



Brandeis University
The Heller School for Social Policy and Management

Health Care Cost Management in Massachusetts: A Discussion of Options

Meeting #2: Value-Based Purchasing Strategies

*December 17, 2007
Boston, MA*

Conference Report

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Perspectives on Value-Based Purchasing Strategies

Presenter: **Joseph Newhouse**, PhD, John D. MacArthur Professor of Health Policy and Management, Harvard University

Overview

Empirical research shows unequivocally that health care providers respond to financial incentives. Fee-for-service (FFS) reimbursement creates incentives for over-utilization while studies show that providers reduce utilization as they bear increased risk for the total costs of patient care. Many are concerned, however, that capitation payment methods create excess pressure for under-utilization. Addressing health care spending growth will necessitate exploring alternatives to FFS reimbursement. Dr. Newhouse recommends a mixed system of partial capitation and partial FFS, along with consideration of the "medical home" concept.

Payers are also experimenting with new "value-based purchasing" strategies including pay-for-performance (P4P) reimbursement, tiered provider networks, and disease management programs. Although these may be viable strategies, there is little empirical evidence that existing efforts save money. Important practical considerations limit the potential effectiveness of these strategies including difficulties getting statistically valid measures of provider performance and fragmentation of approaches across Medicare, Medicaid, and private payers. Successful implementation will require both technical and political progress.

Context

Dr. Newhouse, a health care economist, author, and policy expert, discussed the role that provider incentives play in affecting health care costs and assessed alternative reimbursement strategies and programs. He shared his opinions on which strategies might have the greatest impact on cost reduction.

Key Takeaways

- **Data shows that the level and method of reimbursement directly impact provider behavior and health care costs.**

There is ample evidence showing that health plans, hospitals, and physicians each respond to changes in the amount or type of reimbursement they receive.

"Providers respond to levels and methods of reimbursement."

— Joseph Newhouse, PhD

- **Health plans.** The 1970s RAND health insurance experiment is the only randomized trial comparing costs and outcomes of a prepaid group model HMO to a fee-for-service system. This study showed a 28% reduction in resource use and a 39% reduction in hospital admissions for HMO patients compared with those in fee-for-service, with little or no difference in health outcomes between the two groups.

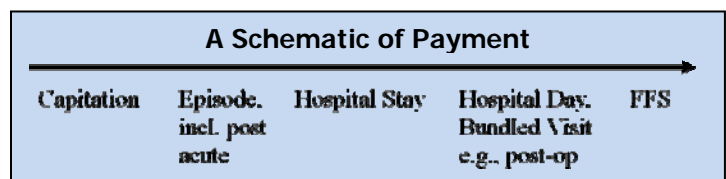
This study showed that an integrated, capitated health care system saved money. But it would be difficult to repeat these results today because hospital admission rates, a major area of the HMO savings, have dropped by 32% since 1980. Further savings are likely to be much more limited. Also, integrated systems like Kaiser Permanente have had difficulty gaining market share. Medicare Advantage remains only a minor portion of the larger Medicare program. It is unlikely that these models can significantly expand in today's environment.

- **Hospitals.** Reimbursement also affects hospital behavior. Implementation of the Medicare Prospective Payment System (PPS) in 1984 led to an immediate drop in average length of stay (ALOS), from 10 to 9 days. ALOS declined further through the 1990s, as hospitals shifted many patients to post-acute facilities where payment remained per diem. Without additional changes in hospital reimbursement methods, ALOS has declined to approximately 6 days at present.
- **Physicians.** Physicians also react to reimbursement changes. Reductions in Medicare fees have resulted in increased volume. Empirical studies have found that if Medicare cuts fees by 3%, physicians respond by increasing volumes, on average, by 1%, leaving Medicare with a real savings of only 2%.

Studies from the UK have shown that capitating groups of GPs to cover hospitalization costs results in fewer elective admissions. And a study of salaried Danish MDs shows that those with partial capitation and partial FFS saw more patients than those with full capitation.

- **Dr. Newhouse believes that the best reimbursement model would be a "mixed" system combining capitation and fee-for-service.**

Dr. Newhouse presented a continuum of payment methods as illustrated below.



FFS creates significant incentives for over-utilization and unbundling of services. Moving from the right to the left of the schematic, the payment incentives for efficient care delivery increase, but so do the incentives for underuse and patient "selection" (with a preference by providers to select good risks).

"Capitation may be too strong an incentive for underservice and selection; fee-for-service may be too costly."

— Joseph Newhouse, PhD



Recognizing the limitations of any one payment system, Dr. Newhouse supports a mixed, partially capitated, partially FFS, system for both health plans and physicians.

"I have advocated a mixed system for both health plans and physicians; e.g. part payment with capitation, part with FFS."

— Joseph Newhouse, PhD

In addition, Dr. Newhouse sees merit in the "medical home" concept that is gaining interest, which incorporates elements of a partial capitation/partial FFS model. In the medical home model, a PCP receives a monthly fee along with discounted FFS payments. However, he is not sure how such a model would come into widespread use. According to Dr. Newhouse, "even if one decided this is a good way to go, how these [integrated] entities would flourish is not obvious to me."

▪ **While multiple value-based purchasing initiatives are underway, the jury is still out on their effectiveness.**

Dr. Newhouse reviewed pay-for-performance, tiered networks, and disease management approaches. He explained the positives and negatives of each and shared his views.

— *P4P. This is a promising approach, but structural and logistical issues must be resolved.* While P4P seems logical, it suffers several execution challenges. For example, how many dollars should be put at risk, and how should payment be structured?

A PacifiCare P4P initiative demonstrates P4P's complexity. PacifiCare paid physicians a bonus of 5% of their capitated rate if they scored above the 75th percentile (as measured from the prior year) on various metrics. However, most physicians receiving the bonus were already high performers, with little progress among physicians in the bottom percentiles. Thus the experiment was expensive per unit of improvement.

In addition, PacifiCare's limited market share (15%) and its relatively low bonus (5%) made the total financial impact of this program too small to provide an incentive for most physicians to change their practice. The impact on clinical quality was therefore minimal.

Other P4P challenges include:

- *Teaching to the test.* When performance on certain measures carries financial rewards, providers may focus on improving only in those areas.
- *Need for risk adjustment.* If payment is going to be outcomes-based, risk adjustment is necessary to make valid comparisons.
- *Expense of auditing.* If bonus payments are substantially influenced by physician coding, an auditing apparatus must be put into place, which carries significant costs.

According to Dr. Newhouse, a more effective approach might be to increase payment for a given absolute amount of improvement as performance increased and improvement became more difficult.

— *Tiered networks. The effectiveness of tiered networks is hindered by problems of small sample sizes and patient selection biases.* The tiered networks offered by several major payers (including Medicare in some markets) offer lower cost sharing for beneficiaries who choose selected "efficient" providers. Two issues threaten the effectiveness of tiered networks:

- *Sample size.* To create a tiered network based on provider quality, the sample size must be large enough to observe real differences between providers. But a study from Dartmouth suggests that almost no hospital conducts enough cases of many procedures to detect a mortality rate double the national average. Sample size problems are even worse at the individual physician level. Evaluating performance on most measures is statistically valid only at the group level, not at the individual physician level.
- *Selection bias.* A physician can improve his or her performance on measures simply by replacing very small numbers of noncompliant patients with average patients.

To address these issues, Dr. Newhouse recommends limiting tiering (for now) to specialists who perform substantial numbers of procedures, as well as creating relatively inclusive tiers that only exclude the most inefficient specialists in the market.

— *Disease management. Disease management suffers from lack of robust evidence showing cost savings.* While there is evidence showing that disease management is linked to improved health outcomes, there is little data showing that it reduces utilization or costs. The effectiveness of disease management depends on the ability of programs to target beneficiaries who are most likely to comply. Work still needs to be done to improve disease management targeting.

"I don't think we've figured out yet how to do this. We've got work to do."

— Joseph Newhouse, PhD

▪ **Value-based purchasing will depend on coordination between public and private payers.**

Successfully executing value-based strategies will require coordination among private payers and Medicare.

"It will be hard for private sector payers to be successful with these strategies if Medicare sends different signals."

— Joseph Newhouse, PhD

Achieving the level of collaboration that is necessary faces significant challenges. Antitrust issues must be addressed for private-payer cooperation to take place and political forces make it unlikely that Medicare will put large amounts of money behind P4P. Dr. Newhouse is skeptical that Medicare will put UK-type money on the table for value-based purchasing anytime soon.



Value-Based Purchasing Strategies: Participant Roundtable

Respondents: **Jon Kingsdale**, Executive Director, Massachusetts Health Insurance Connector Authority
Paul Levy, President and Chief Executive Officer, Beth Israel Deaconess Medical Center

Moderator: **Stuart Altman**, PhD, Brandeis University

Overview

The same level of collaboration that brought about health reform in Massachusetts will be necessary for growth in health spending. Collaboration and market discipline to reduce spending trends are a preferred alternative to regulation. Ideas worth considering that require collaboration include administrative simplification, standardization of measures used in pay-for-performance reimbursement, and standardization of disease management programs. Better uniformity across programs would create more consistent provider incentives and reduce administrative costs. Progress could be accelerated by active involvement of the state's Attorney General to reduce concerns about anti-competitive behavior.

Participants discussed the importance of moving away from pure fee-for-service reimbursement in order to increase incentives for provider organizations to become more efficient. There are many challenges to beginning this process. Most participants also expressed support for reimbursement systems that appropriately reward primary care.

Context

Following Dr. Newhouse's presentation, Mr. Kingsdale and Mr. Levy provided perspectives. Participants then discussed the cost challenges faced in Massachusetts and potential solutions.

Key Takeaways

- **The health care cost challenges faced in Massachusetts are not unique.**

While the *level* of health spending in the US is dramatically greater than any other country, the *rate* of spending growth around the world is largely consistent. Dr. Newhouse said the US has a head start but other developed countries are demanding more health care. Dr. Newhouse attributes the worldwide growth in demand to the "increased capacity of medicine." Since medical capabilities will continue to grow, the question becomes how to finance the increasing consumption of health care.

In Massachusetts, the *level* of health care spending is greater than the average spending across the US, but over the long term, Massachusetts' *rate of spending increase* is comparable with that of the rest of country. There was discussion about whether the growth rate was higher in Massachusetts last year, but this would not signal a change in the long-term trend.

- **The need for solutions to health cost growth is clear.**

Mr. Kingsdale commented that the recent health reform in Massachusetts has resulted in 300,000 newly insured individuals

and an additional \$1 billion in revenues for the health system. Reform involved a shared contribution from employers, individuals, the state, and the health care community.

Mr. Kingsdale emphasized that the current challenge is making reform sustainable. Failure to do so could kill health reform in the US for another decade. In Mr. Kingsdale's view, sustainability is contingent on moderating the rate of increase in health spending. In the US, we already spend 2-3 times as much per acute, inpatient stay as in most OECD countries. He favors cost controls brought about by cooperation and market discipline. If these are unsuccessful, regulation may be the only option.

- **Some see the continued cost increases as a result of the power of the medical industrial complex.**

Harvard Pilgrim CEO Charlie Baker commented that a major difficulty in constraining spending is the immense market power of the medical industrial complex. While local players like BCBS and Partners may seem large, their purchasing clout is limited compared to multinationals like General Electric or the major pharmaceutical companies. Mr. Baker said, "Local providers can't push national suppliers to do anything."

Stuart Altman cautioned not to let the power of the medical industrial complex become a reason not to take action. Mr. Levy suggested that it might be possible for the large providers in Massachusetts to work together (with the involvement of the Attorney General's office) to decide collectively not to buy a certain piece of equipment. Resisting the medical industrial complex might be possible in collaboration.

- **There may be ways for increased collaboration to address health spending growth.**

Participants discussed a number of opportunities for collaborative action including the following:

— *Increasing use of capitation.* In response to Dr. Newhouse's data indicating that capitation can lower costs, Dr. Eugene Lindsey of Harvard Vanguard told the group that 45% of his organization's patients are capitated (down from 100% in 1997), but that those 45% are more profitable than Harvard Vanguard's FFS patients—showing that providers can make money under capitation. Shifting reimbursement away from fee-for-service toward greater use of capitation would require cooperation among the state, payers, and provider groups.

Dr. Newhouse suggested starting with a 50/50 split in reimbursement between fee-for-service and capitation. The ratio should shift toward greater capitation as the ability to accurately set risk-adjusted capitation rates improves.



- *Standardizing disease management program execution.* Payers in attendance agreed that despite that lack of academic literature showing economic benefits, disease management is, in fact, yielding cost savings. These payers plan to continue investing significantly in this area. Dr. JudyAnn Bigby, Secretary of Health and Human Services, said there is no question about whether to continue disease management; the question is how to improve its execution. Doing so requires cooperation to make programs more consistent and effective.
- *Simplifying health care administration.* Dr. Robert Torchiana of the Massachusetts General Physicians Association (MGPA) explained that MGPA works with 18 different payers. Each payer has its own interface and billing process, as well as its own unique P4P and disease management programs. Because of this, MGPA has 300 people billing for 1,400 physicians. More than 10% of the bills that MGPA submits are rejected.

MGPA estimates that administrative and billing simplification, along with standardization of P4P and disease management programs, could result in total cost savings of 12% per year.
- *Limiting facilities.* Mr. Levy suggested that greater cooperation could help the state limit the number of facilities providing certain health care services to a level consistent with population need. For example, Mr. Levy suggested that Massachusetts might not need 10 locations to perform organ transplants; the state could meet its demand with perhaps 2 or 3 facilities. Working together to limit facilities and technologies can play a role in constraining costs.

Other Important Points

- **Increased transparency.** While not directly related to lowering costs, Mr. Levy believes collecting and publishing data on provider performance is an important way to improve accountability.
- **PCP compensation.** In response to those who advocate controlling costs by decreasing payments to physicians, Mr. Levy argued for increasing payments to primary care physicians. PCPs are overwhelmed and lack time and resources to improve their practices. Under current conditions they frequently must triage, pushing patients up the continuum of care earlier than is necessary. Better pay will help PCPs improve their practices and keep more patients at the most appropriate care level.
- **AG support.** Potential collaboration among payers to standardize administrative processes or develop uniform performance measures will require support from the Massachusetts Attorney General's office to manage concern about anti-competitive behavior. A representative from the AG's office indicated that they are willing to work with all stakeholders to tackle these issues.
- **A "Federal Reserve" entity.** One idea that has been floated on the West Coast is creating a Federal Reserve-like entity that would set consistent health industry standards in areas such as performance measurement.

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Additional materials are available at:

www.heller.brandeis.edu/costmanagement



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