



Healthy, Wealthy, and Wise: Improving the Productivity of Massachusetts' Health Care Spending

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Even after accounting for wage levels and research spending, Massachusetts spends more per capita on health care than any other state (Figure 1). Moreover, the rapid rate of spending growth does not appear to be declining or leveling off. Rather, it is projected to double from 2009 to 2020.

High and increasing spending on health spending might be warranted if each dollar devoted to the health care sector yielded real health benefits, but this does not seem to be the case. While we have seen remarkable gains in life expectancy, there is a growing consensus that health care resources are not being spent efficiently and much of the additional spending is the consequence of imperfect incentives. Left unchecked, these forces will require a combination of tax increases, reduced public spending on other priorities, and low or stagnant growth in wages (because employers and employees will be paying more for health insurance).

The widespread inefficiency also offers hope because there is tremendous potential to improve the productivity of health care spending, and, in doing so, to improve the fiscal health of the state and the well-being of its residents. This Policy Brief discusses the role of a few broad policy levers that would increase the

efficiency of the delivery system by encouraging providers to deliver and patients to consume high-value care—daunting (but potentially valuable) tasks in the current political landscape.

Productive Efficiency and Allocative Efficiency

Because the concept of efficiency means different things to different people, this Policy Brief begins by defining it concretely. A well-functioning health care delivery displays two types of efficiency: *productive efficiency* and *allocative efficiency*.

Productive efficiency means that health care resources are put to the best use possible and produce as much health as they can. If this is not true, it means that we can deliver more health care for less money. We have an enormous amount of evidence that demonstrates that the health care delivery system is far from achieving productive efficiency. There are three departures from productive efficiency:

- **Providers underuse effective care.** Providers often fail to do very low-cost things, such as prescribing prophylactic antibiotics before surgery or beta-blockers for heart-attack patients. Similarly, investment in prevention, safety, and error-

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The brief also draws on "Health Care Costs and Spending in Massachusetts: A Review of the Evidence," a chart pack assembled by the Blue Cross Blue Shield of Massachusetts Foundation in collaboration with Chandra and Josephine Fisher, available online at <http://bluecrossmafoundation.org/Policy-and-Research/Reports-By-Topic/Health-Care-Costs-and-Affordability/Cost-Deck.aspx>.

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Figure 1: Massachusetts Spends More on Health Care than Any Other State



Note: District of Columbia is not included.

Source: Centers for Medicare and Medicaid Services, *Health Expenditures by State of Residence*, CMS, 2011.

reduction protocols could yield high health returns in the future. Many of these inadequacies could be reduced by an investment in superior health-information technologies. Inadequate health-information technologies decrease the productivity of all the resources used by increasing the likelihood of errors, fragmentation, and duplication.

- **Fee-for-service systems discourage good decisions.** The current reimbursement system, which is based on a fee-for-service model, encourages the overuse of ineffective care, discourages the use of more conservative therapies, and inhibits the adoption of shared-decision making where patients' preferences for care are carefully ascertained. For instance, cyclotron-based, proton-beam therapy for prostate cancer is a very expensive treatment with no evidence of improved outcomes in comparison to conventional, less expensive approaches. Fee-for-service medicine, and its incentives to do more, also discourages providers from ascertaining patient preferences for more conservative care. Consequently, some care is misused, as patients receive care that they would rather not have.

- **Some care has negative health effects.**

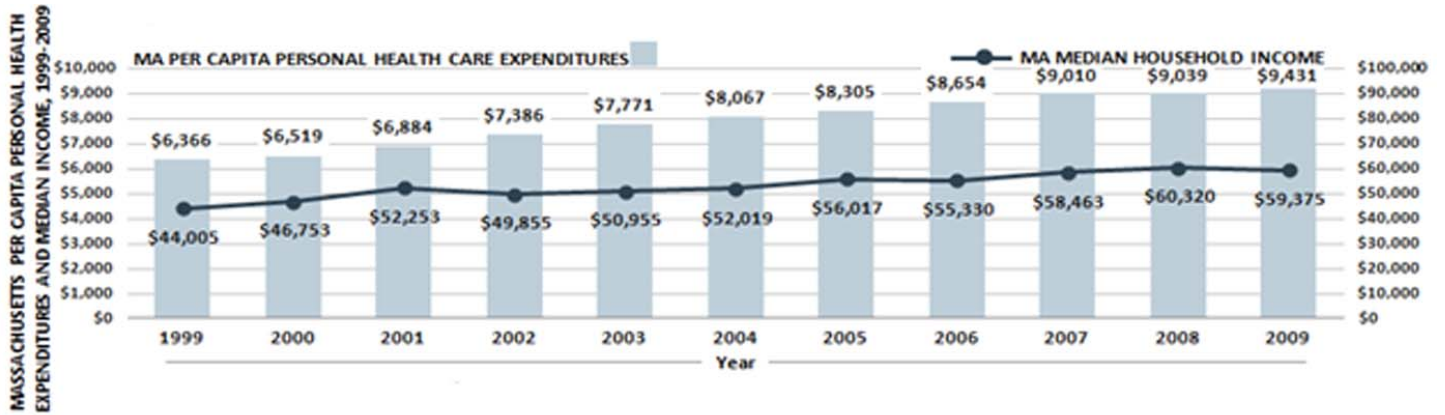
For example, excess radiation from the overuse of CT and magnetic resonance imaging (MRI) scans is believed to cause 1.5–2.0 percent of cancers.

Reducing the rates of these sources of inefficiency – underuse, overuse, misuse, fragmentation, and duplication – would improve the productive efficiency of health care. In fact, some studies have suggested that we can achieve the same level of health with 20–50 percent less spending. The best way to achieve these goals is to create systems and reimbursement models that have the right incentives, as opposed to regulating the activities of providers through price setting or certificates of need.

Allocative Efficiency

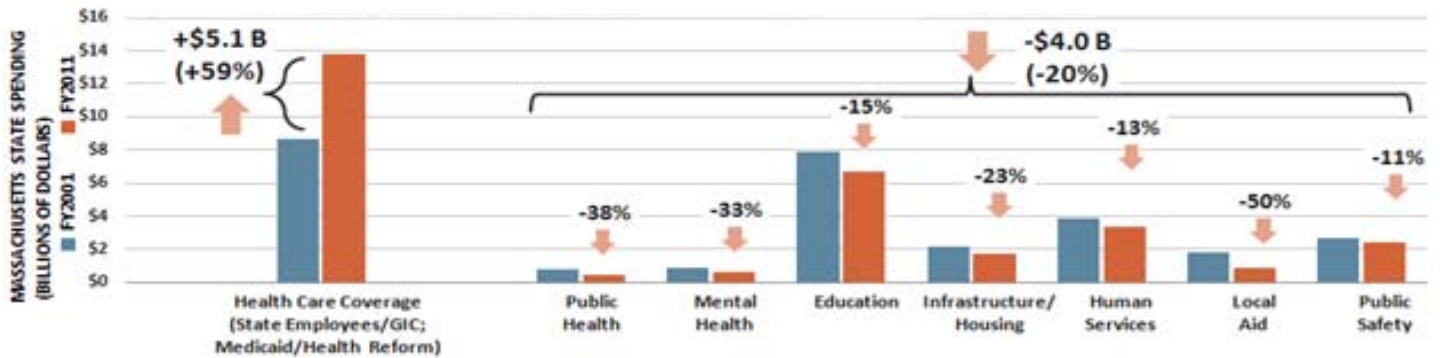
In addition to productive efficiency, a well-functioning system exhibits allocative efficiency. When we talk about allocative efficiency, we are asking whether the right share of resources is being devoted to health care versus other things in the economy. As Figure 2 shows, increasing health care costs from 1999–2009 in Massachusetts consumed a greater portion of household budgets and contributed to stagnant wage growth. Wages remain stagnant in the presence of growing

Figure 2: Increasing Health Care Costs Consume a Greater Portion of Household Budgets



Note: Health care expenditures are inflation-adjusted with 2005 as the base year; median household income is adjusted with 2010 as the base year. Source: Data for health care expenditures from CMS, *Health Expenditures by State of Residence, 1991-2009*. Data for median income from U.S. Census Bureau, *State Median Income*.

Figure 3: The Increasing Costs of Health Care Squeeze Out Other Public Spending Priorities



Source: Massachusetts Budget and Policy Center Budget Browser.

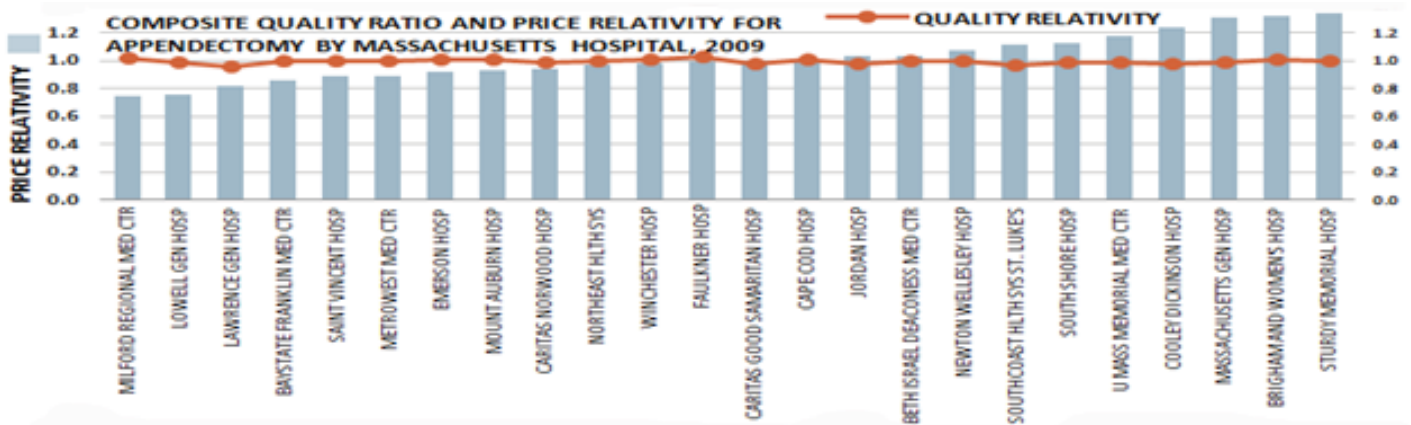
health care spending because a greater share of employee compensation is being offered in the form of health care benefits. This means many people have less income to spend on other areas such as education and housing even if they prefer spending on these priorities over spending on health care.

The same tradeoff confronts the public sector. As Figure 3 shows, the growth in health care spending by the state between FY 2001 and FY 2011 squeezed out spending on other public priorities such as education and infrastructure. Ironically, some of these alternative forms of spending may improve health more than

spending on health care, especially if the marginal spending on health care services is of dubious benefit.

In summary, to be an efficient health care delivery system, we would need to achieve both productive and allocative efficiency. In the absence of achieving productive efficiency it is impossible to achieve allocative efficiency. After all, it's impossible to figure out how much to spend on health care when the last dollar spent sometimes is valuable and at other times is not.

Figure 4: Higher-Paid Providers Do Not Score Better on Quality Measures



Source: Massachusetts Division of Health Care Finance and Policy, "Massachusetts Health Care Cost Trends: Price Variation In Massachusetts Health Care Services," May 2011.

Moving Towards Reform

But what are the policy levers to address allocative and productive inefficiency in health care spending? I divide these policy levers into ones that operate on the provider side, on the patient side, and those that affect the system-wide environment in which insurance and care are purchased. The vast majority of reforms may appear to be system-wide changes that are beyond the Commonwealth's control (for example, reforming Medicare's fee-for-service system or national changes in malpractice standards). But for the vast majority of inefficiencies, there are tremendous opportunities for the state to lead.

Provider Side Reforms

In the very short run, payers in Massachusetts can work to ensure that the prices charged by providers represent the clinical (as opposed to the technical) quality of those services. Although some may intuitively assume that higher prices translate into better outcomes, research suggests that neither high prices nor higher use of services is associated with better health outcomes or better quality. Providers with the highest prices may have greater market power (the market power may be because of brand as much as because of market size).

Illustratively, researchers for the state's Division of Health Care Finance and Policy (DHCFP) did not find any connection between technical quality scores and prices for any of the services they examined, including appendectomies and heart attacks (Figure 4). What's more, DHCFP's researchers did not find an association between consumer satisfaction with care and the prices charged by providers. Given the lack of connections between prices and the actual value of care, there is considerable opportunity to reduce health care costs without comprising quality or outcomes. This point is particularly salient to the Commonwealth as price increases have been the most significant cost-drivers of short-run health care spending increases. High prices account for nearly all the increases in private spending on inpatient care, 55 percent of the change in spending on outpatient care, and 76 percent of the overall increase in physician services' spending.

Once prices and quality are aligned, future price increases should be celebrated as opposed to being a source for concern. This will not be an easy task, especially because many quality indicators measure processes or the technical quality of care, as opposed to outcomes like complications and infections. Absent a way to

collect these data in a consistent manner and without physician leadership and a professional commitment to better measurement, it will be difficult to make progress on this front.

Moving away from fee-for-service payments may produce better incentives for efficient resource allocation. Current payment schemes do not provide incentives for providing lower-cost care (that is similarly efficient) or cost-saving innovation. For instance, a back-pain clinic generally makes less money if its clinicians recommend lower-cost rehabilitation programs instead of equally effective but usually costlier back surgeries and diagnostic tests.

To address inefficient delivery systems, some have focused on the idea of an integrated delivery system with capitated payments. Since such systems retain the savings from lower readmission rates, better prevention, and better

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medication adherence, they produce better incentives to steer clear of therapies that have uncertain benefits. One example is Accountable Care Organizations (ACOs), in which shared-saving “bonuses” are provided to organizations that are able to provide high-quality care at lower costs, such as the Geisinger Clinic in Pennsylvania.

Although we do not know how well ACOs and bundled payments will sidestep cost-ineffective technologies, ACOs hold potential for Massachusetts. By measuring ACO performance and patient satisfaction, carefully calibrating ACO payments and updates

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over time, and using additional tools when necessary, ACOs can be a promising strategy to improve health care efficiency. Their diffusion may also improve the quality of care on an important, but often ignored, dimension of quality: is the patient getting the care that he or she wants? The literature on shared decision making has often shown that when given relevant information on risks and side effects patients choose more conservative therapies over more intensive ones. Capitation automates the incentives to rely on shared decision making.

But capitation and bundled payments are not without their challenges. In particular, we should acknowledge that while fee-for-service systems encourage overuse, capitation can encourage underuse. The best way to avert claims of ‘rationing’ by providers is to accurately and aggressively measure providers’ performance. Doing so will only be possible if there are electronic medical records that allow for far superior risk-adjustment than what many providers use today.

The benefits to moving to bundled care at the state level are also muted by Medicare, which is a federal program. Medicare’s inefficiencies reduce efficiency in the private health insurance market through coverage spillovers. Medicare evaluates new technologies by focusing on whether procedures or drugs provide benefits and does not consider costs. Nor does Medicare ask whether care could be better managed in its fee-for-service incarnation. As a result, it discourages

efficient insurance offerings and cost-saving innovations. Worse, it hampers efforts by private plans to be more innovative because providers do not have separate decision rules for treating Medicare and non-Medicare patients. For example, when Medicare covers Provenge for prostate cancer, which costs over \$90,000 for a few months of survival, private insurers are more likely to follow the coverage decision in order to avoid litigation in which their patients claim that insurers have withheld valuable care. Receiving a Medicare waiver from the federal government might be a way for the state to “turbo-charge” any move towards risk-bearing payment systems.

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Patient-Side Incentives and Insurance Design

Although insurance provides protection against financial risk, it comes with moral hazard: patients consume more health care when the cost is lower. Several policy proposals aim to enhance the incentives for patients to consume only care that is sufficiently valuable to them. Among these are “value-based” insurance plans, which aim to enhance efficiency by imposing higher patient prices for lower-value care. The degree of cost-sharing or prices could be set based on evidence from clinical trials and might vary depending on patient characteristics. For example, we could use lower (or even negative copayments) for drugs that target chronic disease and reduce the likelihood of future hospitalizations. The move towards integrated delivery systems that receive a global payment will naturally catalyze the use of these strategies, because providers will be responsible for future costs.

Cost-sharing could also be used to move patients towards higher value providers through “tiered networks” or encouraging employees to pick more generous health plans by making the wage benefits of their choice more salient.

These ideas are only as effective as the quality of the decision making by patients confronting cost and quality tradeoffs. Illustratively, my work with Jonathan Gruber and Robin McKnight found that patients with chronic diseases don’t always make the most optimal tradeoffs between spending more or cutting back on services of dubious benefit. Instead, many cut back too much on valuable care and end up in the hospital. Even when people cut back correctly, the price-responsiveness is too small to have meaningful effects on averting fiscal Armageddon.¹

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Acknowledging Tradeoffs

Both Massachusetts and the US have yet to wrestle with the question of public policy priorities in a world of scarce resources. Even with perfect productive efficiency, we cannot cover all services for all people.

Most reforms do not address this tradeoff. But when public resources come at a cost of lower economic growth because of higher taxes or lower investments in education and public safety, there must be some explicit consideration of the value of redistribution, and the public priority placed on covering different levels of service for different parts of the population. By this argument, insuring

the uninsured is money well spent because it has far more value than providing Provenge to other patients. Solving this dilemma legislatively is complicated because the recipients of Provenge generally are over-represented in the voting booth relative to the beneficiaries of future spending on education or health insurance.

Reducing Congress' and the General Court's role in health care policy by creating an independent authority to oversee and coordinate spending might ease these pressures, but this approach is unproven. Moreover, as the national debate on "death panels" in the context of the Independent Payment Advisory Board (IPAB) has shown, the more likely such an authority is to succeed, the more vocal the resistance to its creation will be. But Massachusetts is not the nation, and what may fail in Washington may still succeed in the Commonwealth.

Regardless, the dilemma of not knowing how to achieve allocative efficiency should not impede our ability to press for productive efficiency. By first ensuring that health care resources are used more productively, we will be in a much better position to move towards spending the right amount on health.

ENDNOTES

- ¹ See Chandra, A., J. Gruber, and R. McKnight. 2010. "Patient Cost-Sharing and Hospitalization Offsets in the Elderly." *American Economic Review* 100 (1):193-213.

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