benefit and C & D Data Group, Ctrs. for Medicare & Medicaid Servs, 2009 HEDIS, HOS and CAHPS Measures for Reporting by Medicare Managed Care Contractors, 1-2 (Dec. 9, 2008), https://www.cms.gov/SpecialNeedsPlans/Downloads/ HEDIS09Measures_120908.pdf (noting that HMOs and preferred provider organizations [PPOs] are required to submit this data for 2009, and that private fee-for-service organizations [PFFS] will be required to submit this data in 2010).

228. *See* JAMES M. VERDIER, MEDICARE ADVANTAGE RATE SETTING AND RISK ADJUSTMENT: A PRIMER FOR STATES CONSIDERING CONTRACTING WITH MEDICARE ADVANTAGE SPECIAL NEEDS PLANS TO COVER MEDICAID BENEFITS 8 (2006), *available at* http://www.chcs.org/usr_doc/ Medicare_Advantage_State_Primer.pdf. For details on the specific factors utilized, see Ctrs. for Medicare & Medicaid Servs., Announcement of Calendar Year 2007 Medicare Advantage Capitation Rates and Medicare Advantage and Part D Payment Policies, Enclosure IV (2006),

As the federal agency responsible for implementing this policy, the CMS would then be responsible for using this data to compensate health plans. In order to do so, CMS would first have to establish vectors RABP and V, along with matrix A.[229] One of the more difficult tasks would be to specify V, the vector of the associated valuations of different health outcomes. In constructing this vector, CMS would begin by offering initial estimates of these valuations. CMS would then go back to historical data to determine whether the compensation paid out hypothetically under the new system using population and outcome data from previous years would be approximately the same as their actual compensation in those years. CMS could then scale the compensation factors in vector V to better match hypothetical and actual compensation. Scaling would preserve the relative valuations between different outcomes.

Initially, to ensure support of affected health plans, it may be necessary for these factors to "overcompensate" these plans. This "overcompensation" may lead to similar criticisms as others have made about MA's overcompensation relative to Medicare FFS. However, what these criticisms fail to account for are the risks faced by these plans. Under FFS, providers face no risk on their level of compensation, because they are compensated for all of the services they provide. On the other hand, with a capitated system such as the current MA system, providers face the risk that their beneficiaries may require more-than-average levels of services. These providers will not receive any additional compensation for these extra services, and so the providers bear these risks that their costs may be higher than these capitated rates. In a similar manner, switching to the new payment system based on health outcomes will also bring significant risks to participating health plans.

Furthermore, these criticisms about possible overcompensation are misplaced. Our first priority should not be a slight "overpayment" in the initial iterations of this system, but rather on the future trend of health care expenditures. We have seen a similar path before in the design of the Regional Clean Air Incentives Market (RECLAIM) emissions trading program for the Los Angeles area.[230] For RECLAIM, the initial amount of emission permits initially allocated was slightly greater than the amount of emissions generated in previous years. However, these

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available   at   http://www.cms.hhs.gov/MedicareAdvtgSpecRateStats/Downloads/ Announcement2007.pdf.

229. *See supra* Part V.C.

230. *See* Dale B. Thompson, *Political Obstacles to the Implementation of Emissions Markets: Lessons from RECLAIM*, 40 NAT. RESOURCES J. 645 (2000).

allocation levels were reduced by approximately forty percent in later years.[231] Similarly, an initial "overpayment" under this system should be less significant than reducing the escalation of future health expenditures.

In the first iterations of this system, CMS would then combine their generated vectors RABP and V, matrix A, and reported information in vectors P_i and Ω_i, to calculate the compensation for a particular plan. Future iterations would be even more significant. Progress on health outcome measures and risk adjustment could be incorporated into revisions of the compensation formula. Additionally, with the exceptions of adjustments for overall inflation, it could be desirable for the base rates and valuation measures to remain constant. If so, this would imply that health care expenditures under this system would only increase as the measures of health outcomes improved. As these measures improved (thereby reducing the risks involved), additional levels of providers such as ACOs could then be incorporated into this system.

VIII. CONCLUSION

This article proposes changing MA[232] so that participating health plans are compensated solely on the basis of health outcomes, with appropriate risk adjustments. It makes this proposal because health outcomes metrics are a better instrument for compensating health care providers. Additionally, the article finds that the optimal scale for using this instrument at this time is at the level of health insurance plans, making MA an ideal initial setting for this system.

There have been many other recommendations to address the inefficient incentives created under the dominant health payment system, fee-for-service. These recommendations include pay-for-performance, competitive pricing, accountable care organizations (ACOs), and bundled payments. Each one of these recommendations plays some role in the landmark health reform legislative package, the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act.

However, these recommendations and the package of reforms in the legislation fail to address perhaps the most significant problem for health

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231. *See* SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, 1997 AIR QUALITY MANAGEMENT PLAN ch.2 app.III, at III-2-29 tab.2-10A (1996), *available at* ftp://ftp.aqmd.gov/pub/aqmp/appendix/ap3.exe.

232. Doing so requires amending title XVIII, part C, of the Social Security Act.

care: the need to control costs in the long term. This is because they still rely on quality measurements and the delivery of services. This article argues that the best way to control costs in the long run is to reward providers based solely on health outcomes.

There are a number of obstacles to using this metric. Doctors will oppose a system where they are held accountable for health outcomes when these outcomes depend so much on the patient's own choices. This article suggests that the solution to this is to utilize decentralized enforcement, where a large collection of health care providers is held responsible for health outcomes. By using decentralized enforcement, the collective body can determine properly tailored incentives for their individual providers, which will not hold individual doctors accountable for each individual patient but nonetheless still lead to overall improvements in health outcomes.[233]

Another criticism is that the health outcomes measures themselves are not sufficiently developed. What this criticism means is that using these measures will entail significant risks. But it does not mean that we should not use these measures: instead, operation of this compensation system will likely lead to significant improvements in the quality of these measures.

This article then uses a federalism framework to determine the appropriate scale for different stages of applying this payment method policy. It concludes that the optimal level to enact and implement the policy is at the federal level.

It then compares economies and diseconomies of scale to determine the optimal locus of enforcement, i.e., what group of providers would be held accountable by tying their payment solely to health outcomes. Accountable care organizations would be a good group to utilize because they could design narrowly tailored incentives for their providers. However, this article concludes that health insurance plans would be a better level for enforcement. Like the ACOs, health plans can also use decentralized enforcement. Their broader size both in terms of number of enrollees and in geographical coverage means that health plans will also be better at handing the significant risks entailed in this payment system. This is particularly true during the initial operation of this system, when outcomes measures have yet to be fully developed.

Given that what is needed is a federal program where health plans are compensated, this article suggests that the natural place to implement this payment system is MA. There certainly will be political opposition

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233.   Quality measurements could be utilized here.

to making this change just as we saw with competitive bidding,[234] notably in specifying compensation levels for different health outcomes. Nonetheless, there are significant advantages to implementing it in MA. Much of the data needed to use this system is available because health plans are already required to collect and report it.

Meanwhile, while it may be difficult to achieve politically, doing so will enable us to finally get incentives right for health care. This system does not reward providers for supplying any health service, regardless of effectiveness or desirability, as is sometimes done by a FFS system. It also does not reward providers for offering services that meet prescribed quality guidelines, which may not permit sufficient flexibility for some individual patients. Instead, it rewards providers for maintaining and improving health outcomes, thereby enabling them to "experience the joy of healing those who seek [their] help."[235]

This approach offers an opportunity to finally control the long-term growth of health care expenditures. In this system, if health care outcomes stay the same, risk-adjusted real[236] expenditures on health care can remain constant. Under this approach, health care expenditures only rise when overall health care outcomes improve. Those health care dollars may be worth it.

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234. *See* PAYMENT FOR MA PLANS, *supra* note 3, at vi (noting that "in the past . . . , health plans and their supporters have resisted such a bidding approach"); *id.* at 18 (noting that "a [competitive bidding] system, as in any competitive market, means increased uncertainty about the chances for reward and the risk of financial loss for participants. Previous experience with Medicare's competitive pricing demonstrations, which were opposed by the insurance industry, suggests that health plans are reluctant to participate under such pricing uncertainty") (citing Berenson et al., *supra* note 71)).

235. Louis Lasagna, *The Hippocratic Oath: Modern Version* (1964), http://www.pbs.org/wgbh/nova/doctors/oath_modern.html.

236. As opposed to nominal.