# *MASSACHUSETTS HEALTH SPENDING SOARS TO $62.1 BILLION IN 2006*

## Spending Here Is World's Highest— 33% per Person Above U.S.A. Average, An Unprecedented Excess

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# *Massachusetts Health Spending Soars to $62.1 Billion in 2006*

## Summary

The Health Reform Program now estimates that total health spending in Massachusetts will reach $62.1 billion in 2006.

New data show that health spending per person rose far faster in Massachusetts than in the nation as a whole for each of the five years from 2000 through 2004. Spending per person reached 33.2 percent above the national average in 2004. This excess above the national average is unprecedented.

The new estimate for 2006, high as it is, remains a conservative figure. It assumes that Massachusetts health care costs per person remain only as far above the United States average as they were in 2004 even though some costs have continued to rise even faster in Massachusetts than nationally in 2005 and 2006. Further, this report measures the high cost of business as usual, not the added cost of covering more people under the new chapter 58 law.

If total health spending in Massachusetts were at the U.S. level of $7,256 per person in 2006, we would save $15.7 billion this year alone.

* * *

High spending in Massachusetts should be a source of optimism borne of worry. We should be optimistic because so much money is available in health care already—enough to care for all residents if we spent it better. We should worry because soaring costs threaten coverage and leave our health care vulnerable to the economic ravages of a deep recession.

Because health care for all is a moral right, cost control is a moral duty. That's because higher costs erode coverage. Health care for all can't be attained without containing the exploding costs of Massachusetts health care.

Without cost control—

- It will be impossible to retain insurance coverage for people who have it.
- It will be impossible to extend coverage to people who are uninsured, or who lack dental, prescription drug, long-term care, or good mental health insurance.
- It will be impossible to implement all of the provisions of the new Massachusetts health care law, chapter 58 of the Acts of 2006.
- It will be impossible to financially stabilize and protect Massachusetts patients, hospitals, or doctors during the next deep recession.
- It will be impossible to protect and improve quality of care.

Massachusetts already has the competence and compassion, the dollars and the doctors, to take care of all of us very well indeed.

## *A. SUMMARY OF EVIDENCE*

New estimates

Our new estimate of total health spending in Massachusetts for 2006 is $3.2 billion higher than our previous 2006 estimate.

- Our previous estimate rested in part on older federal government estimates, for 2000. Those showed that health spending in Massachusetts, per person, was a little over one-quarter above the national average.
- Calculations from the latest federal government estimates, for 2004, indicate that spending here, per person, rose to one-third above the U.S. average.

*Sources:* The data in this report reflect the newest information on health care spending in Massachusetts, other states, and nationally. Our updated analyses of health care costs in Massachusetts for 2005 and 2006 rest in part on just-released data on state-level health care spending through 2004, and on the most recent projections of national spending through 2006. The report also employs data on hospital spending from the American Hospital Association, data on physicians from the American Medical Association, and information from a variety of federal agencies and other sources.

Increases in spending

From 2005 to 2006 alone, the Health Reform Program estimates, total health spending in Massachusetts will rise by $4.2 billion.

When Gov. Romney was elected in 2002, total health care spending in Massachusetts was $46.5 billion annually. Since then, it has risen to $62.1 billion, a rise in only four years of 33.5 percent—$15.6 billion in annual spending.

As a benchmark: this added $15.6 billion, amounting to one-quarter of this year's total health care spending in Massachusetts, substantially exceeds the $14.6 billion reported *total* cost of the 20-year-long Big Dig. [1] And absent cost-cutting reforms, we'll pay that added $15.6 billion again every year. That's because it is now built into the base for future cost increases.

Looming health care cost increases and the implementation of chapter 58

If these trends continue, total health spending in Massachusetts will reach $75.6 billion in 2009, the year when the new chapter 58 health care law is scheduled to be fully implemented. That's up by $13.5 billion (21.3 percent) in just three years.

This is only the cost of finding more money to finance business as usual. It does not take into account the added costs—higher Medicaid payments to hospitals,

state subsidies to individuals who buy insurance, and higher insurance payments by individuals and families—that would be necessary to implement the new law.

The rising cost of business as usual in health care usual may act like a sponge, absorbing dollars that will be needed to finance the improvements in coverage called for under chapter 58. Equally bad, the rising cost of health care and health insurance in Massachusetts can be expected to

- Increase the cost of insurance policies that uninsured individuals and families will be obliged to buy under the new law

- Force individuals and families who are now insured through the job—or their employers—to drop their own insurance coverage, cut services covered, or boost out-of-pocket payments.

## The world's costliest health care

Total health spending per person this year in Massachusetts will be $9,662, fully one-third—33.2%--above the national average of $7,256 per person. This is the highest spending level among the 50 states. [2]

Since U.S. total spending per person is itself the highest in the world and Massachusetts is highest among the states, Massachusetts therefore has the highest total health care spending per person in the world.

Massachusetts personal health care spending in 2006 will be $8,046 per person and $51.7 billion statewide. Personal health care spending includes all care to individuals. Nationally, it will comprise about 83.3 percent of total health spending this year. Personal health spending excludes research, construction, government public health activities, insurance profit, and administration of public and private insurance.

## How much would we save if—

- If total health spending in Massachusetts were at the U.S. level of $7,256 per person in 2006, we would save $15.7 billion this year alone.

- If total health spending per person in Massachusetts in 2006 were even at the level of the second-costliest state (New York, at $9,056 per person), we would still save $3.9 billion this year.

- Total health spending reached an estimated 17 percent of the state economy in 2006. If it had remained at the average share that prevailed in the decade 1991 - 2000 (15 percent), savings this year would have been $7.8 billion.

Total health spending has soared over time as a share of the Massachusetts economy, or gross state product (GSP). Total health spending rose from

- an average of 11.9 percent of GSP during the decade from 1981 to 1990,
- to an average of 15.0 percent during the decade from 1991 to 2000, and
- to an average of 16.5 percent during the half-decade from 2001 to 2006—reaching an estimated 17.0 percent of GSP in 2006.

Excess costs by sector of health care

High and rising costs of hospital care have long been a topic for public debate and discussion. But high health care costs in Massachusetts are not just a problem for hospitals. We have estimated the savings on health care, sector by sector, if spending on personal health care per person in this state in 2004 were at that year's national average. (This excludes research, construction, and other items not part of personal health spending.) These are the sums that would be saved, in dollars and as a share of actual spending in Massachusetts in 2004.

- Hospitals $5.6 billion, or 31.1 percent of actual hospital spending
- Physicians $1.4 billion, or 13.5 percent of actual physician spending
- Long-term care $2.5 billion, or 41.8 percent of actual LTC spending
- Rx $0.7 billion, or 13.7 percent of actual Rx spending
- Dental $0.5 billion, or 22.8 percent of actual dental spending
- All other $0.6 billion, or 15.4 percent of all other actual spending
- Total $11.3 billion, or 24.9 percent of all personal health spending

Health costs versus state revenues

As another benchmark, it's useful to compare total health spending in Massachusetts to total revenue raised by state government from its own sources. (This excludes federal aid and matching funds.) In 2005, the Commonwealth's total revenue from the sales tax, the personal income tax, the corporate income tax, the lottery, and other sources of state revenue totaled about $23.1 billion, only two-fifths as much as the $57.9 billion spent on health care in 2005. In other words, annual total health spending in Massachusetts from all sources was two and one-half times as great as the state's own annual revenue in 2005.

State government revenues are becoming increasingly inadequate to shoulder the burden of soaring health care costs. In 1988, the state's own revenue equaled about 56.5 percent of health care spending; in 2005, the share fell to approximately 39.9 percent of health care spending.

This trend has clear implications for state government's ability to keep its promises to help finance expanded insurance coverage and higher hospital Medicaid payments under the new chapter 58 legislation.

## *B. SUMMARY OF DISCUSSION*

### *Overview*

Suppose that the one-third excess of Massachusetts health care costs per person, above the national average, were justified by a variety of seemingly reasonable and legitimate factors. (We don't think that it is, but suppose so.)

Such a justification would mean nothing to the people who now can't afford to buy coverage. And in coming years, the ongoing steady erosion of coverage as costs rise will become a massive loss of insurance when a bad recession hits.

Although some of the excess cost of health care in Massachusetts is justified by legitimate and reasonable factors, much of the excess does not seem to be justified.

Legitimate justifications for part of the Massachusetts excess include provision of some health care to patients from out-of-state (export of health care), quality of care and health status that are generally somewhat better than the national average, a higher cost of living in Massachusetts, a higher rate of insurance coverage than prevails nationally, and a slightly older population.

While these and other factors might help to justify some of the Massachusetts health care cost excess, we are not getting our money's worth in dramatically better health status or in economic benefits.

Therefore, several aspects of the Massachusetts cost excess—and its public discussion by caregivers, businesses, and politicians—are deeply troubling. These worrisome aspects include:

1. First, the tendency of hospital and doctor groups, and some of their allies in universities, to rationalize, explain away, or ignore both the cost problem and continued rapid cost increases. Addicted to more money to finance business as usual in health care, and accustomed to failure of cost containment efforts, they would, apparently, rather offer words to try to justify soaring spending than offer deeds to try to slow cost increases and make care durably affordable for all.

2. Second, the weak efforts to contain cost that state government, insurers, hospitals, and doctor groups offer to a concerned public today.

3. Third, the grave threat posed by excess costs and soaring costs to the affordability of health insurance, Medicare, and Medicaid in our state—for people who are covered today and people who hope to be insured under the new chapter 58 legislation. Those who would try to rationalize and explain away high and soaring costs—by saying that higher health spending pays a

good return on investment, for example—ignore or trivialize the inability of many citizens to afford to make that investment by buying insurance coverage.

4. Fourth, the failure of caregivers, insurers, and governments to prepare disaster plans to cope with the looming threat of financial meltdown of health care at the bottom of the next serious recession.

5. Fifth, our conclusion that about one-half of health care spending in Massachusetts (as nationally) is wasted.

Because of these worries—about unjustified high spending, soaring costs, and growing unaffordability of care—failure to prepare financial disaster plans, and the high level of waste in health care, we offer several proposals. These include:

1. State government should make a finding that Massachusetts health care is drifting toward a crisis of cost, affordability, coverage, and caregiver survival. It should acknowledge that cost control is essential, that few cost controls tried over the past 30 years have helped, that no provisions to meaningfully slow cost increases are now available, and that new approaches are therefore essential. State government should work privately and publicly to persuade caregivers, insurers, employers, unions, and other payers that our state's high costs cannot be justified or rationalized—and that this state's high costs are not affordable.

2. State government must put its arms around the health coverage and cost crisis. This will require strong and sustained executive leadership to engage all stakeholders—state legislators, city and town officials, private employers, unions, caregivers, access advocates, and others—in shaping durably affordable and high-quality health care for all in Massachusetts. It is futile and unnecessary to wait for Washington to act. The federal government is paralyzed politically. It is willfully reckless financially. And it lacks any reasonable ideas about how to contain cost *and* cover all Americans. (Current political debates suggest that Congress may be willing to cut Medicare and Medicaid spending to reduce the federal deficit. [3] No one should ignore this warning.) Our state can do much on its own. State government should also prepare to seek any needed waivers of ERISA, Medicare, and Medicaid laws—and press Washington to grant states such flexibility.

3. State government must work with payers, insurers, and caregivers to prepare a financial disaster plan to cope responsibly with a severe financial shock, such as a 10 percent drop in real revenue to finance health care in this state. Without such a plan, state government and our seemingly invincible teaching hospitals and insurers could easily pass (to echo Al Gore's words about global warming) from denial today to despair at the bottom of the next recession—never stopping to try actually doing something constructive. [4]

4. All stakeholders will work to put in place arrangements to squeeze waste out of our health care, capture the savings, and recycle them to finance and deliver comprehensive and high-quality care for all residents of the Commonwealth. All parties must adopt a fiduciary outlook toward health care in Massachusetts.

5. In our view, almost all of the cost controls attempted during the past 30 years have failed. That's because they did not engage doctors in playing a central, cooperative role. Doctors' decisions control almost 90 percent of personal health care spending. Doctors and payers could negotiate payment and delivery arrangements that will encourage, induce, and help doctors to squeeze out health care waste, contain cost, and make money available to finance and deliver durably affordable high-quality care for all.

### *Attempted Justifications and Rationalizations for Excess Health Costs Here*

Consider several of the reasons commonly said to justify the state's high costs:

### *Export industry*

In 1998, the last year for which comparable data are available, $622 million in care was provided here to residents of other states (or nations), net of the cost of care provided out-of-state to residents of Massachusetts. This was only 2.1 percent of personal health spending.

This $622 million comprised an export, something that boosts the state's economy by earning money from out-of-staters. Viewed across the states, 23 states were net exporters of health care in 1998. Massachusetts ranked 9th among these in share of care exported, above Texas but below Colorado.

Suppose that the net 2.1 percent of health spending in Massachusetts continued to pay for care to people from out-of-state in 2006. That would mean that, of the $51.7 billion in personal health care spending in Massachusetts in 2006, $1.1 billion was a net export—money earned for the state's economy by selling health care to out-of-staters. (This measures the export of personal health care. It does not reflect exports earned by conducting research and development financed by the National Institutes of health or other sources outside the state.)

Health care exports may well have dropped since 1998 as a share of personal health care spending here. Caregivers in other states are adopting many of the advanced health care technologies and procedures for which Massachusetts has been famous. Also, foreign nationals have apparently been experiencing more difficulty obtaining visas after the 11th of September 2001.

Further, exports of personal health care and even research financing are not pure, unalloyed benefits to the state's economy. If our state's health care services, taken as a whole, are distorted in more expensive directions as a result of activities designed to attract patients or research dollars from out of state, all of us who pay for our state's health care must pay a share of the extra cost.

### *Superior health status and better quality of care*

Massachusetts health status and quality are good, but not as much better than those prevailing nationally as might be expected from our extraordinarily high spending. It is possible to live longer than Americans now do, on average, while spending much less. Seven wealthy nations that spent, on average, 46.2 percent as much on health care per person in 2003 as did the U.S.A. enjoyed average life expectancy at birth of 79.7, 2.5 years above the U.S. level—even though their citizens were 38 percent likelier to smoke. [5]

Similarly, many states enjoy better health status than does Massachusetts while spending less. While health status in Massachusetts is better than in most other states, is the cause better quality of medical care? Alternatively, is the cause a healthier environment, healthier behaviors, and superior public health programs? A public health report card prepared by the American Public Health Association ranked Massachusetts 4th in the nation in the health of its environment, 2nd on healthy behaviors, and also second on public health services.

What are the roles of our citizens' higher incomes and higher level of education?

Health care spending and a key measure of health appear only weakly linked:

- Massachusetts' age-adjusted death rate in 2003 was 778.7 per 100,000 people, 6.5 percent better than (below) the national average of 832.7.
- Massachusetts ranked 13th-best among the states in age-adjusted death rate per 100,000 people in 2003, behind Hawaii (with the nation's lowest death rate), Minnesota, Connecticut, New Hampshire, California, New York, Vermont, North Dakota, Iowa, Wisconsin, Washington, and Florida.
- Interestingly, Massachusetts personal health spending per person in 2004, $7,075, was fully 25.6 percent higher than the average spending per person of these 12 states with lower death rates, $5,632, we have calculated.
- Further, Utah ranked 14th-best, just behind Massachusetts in age-adjusted death rate, though it was lowest in the nation in personal health spending per person. Massachusetts personal health spending per person was 75 percent higher than Utah's in 2004.

- Overall, personal health spending per person is very weakly correlated with aged-adjusted death rates, explaining only about 4 percent of inter-state differences.

### *Better coverage*

Viewed across the states, higher spending on health care is indeed associated with improved insurance coverage. The share of people in Massachusetts who lack health insurance was only 71.3 percent of the national share in 2003-2004.

States with higher health spending per person tended to have substantially lower uninsured population shares. But, unfortunately, rising health care costs over time across the nation are very closely associated with declines in insurance coverage. Many believe that rising health insurance premiums in Massachusetts will result in a rise in the number of uninsured people. [6]

Further, broad coverage doesn't require such high costs. Seven wealthy democratic nations covered virtually all residents in 2003 while spending an average of $2,604 per person that year—just over 46 percent as much as the U.S. did to cover only about 85 percent of our people—and 33 percent at is spent in Massachusetts to cover about 89 percent of our people. [7]

### *Hospitals and doctors*

Massachusetts hospital care is much more costly than the national average. This is in part because we are first in the nation in our reliance on costly teaching hospitals. And we do more to patients: for example, our surgery rate in hospitals —inpatient and same-day—is one-quarter above the U.S. average. Our reliance on costly hospital outpatient care is three-fifths above the national average. Needed, efficient, and geographically well-distributed community hospitals should be identified and preserved. State action will be required to do so.

Massachusetts leads the nation in physicians per 1,000 patients, and the state's excess has been growing steadily in recent decades. Although personal health spending per person on physicians' care is almost one-sixth above the national average, spending per doctor (here called "average gross income") is only 70.5 percent of the national average. The reason is that we have so many physicians.

More physicians, other things equal, means more care. In the course of earning their below-average incomes, Massachusetts physicians help to deliver a relatively elaborate and costly pattern of care—in hospitals and in other settings.

Because of their relatively low average gross incomes, Massachusetts doctors are particularly vulnerable to net income's falling share of gross income across

the nation from 1970 to 2000. Nationally, net income after expense fell from 63 percent of gross income in 1970 to 48 percent in 2000. The reason: practice expenses rose much faster than did gross income. Surprisingly, malpractice premiums themselves absorbed only a small share of the rise in expenses.

Assailed by these deep-rooted financial realities, doctors here may be especially interested in negotiating new arrangements to finance and deliver health care. And the rest of us should be particularly interested in—and optimistic about—negotiating with doctors.

One of the main reasons for optimism is that the problem of high Massachusetts health care costs does not stem from doctors' own net or gross incomes, which are relatively low. It does stem somewhat from doctors' soaring costs of running their practices. But it stems mainly from the high-cost care that Massachusetts doctors deliver or approve in the course of earning their relatively low incomes.

This points to ground for compromise. If doctors' expenses could be lowered—if doctors could retain a larger share of their gross incomes—they would obviously be better off financially. Reducing expenses will only be possible if payers have reason to trust doctors to spend money much more carefully—to contain cost while serving all in need. The challenge facing all of us is to negotiate arrangements that allow us to trust our doctors to spend money more carefully.

### *Reality and reform*

Even if excess costs of health care in our state are partly justified, three core questions remain:

1. Is Massachusetts health care affordable today?

2. Are the projected spending increases sustainable economically, politically, and socially?

3. Will our high costs interfere with the implementation of the chapter 58 legislation that aims to provide health insurance to almost all residents of the Commonwealth?

In 2006, family health insurance coverage at one large Boston-area employer reached $13,800. That reflects an average 10.2 percent rise in each of the past ten years. Projecting that rate of premium increase forward for five years means that family coverage would cost $22,400 in 2011—a rise of 62.3 percent in five years.

Winning affordable health care for all is the easiest problem to fix in Massachusetts. That's because we already spend more than enough to do the

job. (Any other problem—public education, crime, environment, job training, rebuilding manufacturing, infrastructure, and all the rest—probably requires more money. Not so health care—not nationally and certainly not in Massachusetts.)

Massachusetts health care is certainly costliest in the world, but we are not getting our money's worth. We can provide better care to more people by better using the money we already spend.

Massachusetts has the competence and compassion, the dollars and the doctors, to take care of all of us very well indeed.

True, few of the efforts to contain costs over the past 30 years, here or nationally, have succeeded.

But with approximately one-half of health care spending wasted—on unnecessary care, administration, excess prices, and theft—there's room to actually cut cost.

Effective and acceptable cost control requires a partnership with physicians. That's because doctors' decisions essentially control almost 90 percent of personal health spending.

State government must take the lead in negotiating this partnership. That's partly because doctors are not now effectively organized.

We believe that doctors nationally will rebel against the soaring share of their incomes absorbed by the expense of maintaining a practice, and against the clear threat of falling incomes. We also suspect that such a rebellion may arise first in Massachusetts, owing to our highest-in-the-nation ratio of physicians to people, and to the relatively low average incomes that physicians garner here.

We do not assert that Massachusetts has too many physicians. Rather, we believe that, under current financing, legal, and delivery arrangements, having so many physicians helps to engender higher costs today. We expect that reforms in financing, malpractice law, and delivery of care could allow today's numbers of physicians to deliver a much less costly variety of health care in our state.

Main elements of negotiations between doctors and other parties could include:

- Complete elimination of malpractice litigation, the right to sue doctors, and its replacement by a combination of real steps to improve and certify quality of physicians' care and real compensation for all victims of medical harm.
- Elimination of almost all of physicians' and hospitals' financial paperwork.
- Doctors agree to take care of all residents of Massachusetts with the huge sums already available.

- By making available clear, unbiased data on effectiveness and cost, the state can help doctors weigh how to best use of inevitably scarce resources.
- Doctors are paid in financially neutral ways, that let patients and payers trust doctors to care for all of us well, providing neither too much care nor too little.

Health care spending must be re-balanced against everything else we value

As health costs soar as a share of the state's economy, as caregivers demand more money each year to finance business as usual, and as insurance premiums soar, more and more people in Massachusetts realize that health spending is out of control. Continued double-digit premium increases are simply not affordable. Not for individuals and families. Not for employers. Not for taxpayers.

Higher health care spending finances smaller and smaller improvements in health. Higher health care spending crowds out other spending that is arguably at least as valuable. That's why it's essential to re-balance health spending against everything else we need.

With $62.1 billion available to finance health care to 6.4 million citizens of Massachusetts in 2006, there is great reason for optimism that we can do much better with the money we've got.

## *A. THE EVIDENCE*

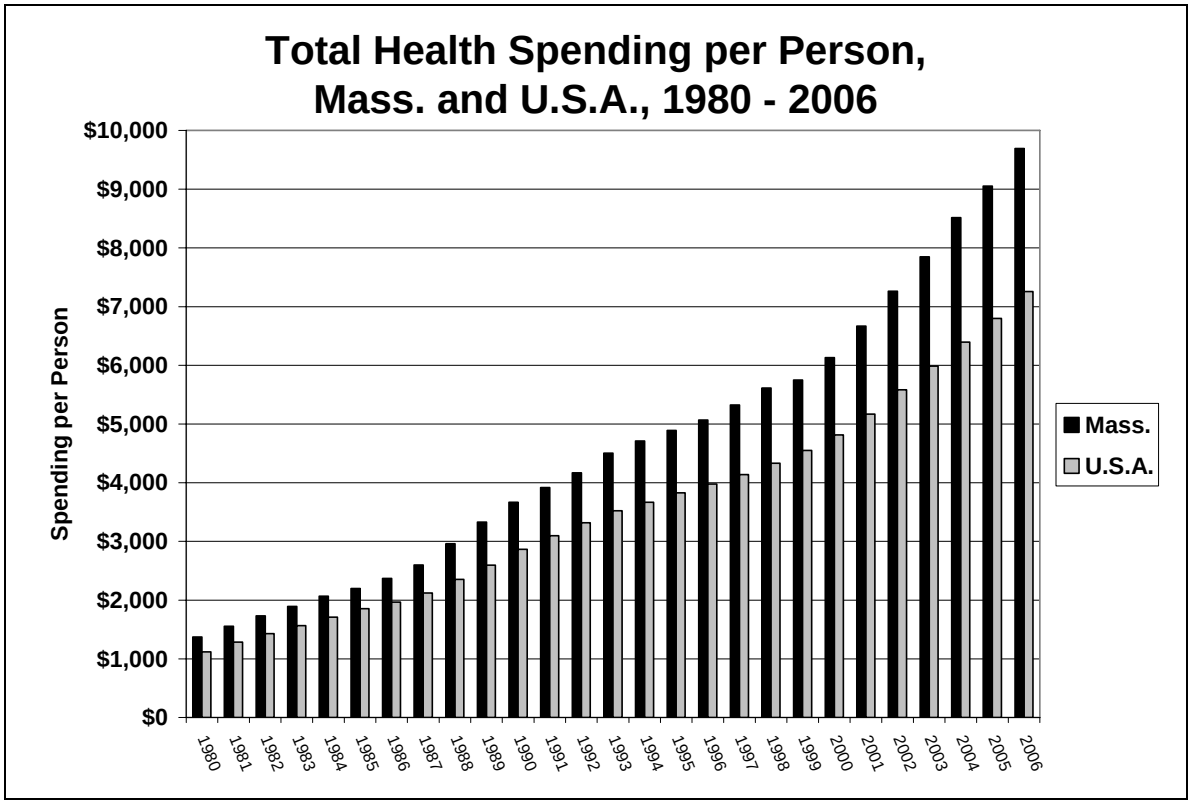
### *Massachusetts Health Spending Increases Much Faster than Expected*

Massachusetts health care spending has risen much faster than previously estimated. Increasing health care costs will strongly influence the ability of

- employers and employees to afford health insurance,
- uninsured people to afford to buy insurance under the newly-legislated individual mandate,
- the state to subsidize policies under the new chapter 58 legislation,[8] and
- hospitals, physicians, and other caregivers to obtain still more money in the future.

We estimate that total health spending in Massachusetts will reach $62.1 billion in 2006, a rise of $4.2 billion over 2005. This new estimate rests in large part on the latest data on state health spending through 2004 from the federal Center for Medicare and Medicaid Services, and on estimates and projections of national health spending through 2015.[9]

***Exhibit 1***



To estimate personal health spending per person in Massachusetts for 2005 and 2006, we took estimated personal health spending per person nationally for those years and raised those figures by 33.2 percent.

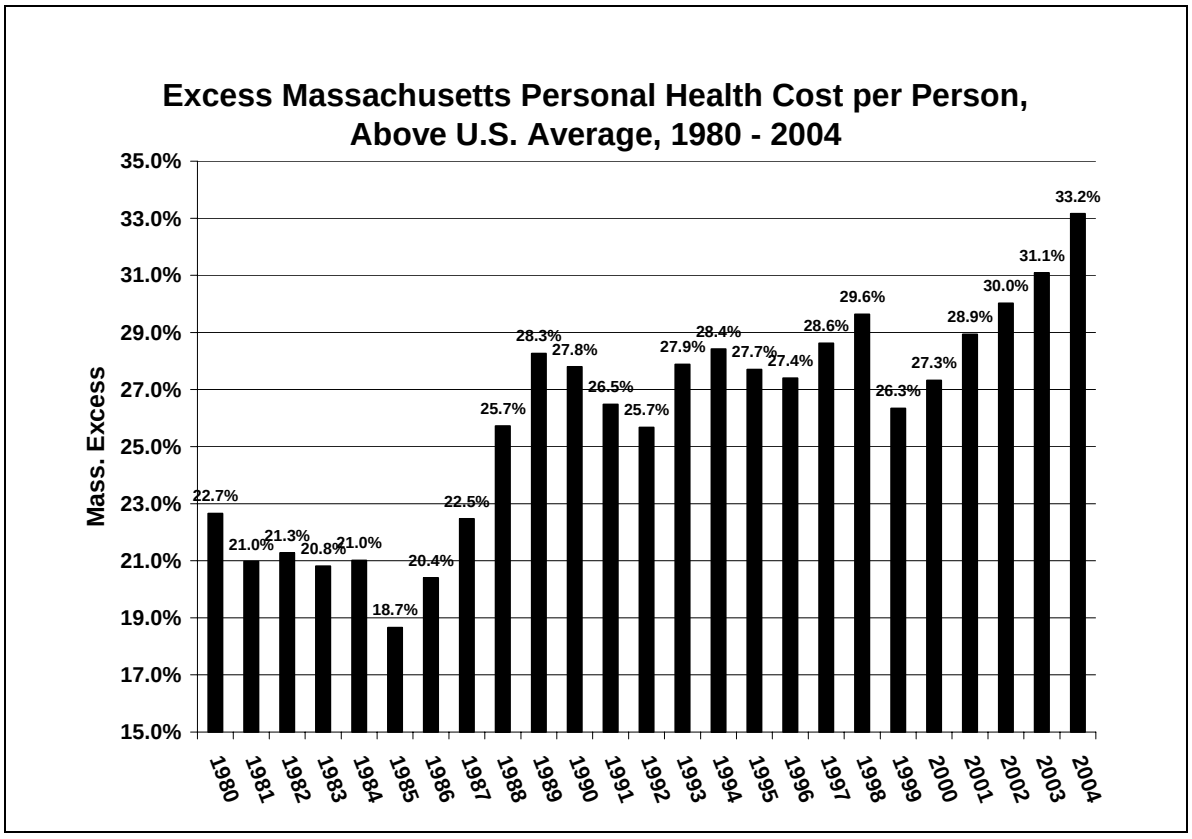
The latest estimates show that the gap between Massachusetts total health care spending per person and the national average has been widening in recent years, both in dollars and relatively. Health spending per person rose much faster here than nationally during the last five years available, 2000-2004.

In 2006, Massachusetts total health spending per person will be $9,662, fully one-third—33.2 percent--above the national average of $7,256. In 2000, by contrast, Massachusetts total spending per person was some 27.3 percent above the U.S. average.

These are the costs of providing more money each year to finance business as usual. These rising costs do not include any of the additional money that will be required to pay for improved coverage under the new Massachusetts law promising to insure almost all residents of the Commonwealth, chapter 58 of the Acts of 2006.

<u>These increases are unprecedented</u>

***Exhibit 2***



As the preceding exhibit shows, excess personal health spending per person in Massachusetts—above the national average—has risen rapidly each year since 1999—from 26.3 percent in 1999 to 33.2 percent in 2004.

The excess appears to rise and fall in six- to seven-year cycles. Each peak is higher than the one before. The 1989 peak was 28.3 percent in excess over the national average. And the 1998 peak was 29.6 percent.

Each trough is higher as well. The trough in 1985 was an 18.7 percent excess above the national average. The 1992 trough was 25.7 percent. The 1999 trough was 26.3 percent.

We have calculated the average excess prevailing during each of three periods. The first is 1980 (the first year that the CMS data are available) to 1987 (the year before the legislature enacted a universal insurance bill that featured very large increases in payments to hospitals). The second is 1988 to 1998 (when the excess last peaked). The third is 1999 (when the excess fell sharply) to 2004 (the last year for which the CMS data are available.

***Exhibit 3***

***Average Massachusetts Excess Spending per Person, Three Periods***

| period | Average Mass. Excess Spending per Person |
|---|---|
| 1980-87 | 21.6% |
| 1988-1998 | 27.8% |
| 1999-2004 | 29.5% |

Personal health care spending versus total health spending

In this report, we sometimes distinguish between total health spending and personal health care spending. Personal health goes to pay for care for individuals. It pays hospitals, physicians, nursing homes, dentists, and other caregivers. Personal health care spending excludes research, construction, government public health activities, and insurance administration and profits. In 2006, nationally, personal health care spending absorbed fully 83.3 percent of total health spending. Assuming that national ratio applies here, in 2006, we estimate, personal care health spending will be $51.7 billion in Massachusetts while total health spending will be $62.1 billion.

The new estimates are conservative

The new estimate of $62.1 billion for 2006, high as it is, should be considered a conservative figure. Actual total health care costs in Massachusetts are probably even higher.

The main reason is that the new estimate conservatively assumes that Massachusetts health care costs remain only as far above the national average—33.2 percent—as they were in 2004, even though some early evidence suggests that costs here continued to rise faster than nationally.

Data from the Mercer health benefits firm indicate that health care costs per employee in Massachusetts rose by 8.8 percent in 2005 versus 6.1 percent nationally. In 2006, Massachusetts costs rose by 8.0 percent versus 6.7 percent nationally. [10]

The higher rate of increase in private insurance costs per employee in Massachusetts strongly suggest that total Massachusetts health care costs per person in 2006 were even higher than the 33.2 percent excess recorded in 2004.

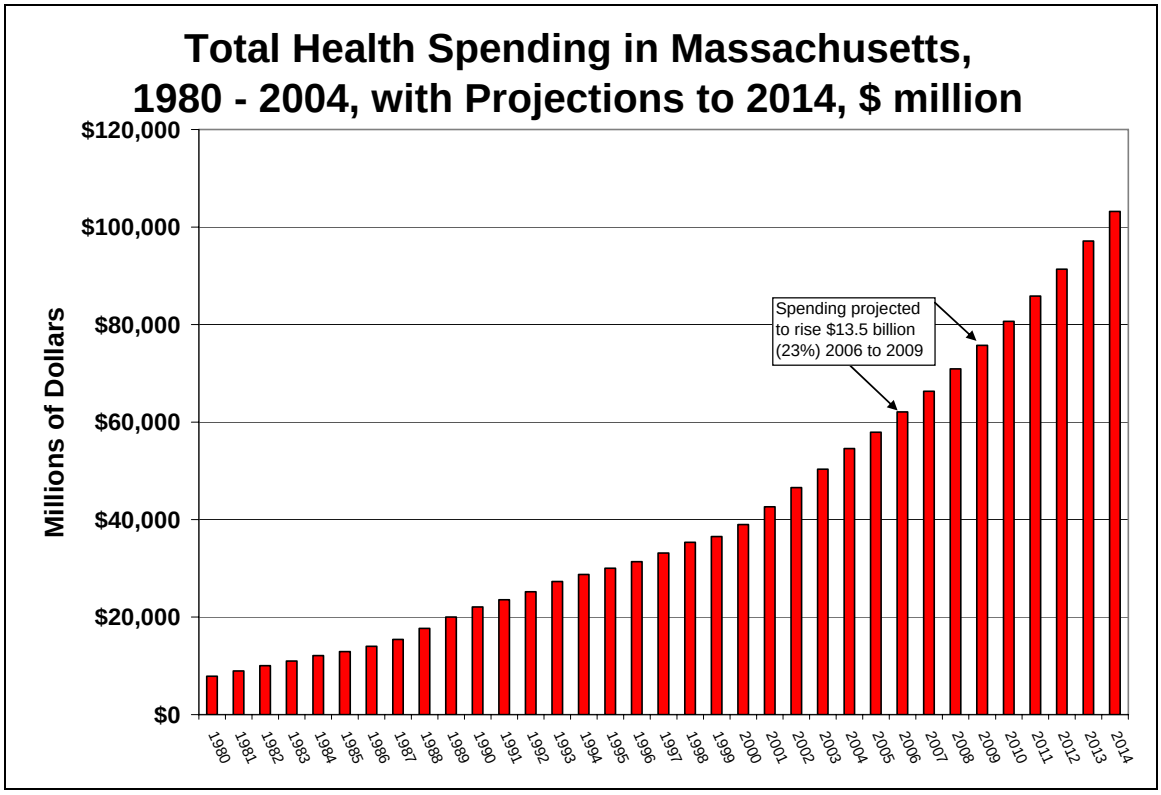
Suppose that the actual Massachusetts total health care costs per person in 2006 were 35.0 percent above the national average. This would translate into total health care costs in Massachusetts of $63.1 billion in 2006 ($1.0 billion above the $62.1 billion reported here), and a $5.2 billion rise over 2005 (not the $4.2 billion reported here).

These estimates are conservative for a second reason. That's because they assume that personal health spending in Massachusetts is 83.3 percent of total health spending here—in line with the national average. But it may well be that personal health spending is a lower share of total spending here—if our costs per person of research, construction, government public health activities, insurance administration, and profit are more than 33.2 percent above the national average.

### *Increases in Total Spending*

If these trends continue, total health spending in Massachusetts will reach $75.6 billion in 2009, the year when the new chapter 58 health care law is scheduled to be fully implemented. That is $13.5 billion (21.3 percent) above the 2006 spending level. And this projection does not allow for the increases in spending by individuals and families, state government, and employers that would be necessary to implement that law.

***Exhibit 4***



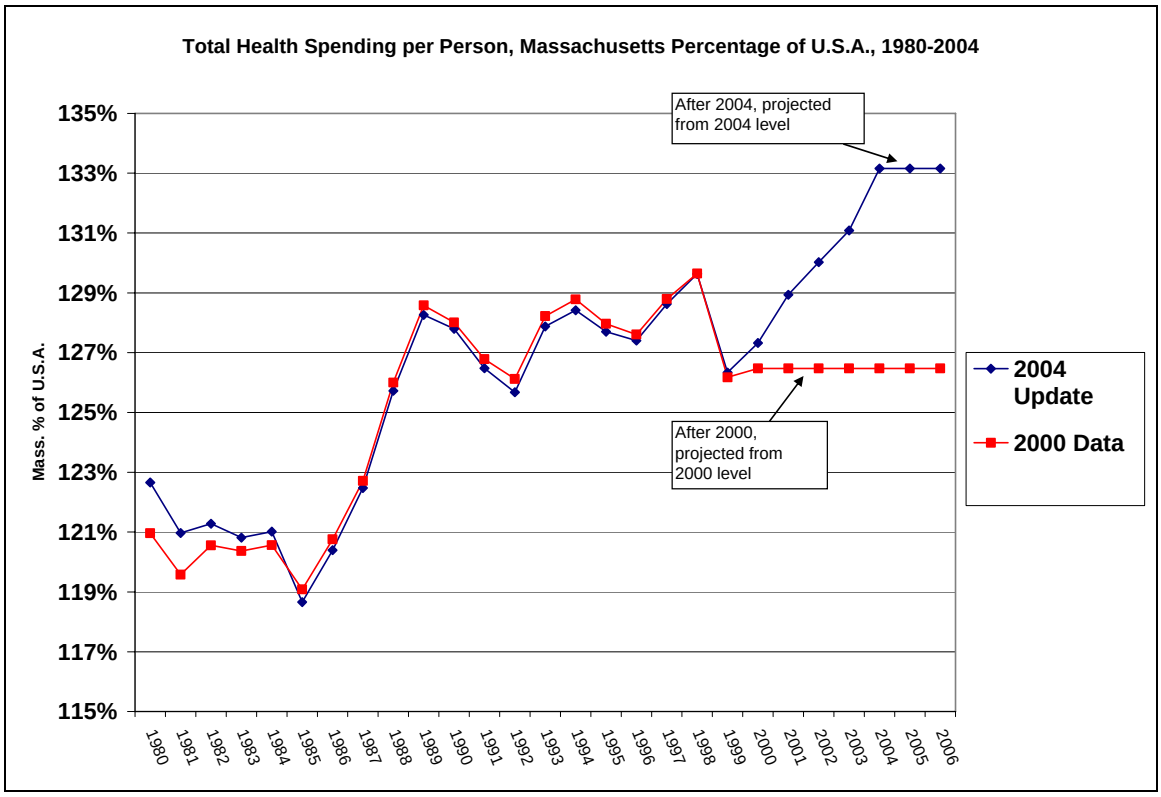
### *New estimates*

This new estimate for 2006 is $3.4 billion higher than our previous estimate for 2006. [11] Our updated analyses rest in part on just-released data on state-level health care spending through 2004, and on the most recent projections of national spending through 2006. The reason for the $3.4 billion increase is that our previous estimate for 2006 rested in part on 2000 data showing Massachusetts health spending per person was 26.5 percent above the U.S. average. The new data for 2001 through 2004 show that Massachusetts health spending per person rose much faster than the national average, reaching 33.2 percent above the national average in 2004.

All of the data in this report reflect the latest information on health care spending in Massachusetts, other states, and nationally.

### *Exhibit 5*

### *Comparison of Estimates of Massachusetts Excess over U.S. Personal Health Costs per Person, Using 2004 Data and 2000 Data*



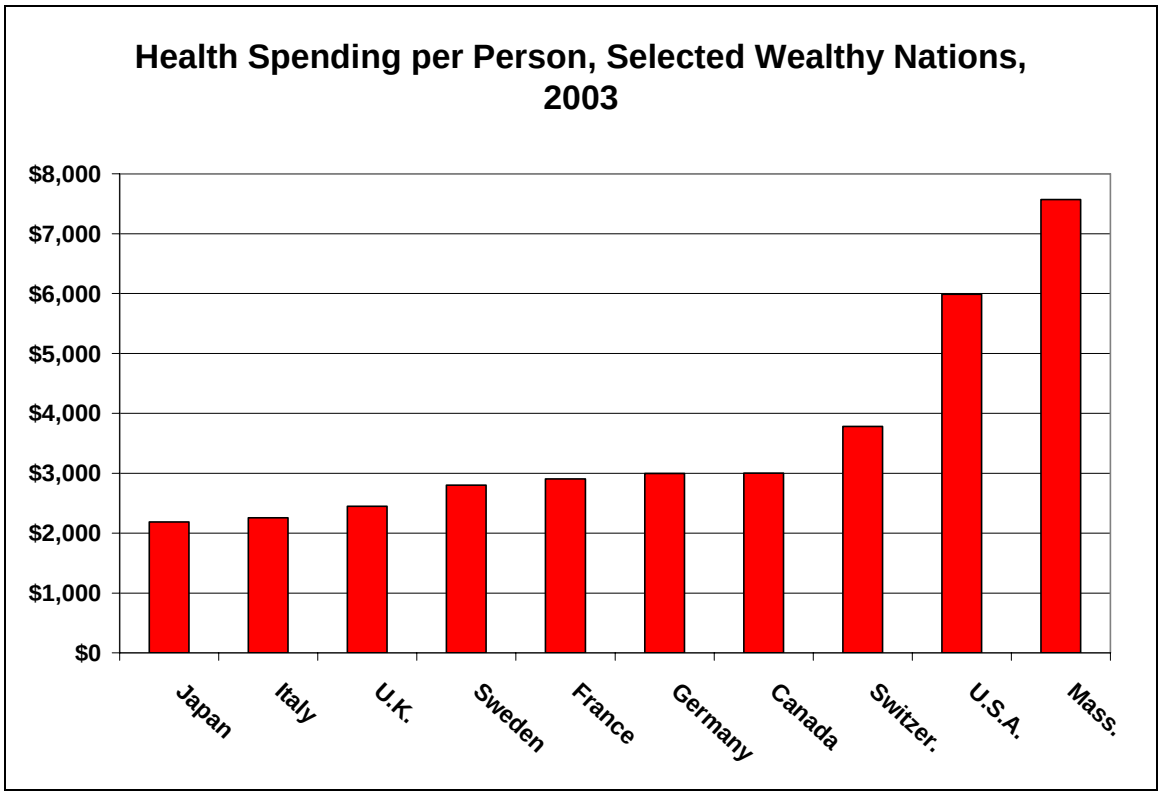
***The world's costliest health care***

Total health spending per person this year in Massachusetts will be $9,662, fully one-third—33.2%--above the national average of $7,256. As the exhibit on the next page shows, this is the highest spending level among the 50 states.

Since the U.S. average is itself the highest in the world[12] and Massachusetts is highest among the states, Massachusetts therefore has the highest health care spending in the world.

***Exhibit 6***

***Health Care Costs in Several Wealthy Nations and in Massachusetts***




If total health spending in Massachusetts were at the U.S. level of $7,256 per person in 2006, we would save $15.7 billion this year alone.

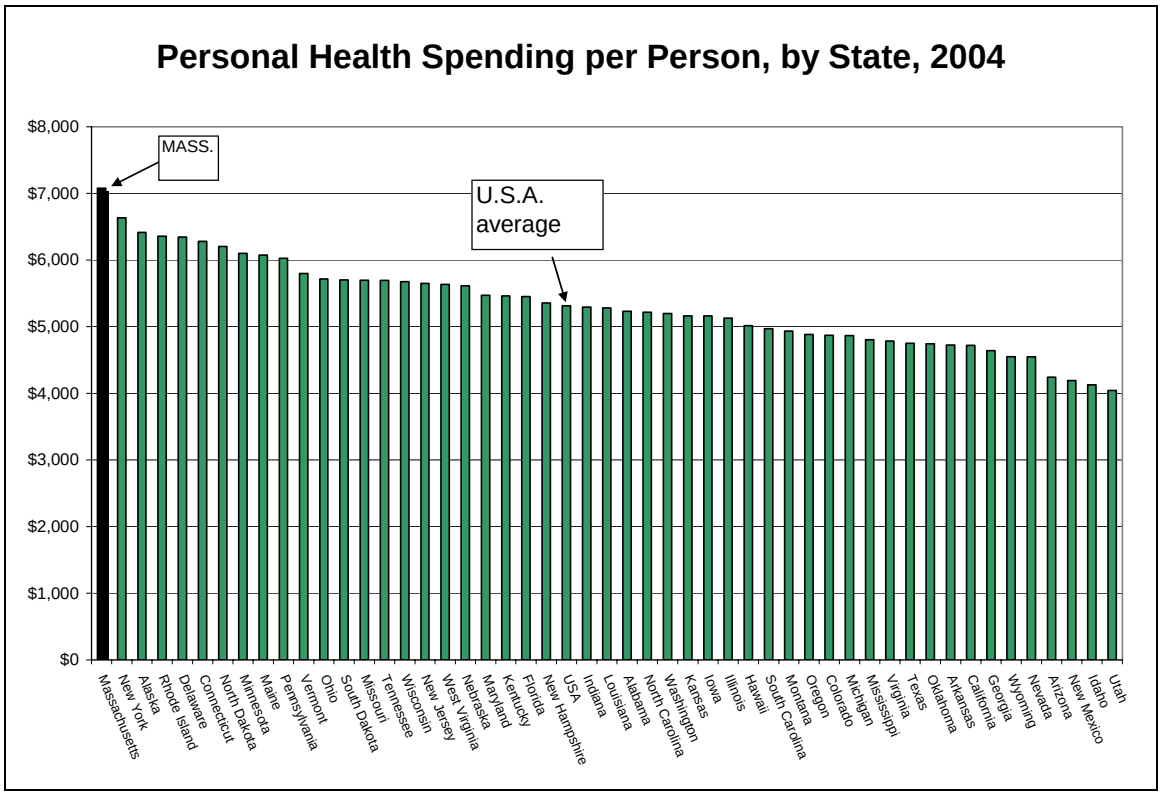
If total health spending in Massachusetts in 2006 had fallen from $9,662 per person even to the level of the second-costliest state (New York, at $9,056 per person), we would still save $3.9 billion this year.

***Health care's share of the economy***

Health spending has soared over time as a share of the Massachusetts economy, as will be detailed shortly. It average 16.5 percent of gross state product from 2001 to 2006.

If health spending in Massachusetts in 2006 had remained at the average share of gross state product that prevailed during the decade from 1991 to 2000 (15.0% of GSP), then savings this year would have been $7.8 billion.

***Exhibit 7***



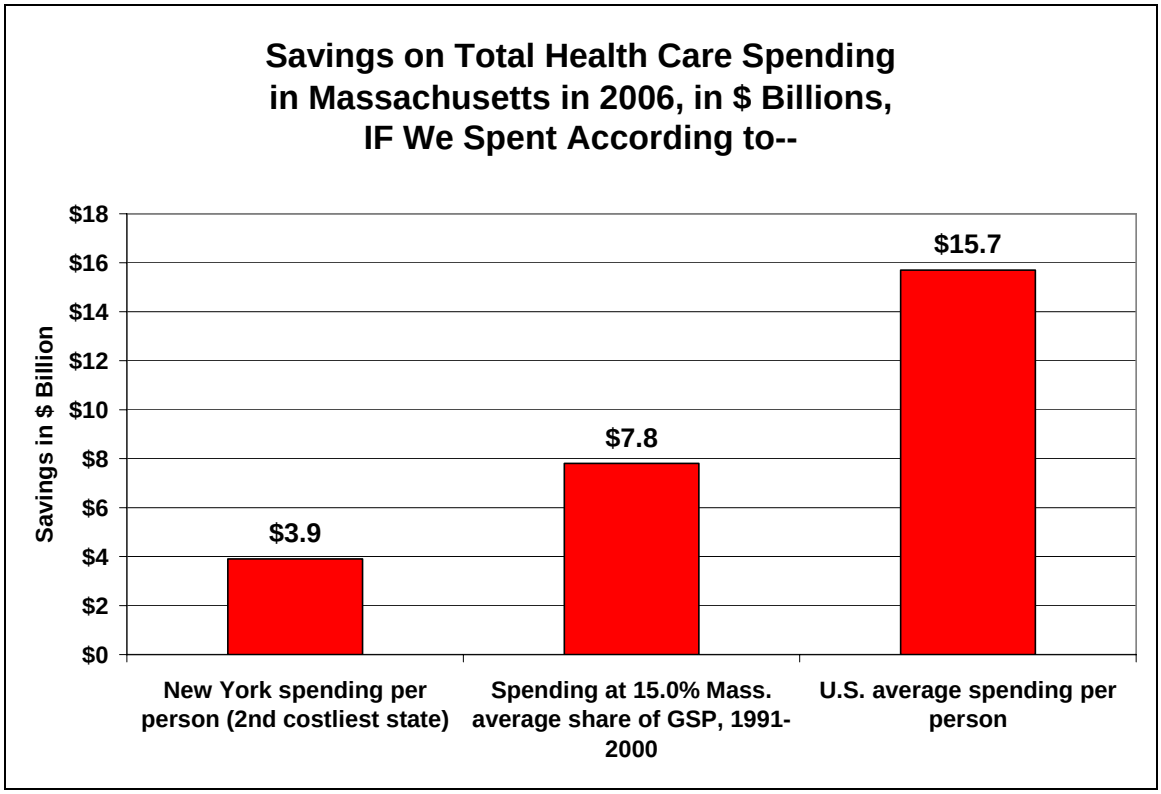
***Comparison of savings by three standards***

The following exhibit summarizes the total savings on Massachusetts health care if 2006 spending in our state were

- at the 2006 spending per person levels of New York State, the second-costliest state,
- at health care's average share of Massachusetts GSP prevailing during the decade of the 1990s, and
- at the 2006 average total health care spending per person prevailing in the U.S.A. as a whole.

The exhibit does not display the much greater savings—two-thirds of 2006 Massachusetts health spending—that would be garnered if our state spent at the Canadian, German, or Swiss levels.

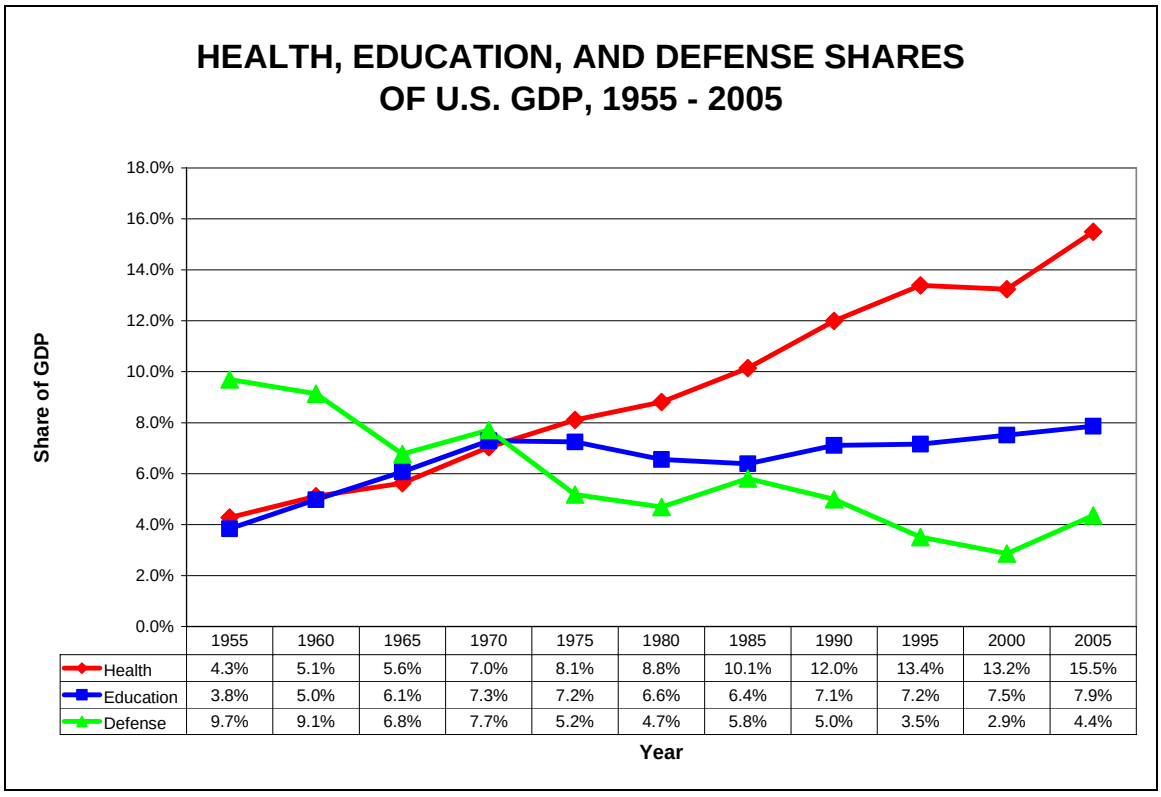
***Exhibit 8***



### *We spend enough on health care*

In 1955, U.S. defense spending was more than double health care spending, as the following exhibit shows. By 2005, health care spending was about 16 percent of the nation's economy, roughly four times as great as defense spending.

***Exhibit 9***




| | 1955 | 1960 | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Health | 4.3% | 5.1% | 5.6% | 7.0% | 8.1% | 8.8% | 10.1% | 12.0% | 13.4% | 13.2% | 15.5% |
| Education | 3.8% | 5.0% | 6.1% | 7.3% | 7.2% | 6.6% | 6.4% | 7.1% | 7.2% | 7.5% | 7.9% |
| Defense | 9.7% | 9.1% | 6.8% | 7.7% | 5.2% | 4.7% | 5.8% | 5.0% | 3.5% | 2.9% | 4.4% |

At the same time, education spending, which had been growing in parallel with health care as a share of GDP from 1955 to 1970, essentially leveled out at about 7-8 percent of the economy. It may be that higher health care spending has competed with—and crowded out—spending on education.

We do not suggest here that the education and defense shares are right or wrong. We do assert that health care's current spending and current share of the economy should be adequate—by all international measures—to finance very good health care for all Americans, and that continued growth in health care's share of the economy will be economically, politically, and socially dangerous.

Economically, health costs burden U.S. exports and sponge up revenues that are needed to pay for other things. Politically, loss of insurance coverage and the increasingly difficult task of finding more money to finance business as usual create political problems. Socially, threats to insurance coverage magnify financial insecurity and dissolve much of the glue that holds our people together.

### *Health care spending's rise as a share of the state's economy*

Health care spending's share of the state's economy has risen in waves. As shown below, total health care spending's average share of gross state product (the rough equivalent of the national gross domestic product) was 11.9 percent during the decade from 1981 to 1990. It rose to an average of 15.0% during the decade from 1991 to 2000, and then further to an average of 16.5 percent during the most recent half-decade, from 2001 to 2005. We estimate that share at 17.0 percent for both 2005 and 2006.

| Period | Total Health Care Spending's Share of Mass. Gross State Product |
|---|---|
| 1981-1990 | 11.9% |
| 1991-2000 | 15.0% |
| 2001-2005 | 16.5% |

In 2006, if health absorbed the same 15.0 percent share of the state's economy as it did during the decade from 1991 to 2000, then total health care spending in the state would have been $7.6 billion less than it actually is this year. That is, total health care spending in Massachusetts would have been $54.5 billion, not the $62.1 billion now expected.[13]

***Exhibit 10***

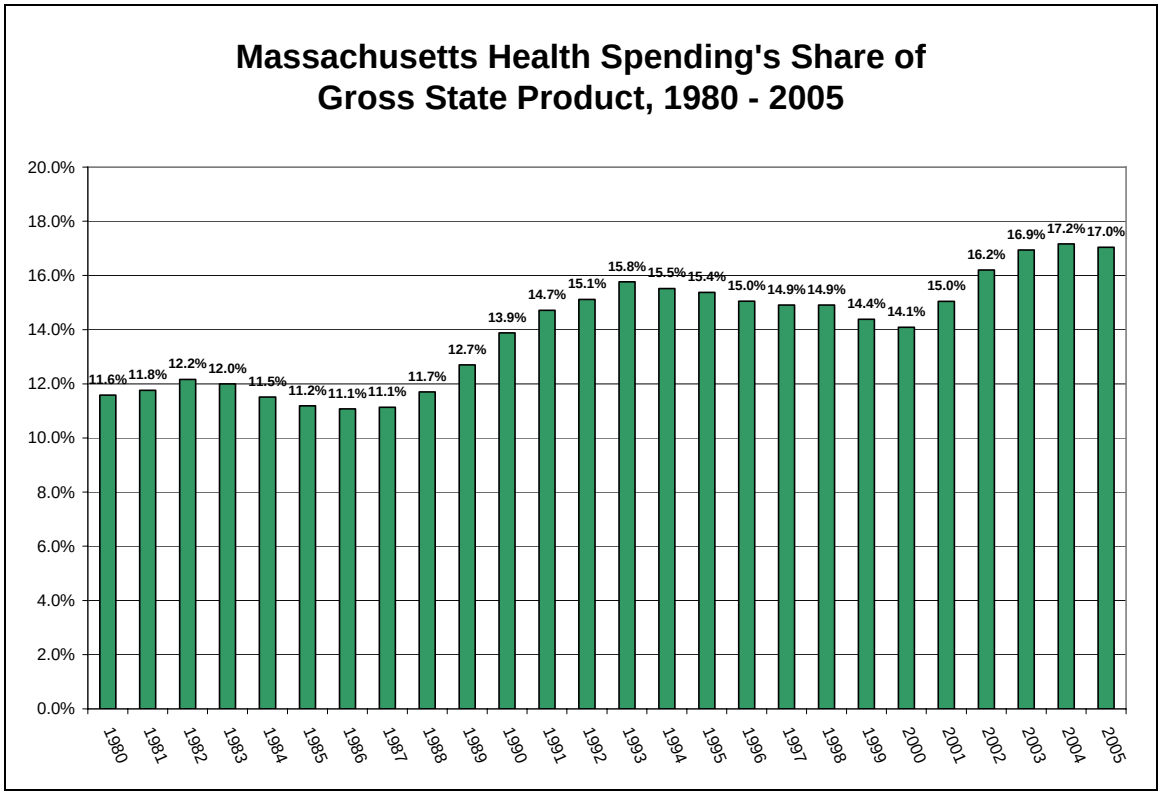
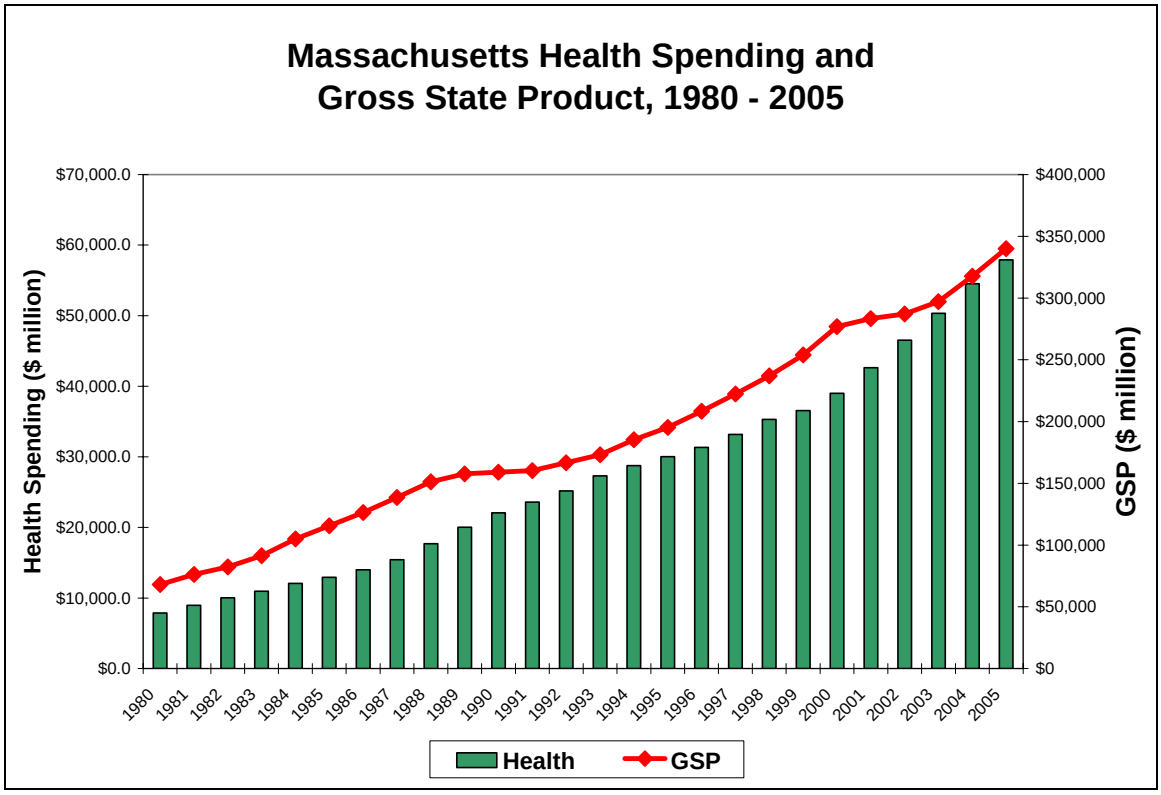


***Exhibit 11***




It is noteworthy that in 2004, health care costs' 17.2 percent share of Massachusetts GSP, exceeded the comparable national share of 16.0 percent. [14]

***Health costs versus state revenues***

It is useful to compare total health spending in Massachusetts to total revenue raised by state government from its own sources. [15] This helps to measure the affordability of health care cost increases to state government. It also serves as a surrogate measure of the even greater affordability problem faced by the cities and towns. Local governments are the canaries in the health care coal mine. [16]

In 2005, the Commonwealth's total revenue from the sales tax, the personal income tax, the corporate income tax, the lottery, and other sources of state revenue totaled about $23.1 billion, only two-fifths as much as the $57.9 billion spent on health care in 2005. In other words, health spending in Massachusetts from all sources is two and one-half times as great as the state's own revenues raised for all purposes.

State revenues are becoming increasingly inadequate to shoulder the burden of soaring health care costs. In 1988, the state's own revenue equaled 56.5 percent of health care spending; in 2005, the share had fallen to only 39.9 percent of health care spending here.

Viewed in another way, state revenues rose 131 percent from 1988 to 2005, but total health costs rose by 227 percent—over two-thirds faster.

***Exhibit 12***

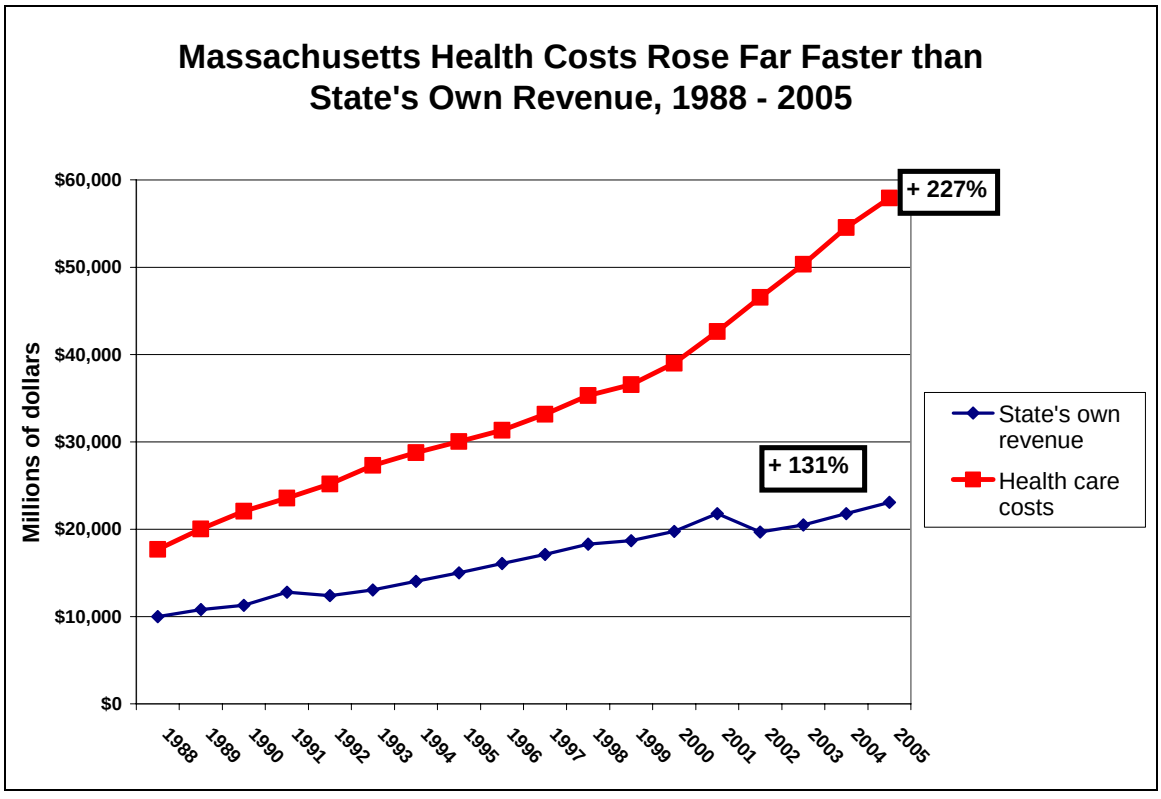
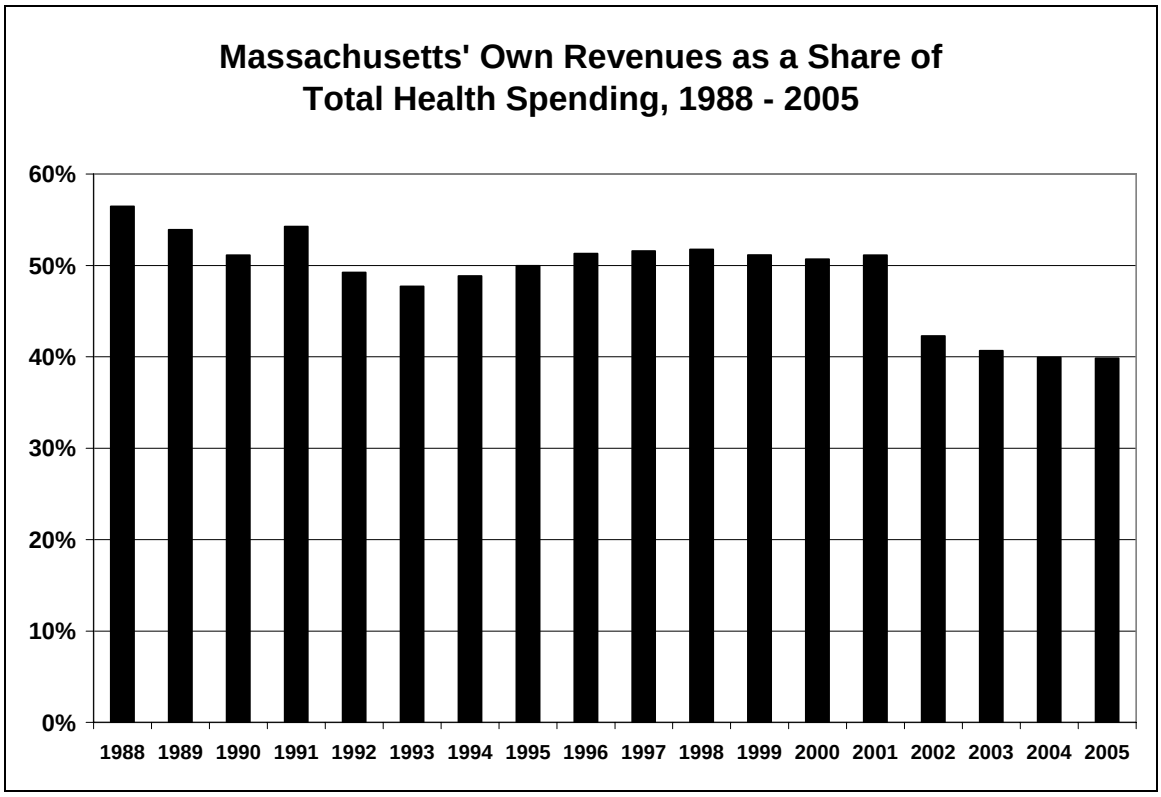


***Exhibit 13***


Massachusetts' Own Revenues as a Share of Total Health Spending, 1988 - 2005
60%
50%
40%
30%
20%
10%
0%
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005

### *Spending by sector*

In 2004, Massachusetts personal health care spending was divided among ten sectors, as shown in the following exhibit.

Hospitals absorbed 39.9 percent of personal health spending, followed by physicians at 22.2 percent, retail prescription drugs at 10.5 percent, and nursing homes at 9.2 percent. (Long-term care, consisting of nursing homes and home health care, took 13.0 percent.)

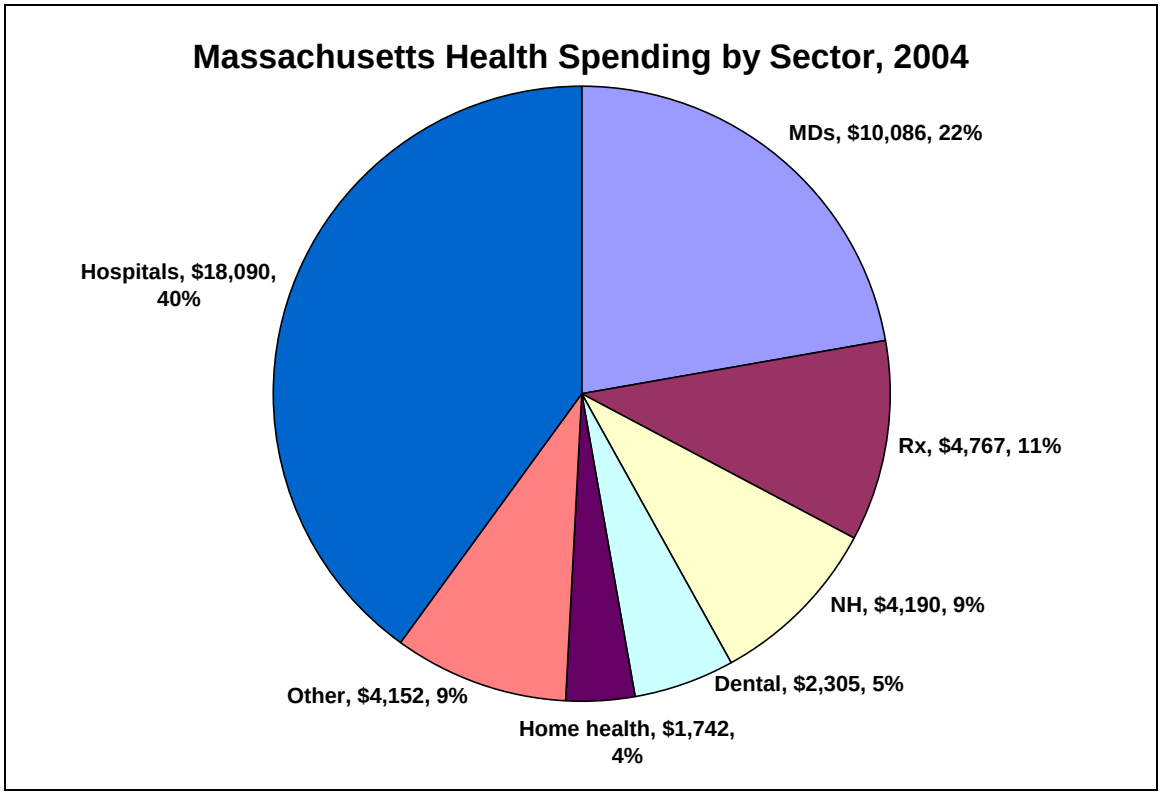
***Exhibit 14***

***Massachusetts Personal Health Spending by Sector, 2004***

| Sector | Spending *$ millions* | Share of Spending |
|---|---|---|
| | | |
| Hospitals | $18,090 | 39.9% |
| MDs | $10,086 | 22.2% |
| Rx, retail only | $4,767 | 10.5% |
| NH | $4,190 | 9.2% |
| Dental | $2,305 | 5.1% |
| Home health | $1,742 | 3.8% |
| Other personal | $1,671 | 3.7% |
| Other professionals | $1,313 | 2.9% |
| Other non-durables | $658 | 1.5% |
| DME | $510 | 1.1% |
| | | |
| Total | $45,331 | 100.0% |

The next exhibit displays these data in a pie-chart format.

***Exhibit 15***




Spending by sector versus savings by sector

As will be shown shortly, health care spending in Massachusetts would be markedly reduced if our spending per person, sector-by-sector, fell to the national average spending per person.

These savings vary by sector. As will be shown, actual spending on hospitals absorbed almost 40 percent of personal health care spending in 2004 but would account for fully 49 percent of all savings—if all Massachusetts spending fell to the U.S. averages per person in each sector of health care.

### *Savings by Sector*

Federal analysts noted that hospital spending has been growing faster in New England than elsewhere, and highlighted recent rapid growth in statewide aggregate spending on hospitals in Massachusetts, averaging "10.2 percent annually from 2000 to 2004."[17] We have calculated that growth in aggregate hospital spending in Massachusetts during those years was tied for sixth highest among the states. That is remarkable both because hospital spending per person here has long been among the highest of any state and because population growth recently has been slower here than in most states.

Data from the hospital industry itself indicate that Massachusetts hospital spending is higher, per person, than in any other state—44 percent above the national average in 2004. [18] That was up from 34.5 percent above average in 1987, a time when hospital revenues were regulated. The 1985-1987 cost controls were replaced by competitive financing policies in the 1988 universal health care law and in 1991 legislation.[19])

Although high hospital costs in Massachusetts have been the most widely discussed and debated health care cost problem, they are certainly not the only health care cost problem.

We have estimated the savings on health care, sector by sector, if personal [20] health spending per person in Massachusetts in 2004 were at the average spent nationally per person in that year. These are the sums that would have been saved, in dollars and as a share of actual spending in 2004 for that category of care. (We are not suggesting that national average spending levels are the appropriate target, but thought it might be interesting to learn how much would be saved if our state spent at national levels.)

***Exhibit 16***

**Savings by Sector, If Massachusetts Spent at U.S. Average, 2004**

- Hospitals $5.6 billion, or 31.1 percent of actual hospital spending
- Physicians $1.4 billion, or 13.5 percent of actual spending on MDs
- Long-term care $2.5 billion, or 41.8 percent of actual LTC spending
- Rx $0.7 billion, or 13.7 percent of actual Rx spending
- Dental $0.5 billion, or 22.8 percent of actual dental spending
- All other $0.6 billion, or 15.4 percent of all other actual spending
- Sum $11.3 billion, or 24.9 percent of actual personal health spending in Massachusetts

Had personal health spending in 2004 fallen to the national average, the savings would have been $11.3 billion. The pie chart in the following exhibit identifies the slices of the $11.3 billion in savings from hospitals, physicians, and other sectors.

***Exhibit 17***

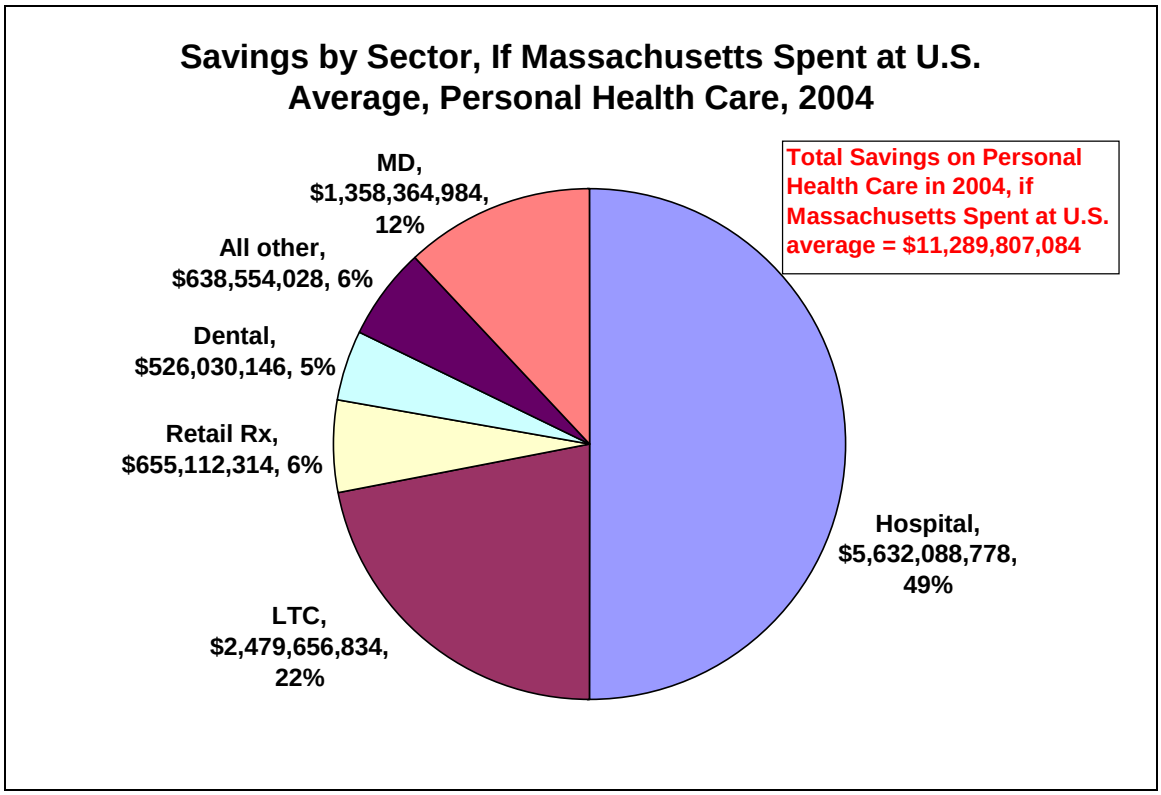



***Exhibit 18***

***Dollar and Percentage Savings by Sector, Personal Health Care 2004***

| | Actual Mass. $ per Person | U.S. $ per Person | Mass. Excess % Over U.S. $ per Person | Statewide Actual Personal Health Care Spending in Mass., 2004 ($ billions) | Mass. Spending at U.S. $ per Person ($ billions) | Mass. Savings at U.S. $ per Person ($ billions) | Savings as % of Actual Mass. $ |
|---|---|---|---|---|---|---|---|
| Total | $7,075 | $5,313 | 33.2% | $45.3 | $34.0 | $11.3 | 24.9% |
| Hospital | $2,823 | $1,944 | 45.2% | $18.1 | $12.4 | $5.6 | 31.1% |
| MD | $1,574 | $1,362 | 15.6% | $10.1 | $8.7 | $1.4 | 13.5% |
| LTC | $926 | $539 | 71.8% | $5.9 | $3.5 | $2.5 | 41.8% |
| Retail Rx | $744 | $642 | 15.9% | $4.8 | $4.1 | $0.7 | 13.7% |
| Dental | $360 | $278 | 29.6% | $2.3 | $1.8 | $0.5 | 22.8% |
| All other | $648 | $549 | 18.2% | $4.2 | $3.5 | $0.6 | 15.4% |

## *B. DISCUSSION*

### *Overview*

Only a part of the excess cost of health care in Massachusetts is justified by legitimate and reasonable factors.

Legitimate justifications for part of the Massachusetts excess include provision of some health care to patients from out-of-state (export of health care), quality of care and health outcomes that are generally somewhat better than the national average, a higher cost of living in Massachusetts, a higher rate of insurance coverage than prevails nationally, and a slightly older population.

While these and other factors might help to justify some of the Massachusetts health care cost excess, we are convinced that this state is not getting our money's worth in dramatically better health status or in economic benefits.

Therefore, we are deeply worried by several aspects of the Massachusetts cost excess and how it is viewed by caregivers, businesses, and politicians. These aspects include:

First, the tendency of hospital and doctor groups, and some of their allies, to rationalize, explain away, or ignore today's cost problem—and tomorrow's continued rapid cost increases. Addicted to more money to finance business as usual in health care, they would, apparently, rather offer words to try to justify soaring spending than offer deeds to try to slow cost increases and make care durably affordable for all.

Second, the weak efforts to contain cost that state government, insurers, hospitals, and doctor groups offer to a concerned public today.

Third, the grave threat posed by excess costs and soaring costs to the affordability of health insurance, Medicare, and Medicaid in our state—for people who are insured today and people who hope to be insured under the new chapter 58 legislation. Those who would try to rationalize and try to explain away high and soaring costs—by saying that higher health spending pays a good return on investment—ignore or trivialize the inability of many citizens to afford to make that investment by buying insurance coverage.

Fourth, the failure of caregivers, insurers, and governments to prepare disaster plans to cope with the looming threat of financial meltdown of our health care at the bottom of the next serious recession.

Fifth, our conclusion that about one-half of health care spending in Massachusetts (as nationally) is wasted.

Because of these worries about unjustified high spending, soaring costs, growing unaffordability of care, about failure to prepare financial disaster plans, and about the high level of waste in health care, we offer several proposals. These include:

1. State government should make a finding that Massachusetts health care is drifting toward a crisis of cost, affordability, coverage, and caregiver survival. It should acknowledge that effective cost control is essential, that few cost controls attempted over the past 30 years have helped, that no provisions to meaningfully slow cost increases are now available, and that new approaches are therefore vital. State government should work privately and publicly to persuade caregivers, insurers, employers, unions, and other payers that our state's high costs cannot be justified or rationalized—and that our high costs are not affordable.

2. State government must put and keep its arms around the health coverage and cost crisis. This will require strong and sustained executive leadership to engage all stakeholders—state legislators, city and town officials, private employers, unions, caregivers, access advocates, and others—in shaping durably affordable and high-quality health care for all in Massachusetts. It is futile and unnecessary to wait for Washington to act. The federal government is paralyzed politically. It is willfully reckless financially. And it lacks any reasonable ideas about how to contain cost and cover all Americans. (Current political debates in Washington suggest that Congress may be willing to cut Medicare and Medicaid spending to reduce the federal deficit. [21]) Our state can do much on its own. In addition, state government should urge Washington to support state efforts to achieve coverage for all affordably. The state should even prepare applications for any needed waivers of ERISA, Medicare, and Medicaid statutes against the time they will be granted by Washington.

3. State government will work with payers, insurers, and caregivers to prepare a financial disaster plan to cope responsibly with a severe financial shock, such as a drop of 10 percent in real revenue to finance health care in Massachusetts. Without such a plan, state government and our seemingly invincible teaching hospitals and insurers could easily pass (to echo Al Gore's words about global warming) from denial today to despair at the bottom of the next recession—without stopping at the point of actually doing something constructive. [22]

4. All stakeholders will work to put in place arrangements to squeeze waste out of our health care, capture the savings, and recycle them to finance and deliver comprehensive and high-quality care for all residents of the Commonwealth

5. In our view, almost all of the cost controls attempted during the past 30 years have failed. That's because they did not engage doctors in a central, cooperative role. Doctors' decisions control almost 90 percent of personal health care spending. Doctors and payers could negotiate payment and delivery

arrangements that will encourage and induce doctors to squeeze out health care waste, contain cost, and make money available to finance durably affordable high-quality care for all.

**The three main consequences of soaring health care costs**

Soaring health care costs have three main consequences for people who live, work, or do business in Massachusetts:

1. Health insurance premiums for everyone who works or does business increase rapidly and to unaffordable levels.

2. The cost of winning health insurance coverage for everyone rises much faster than our willingness or ability to pay for it.

3. Addicted to more money for business as usual, Massachusetts health care is becoming increasingly unready to cope with the effects of a deep economic recession—one that we fear will befall the state and nation within the next five years.

***Is the excess cost of health care in Massachusetts justifiable? If so, what are the possible justifications?***

Those who support or seek to rationalize higher health care spending in Massachusetts point to several possible justifications. These include assertions that

- health care is an export industry, a huge engine of economic growth. State hospital associations frequently claim that hospital make great contributions to their states' economies. [23] Similarly, James Mongan, head of Partners Health Care, recently claimed in a *Boston Globe* op-ed that health care was good for the state's economy. [24] Mongan asserted that Massachusetts health care attracts National Institute of Health research grants, patients from out-of-state, and special Medicare payments;
- Medicare and Medicaid finance a big share of our health care costs, providing much revenue from out-of-state;
- higher costs are explained in part by an older population, a higher cost of living, and the like;
- higher spending allows our state to insure more people or improve quality of care. For example, Joe Kirkpatrick of the Massachusetts Hospital Association recently said that "Massachusetts healthcare is not only the most expensive, it's the best." [25]

While there is at least some truth to most of these assertions and arguments, we conclude that they are not substantial enough to justify today's high health care spending. And they will not be enough, in the future, to protect Massachusetts health care—those who depend on it for care and those who provide it—from deep and dangerous cuts during the next severe economic recession.

Even conservative estimates of total health spending in Massachusetts indicate that it is a bigger share of our economy than prevails nationally. Health care here was 17.2 percent of GSP in 2004, compared with 16.0 percent of national GDP.[26]

### *Export industry*

If Massachusetts gave a great deal of health care to residents of other states or nations, this would be important for two reasons. First, this would mean that the actual cost of health care per person in Massachusetts is lower than the conventional data indicate. Second, it would mean that Massachusetts exports a substantial amount of health care, thereby earning money that individuals and businesses in our state can use to buy food, fuel, electronics, and other goods and services from outside the state.

The best and most recent data, though, indicate that exports of actual health care for individuals is a tiny share of personal health care provided in Massachusetts, net of care given to residents of Massachusetts elsewhere. This means that the cost of personal health care is very close to the data reported here, and that provision of health care services does not give a very big boost to the Massachusetts economy.

Some industry voices dispute the importance of estimates of health care spending per capita in Massachusetts, arguing that much care provided in Massachusetts is for people from outside the state. Often, however, they neglect to note the off-setting outflow of patients from Massachusetts who seek care in Providence, Albany, or other cities across state borders, or elsewhere while traveling, and the like.

Actually, it is not very hard to quantify the cost of health care given in Massachusetts to people from out of state, net of care given outside Massachusetts to Bay Staters.

That is because the federal government periodically develops estimates of spending on health care for the residents of each state, as opposed to the recent estimates of spending on the health care providers in each state.

In 1998, the last year for which such data by residence are available, $29,566 million was spent—here and in other states—on health care for Massachusetts residents. Spending per resident in Massachusetts was highest in the nation. In that same year, health care providers in Massachusetts garnered $30,198 million in revenue.

The difference, $622 million, was care provided here to residents of other states (or nations). The $622 million therefore comprised an export, something that boosts the state's economy by earning money from out-of-staters. This $622 million difference equaled 2.1 percent of the money spent to provide care to residents. Looked at another way, net spending on care for residents equaled fully 97.9 percent of the spending on caregivers in the state.[27]

Viewed across the states, 23 states were *net* exporters of health care in 1998. Massachusetts ranked 9th among these 23 in exports as a share of state-of-provider spending, above Texas but below Colorado. [28] Massachusetts ranks 8th on dollar exports.

This measures the export of personal health care. It does not reflect exports earned by conducting research and development financed by the National Institutes of Health or other sources outside the state.

The 1998 HCFA data, and previous analyses for 1993, showed Massachusetts per capita costs to be the highest among the states, both for care provided *by Massachusetts caregivers* and for care provided *to Massachusetts residents*. So the state's high per capita health costs could not be explained by use of Massachusetts caregivers by patients from outside the state.[29]

If—as in 1998—fully 97.9 percent of 2006 personal health spending in Massachusetts goes to Massachusetts residents, net, then personal health spending per resident in Massachusetts this year will be $7,877.

Those who pay for health care for Massachusetts residents spend far more than payers do in any other state, 30 percent above the national per capita average. The same federal government data show that spending on the state's caregivers in 1998, per resident, was 77 percent higher in Massachusetts than in Idaho—the highest and lowest cost states in 1998, respectively, and four percent higher than in New York, the next highest state.

We fear that exports have been falling over time as a share of personal health spending in Massachusetts. One reason is that doctors and hospitals in nearby states, such as New Hampshire, have been markedly boosting their own capacity to provide care for which people previously traveled to Boston. A second reason is that prospective patients from other nations are said to be experiencing greater difficulty than formerly in obtaining visas.

## Medicare and Medicaid payments

It is money raised from within the state—not money from Washington—that must finance the bulk of health care spending.

Medicare and Medicaid together paid a slightly smaller share of personal health care costs in Massachusetts in 2004 than they did nationally. Together, they paid 36.0 percent of costs here versus 36.6 percent nationally. Massachusetts ranked only 24th in Medicare plus Medicaid shares of personal health spending. (See the exhibits in Section C.)

Even these estimates actually over-state Washington's financial support for our state's costly health care.

Medicare—overwhelmingly federal money—covered only 17.7 percent of the cost of personal health care in Massachusetts, well below the 19.2 percent share for the national as a whole. This is true even though the over-65 share of the population in Massachusetts is slightly greater than the national average. So the low Medicare proportion of personal health spending may partly reflect the higher-than-average dollars per person spent by other payers here—particularly through HMOs and private insurance financed by employers and employees.

Mongan asserts that Massachusetts receives three times the U.S. average in Medicare payments for medical residents and costs associated with their training.[30] If so, it is particularly disheartening to learn that Medicare covers a share of personal health care costs in Massachusetts that's below the U.S. average share paid by Medicare. The CMS data on personal health spending do include these special payments for residents and costs associated with their training. [31]

It is Medicaid that covers a higher share of Massachusetts health care costs than nationally—18.2 percent here versus 17.4 percent nationally. This reflects, in part, the 50 percent rise in people covered by Medicaid in the second half of the 1990s. But our state must effectively contribute almost 50 percent of this money, while states with lower average personal incomes, contribute much smaller shares of Medicaid—only about one-quarter in Mississippi, for example. [32]

Medicare and Medicaid have provided the money needed to finance much of the growth in heath spending in our state. But we should be cautioned that public revenues for health care have been growing somewhat more slowly than private health insurance revenue. [33]

Further, Medicare and Medicaid dollars are not guaranteed to flow even as well in the future as they have in the past. A bad recession threatens all sources of revenue—public and private—that finance Massachusetts health care. Early signs of threats to Medicare and Medicaid are visible already. Sen. Gregg has proposed federal budget rules that, if adopted, would prepare the ground for very substantial cuts in federal Medicare and Medicaid dollars in the years ahead. [34]

Sen. Gregg's proposed rules are a harbinger, not an aberration. The federal budget is structurally out-of-balance. Washington runs a very big deficit, even during ostensibly good economic times—and our nation runs an even bigger (and growing) trade deficit. The structural deficit means that the president and Congress must either raise taxes or cut spending. Health care is a large share of the spending that could be cut. The structural deficit, by the way, means that Washington will find it much harder than in the past to borrow to spend our economy's way out of the next recession.

### *Economic benefits and economic balance*

Economic benefits

High health care spending means more jobs in health care, but if only a small share of our health care constitutes a real export, financed by money from out-of-state, then more jobs in health care means fewer jobs outside health care.

After all, if we spend more money on health insurance premiums, we have less money to spend on home or auto repairs, food at home or in restaurants, and other things we need and want.

Higher spending on health care means fewer jobs outside health care. And it also means higher health insurance premiums to pay the salaries or wages for more people with jobs in health care. Higher premiums mean fewer people can afford health insurance.

Many individuals hope that health care will boost the state's economy, bringing in investments in pharmaceuticals and medical devices from out-of-state, jobs to do the work financed by these investments, and exports of care by serving patients from out-of-state.

This hope is born in part out of desperation. A state that has lost textiles, shoe manufacturing, candy, auto assembly, mini-computers, and other industries is constantly seeking new sources of economic growth and continuity.

Health care is valuable in itself if it offers medical security, cure, and care. Health care promotes economic growth only if it brings in more money from out-of-state than it drives away. In this sense, teaching hospitals are good if they attract NIH research from Washington. But they are bad if they help to drive up health insurance premiums, which spurs employers to relocate out-of-state.

Higher health care spending may make for better quality of care and improved health status. As will be shown shortly, health status in Massachusetts is above the national average in most important respects. But it is not as far above average as would be expected from our high spending. And health spending per person is barely correlated with health status measures like age-adjusted death rates.

As Robert Keough wrote in 2004, "Never before have we counted so heavily for our economic future on a sector whose growth we are so anxious to restrain." [35]

Economic balance

As noted earlier, total health care spending in the United States this year is roughly four times defense spending and double education spending. By all international standards, that should be enough money to take good care of all Americans.

As health care's share of the national economy or state economy continues to increase, this means more than higher health insurance premiums. It means less money to spend on other public or semi-public activities like education, infrastructure, criminal justice and public safety, cleaning the environment, housing homeless people, and all the rest.

It also means lower take-home pay and less money to spend on our own housing, food, clothing, transportation, college tuitions, vacations and recreation, and all the other things we care about.

Bent out of shape

Massachusetts health caregivers hope to attract patients, research grants, and other revenue from out-of-state. They succeed, to a large degree, in attracting research funds from the National Institutes of Health, drug makers, and other sources. They do less well in actually exporting health care to non-residents.

But in seeking to push back the frontiers of research and clinical services, and in shaping our state's health care to try to export care, Massachusetts health services seem to have evolved in directions that are elaborate and expensive. Our state's primacy in share of patients served in costly teaching hospitals and in physicians per 1,000 residents point to a health care system that is too costly for many of us to afford.

This problem shows up in health insurance premiums in greater Boston that are highest among 14 metropolitan areas studied. And it shows up in the rate of rise of health insurance costs per employee in Greater Boston itself. Costs per employee in 2006 are expected to be 212 percent of those prevailing only seven years earlier in Boston, as the following Exhibit 19 displays.

Then, Exhibit 20 shows the rising cost of family health insurance premiums for one large Boston-area employer from 1990 to 2006. Family premiums hit $13,800 in 2006.

Subsequently, Exhibit 21 projects family premiums forward to 2011. This projection assumes that annual cost increases average the 10.2 percent prevailing during the decade from 1997 to 2006.

***Exhibit 19***

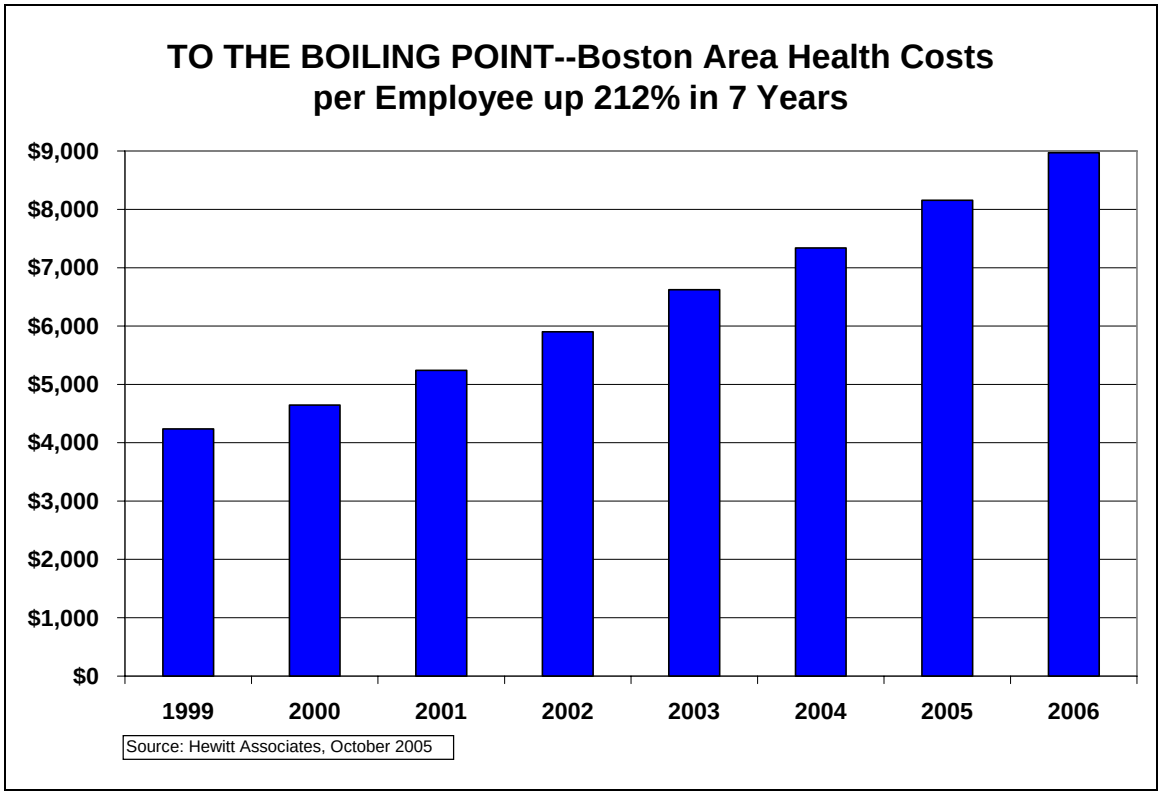



***Exhibit 20***

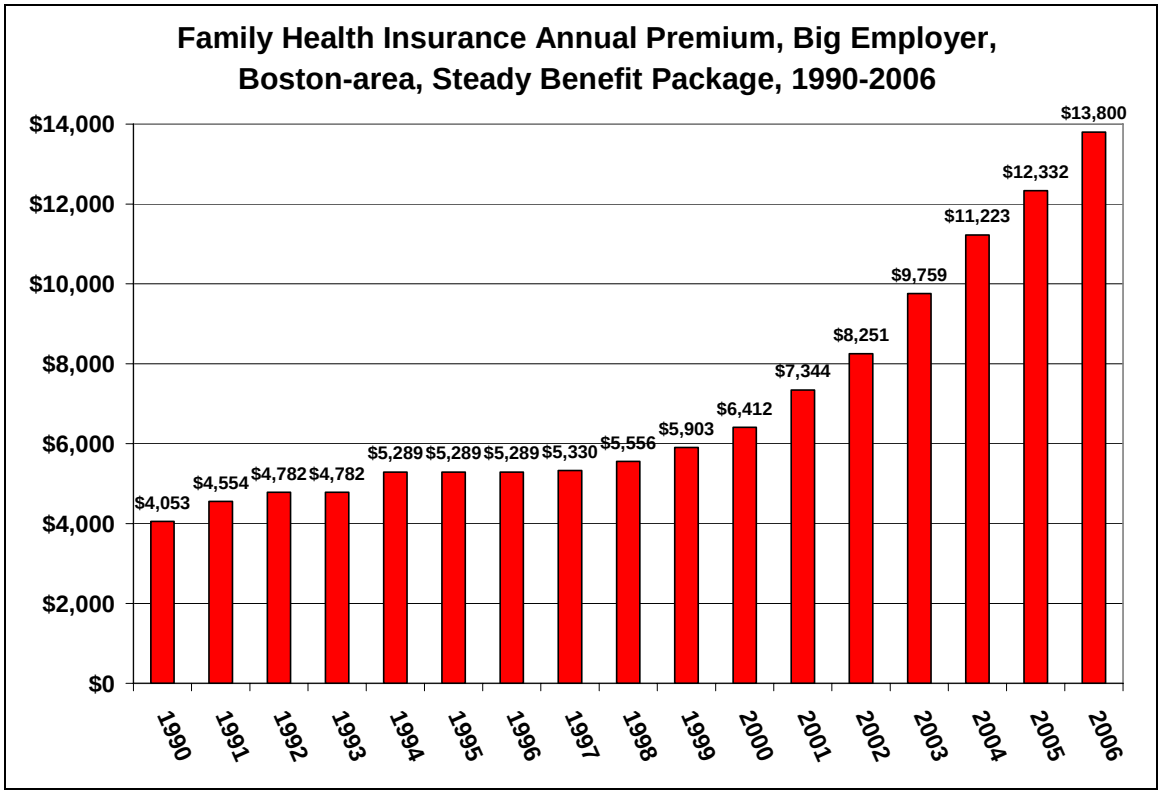
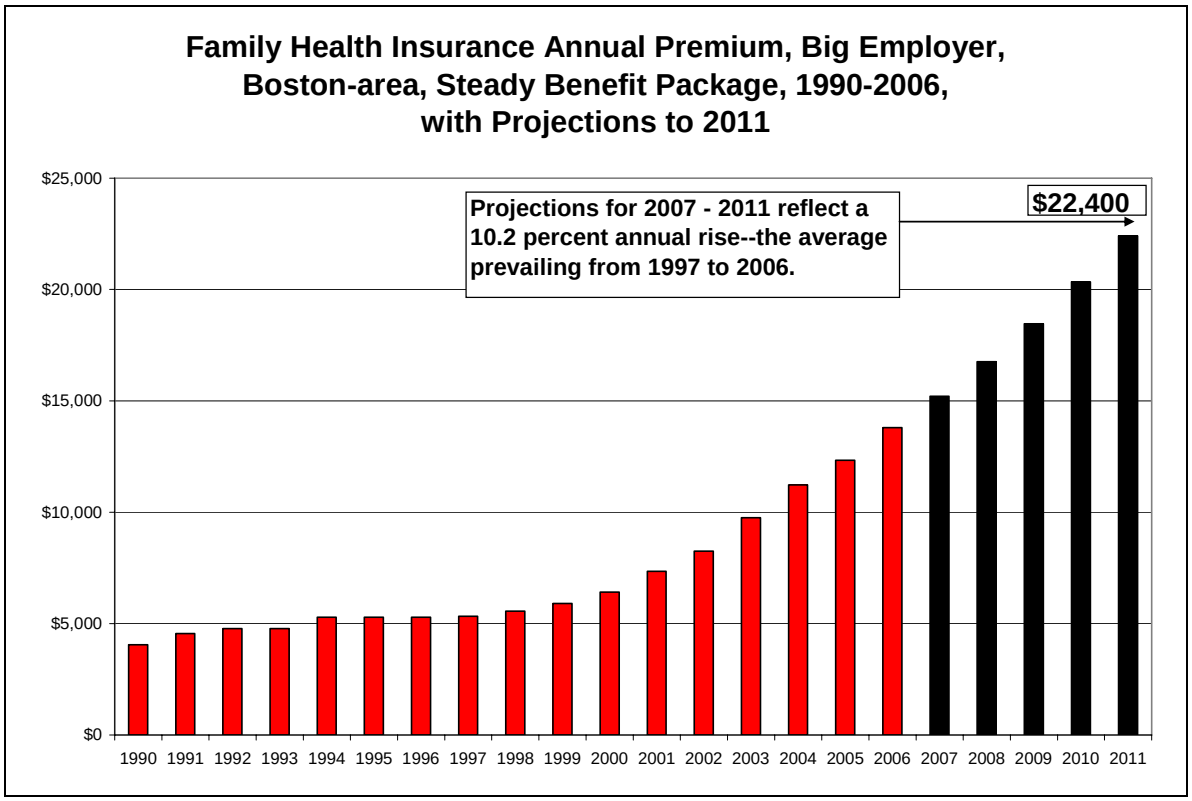


***Exhibit 21***




As Exhibit 21 indicates, a steady rise in premiums of 10.2 percent annually—the rate prevailing from 1997 to 2006, results in a boost in annual premium from $13,800 in 2006 to $22,400 in 2011. That's a rise of 62.3 percent in only five years.

### *Health status and quality of care*

Does our state's excess health care spending buy better health status and quality of care for the people of the Commonwealth?

The health status of Massachusetts residents is good, but not as much better than levels that prevail nationally as might be expected from our extraordinarily high health care spending. Evidence from other nations (discussed earlier) and other states (discussed shortly) indicates that very good health and quality of care can be bought at much lower costs.

For example, Hahn and others compared excess mortality rates from chronic disease among the states. They found that Massachusetts ranked near the U.S. median. [36]

To the extent that health status is better in Massachusetts, is the cause better quality of medical care or greater quantities of medical care? Alternatively, is the cause a healthier environment, healthier behaviors, and superior public health programs? What are the roles of higher incomes and better education?

A public health report card prepared by the American Public Health Association ranked Massachusetts 4th in the nation in the health of its environment, 2nd on healthy behaviors, and also second on public health services. [37]

One study comparing Medicare quality indicators by state found that Massachusetts ranked 5th among the states overall, but was surpassed by states with much lower personal health spending per person. [38]

Death rates and longevity. The National Center for Health Statistics no longer reports longevity by state, but the most recent published data, for 1979-1991, indicate that Massachusetts ranked 13th best in the nation, with average longevity about one year above the national average. [39]

Massachusetts' age-adjusted death rate in 2003 was 778.7 per 100,000 people, 6.5 percent below the national average of 832.7. [40]

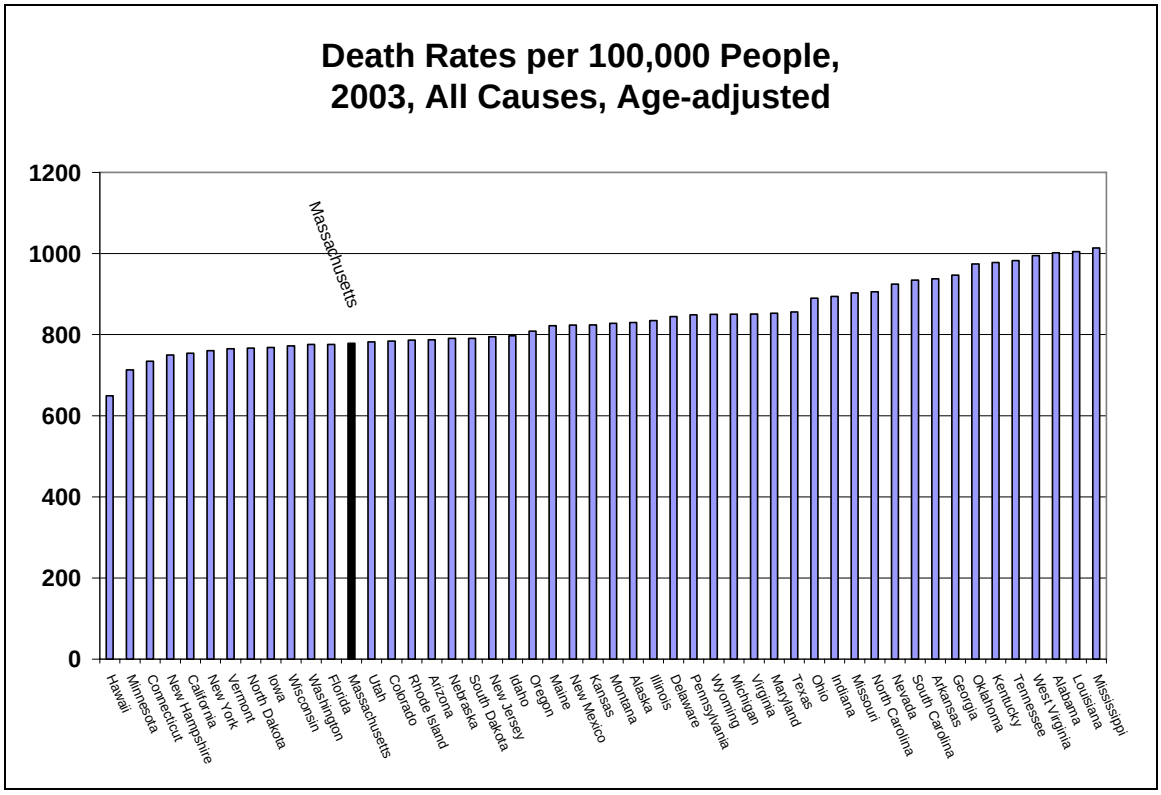
Massachusetts ranked 13th-best among the states in age-adjusted death rate per 100,000 people in 2003, behind Hawaii (with the nation's lowest death rate), Minnesota, Connecticut, New Hampshire, California, New York, Vermont, North Dakota, Iowa, Wisconsin, Washington, and Florida.

Interestingly, Massachusetts personal health spending per person in 2004, $7,075, was fully 25.6 percent higher than the average spending per person of these 12 states with lower death rates, $5,632, we have calculated.

Further, Utah ranked 14th-best, just behind Massachusetts, though it was lowest in the nation in personal health spending per person. Massachusetts personal health spending per person was 75 percent higher than Utah's in 2004.

The following exhibit arrays the states on their 2003 death rates per 100,000 people from all causes.

***Exhibit 22***

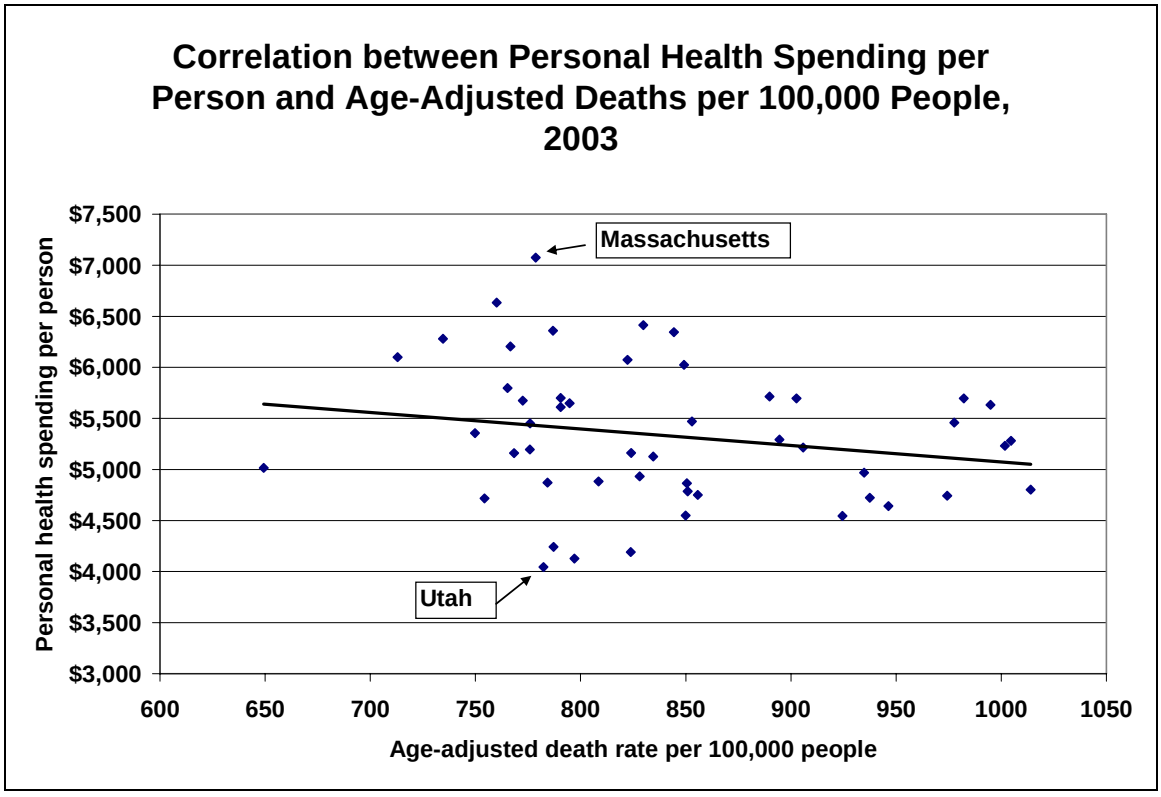



Deaths and dollars—a weak relation

States differ in the ability of their citizens to survive, to delay death. But those differences are not well explained by differences in health care spending. Across states, the correlation between personal health care spending per person and age-adjusted death rates was negative (meaning that higher spending was associated with lower death rates), but only – 0.2016, statistically significant at only p = 0.16. This means that health spending differences explain only about four percent of the difference in age-adjusted death rates across the states.

The next exhibit presents a scattergram with these data on states' death rates and spending.

***Exhibit 23***




Regional health spending and health status

Work by Wennberg and his colleagues has shown, in different ways, that high spending is not essential to improved mortality rates.

For example, he and others compared the cost of hospital care for Boston residents with that for residents of New Haven and found no difference in mortality rates—but Boston's hospital care cost twice as much per resident as New Haven's. [41]

Wennberg, Fisher, and Skinner have asserted that

> Medicare spending varies more than twofold among regions, and the variations persist even after differences in health are corrected for. Higher levels of Medicare spending are due largely to increased use

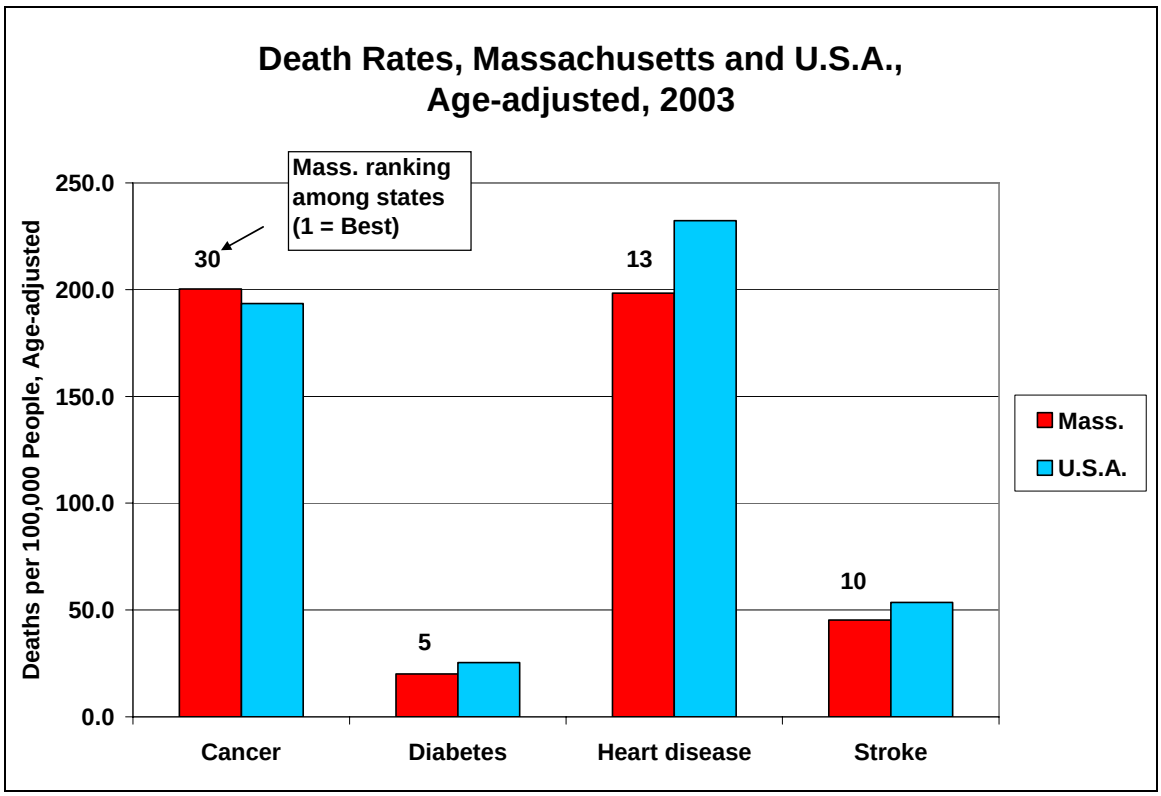
> of "supply-sensitive" services—physician visits, specialist consultations, and hospitalizations, particularly for those with chronic illnesses or in their last six months of life. Also, higher spending does not result in more effective care, elevated rates of elective surgery, or better health outcomes. . . . [For example,] age-, sex- and race-adjusted spending for traditional, fee-for-service (FFS) Medicare in the Miami hospital referral region in 1996 was $8,414—nearly two and a half times the $3,341 spent that year in the Minneapolis region….[Yet use] rates for effective care and preference-sensitive care are slightly lower in Miami than in Minneapolis. [Emphasis added] [42]

Particularly important to the present Massachusetts discussion is Wennberg's and colleagues' conclusion that greater use of supply-sensitive services does not result in better health outcomes.

Spending and rates of death from four diseases

The next exhibit compares the age-adjusted death rates for Massachusetts and the nation in 2003 for four diseases. The Massachusetts death rate was higher than the nation's for cancer (Massachusetts ranked 30th-best among the states) but lower than the nation's for diabetes (ranking 5th-best), heart disease (13-th best), and stroke (10th-best). While these are good results overall, and while other factors (health behavior, income, education, and others) influence death rates, these results don't seem commensurate with the nation's highest personal health care spending.

***Exhibit 24***



### *Appropriate end-of-life care*

When efforts to improve health and delay death have failed, do our high costs mean that Massachusetts excels in providing appropriate end-of-life care?

Many Americans express fear that, when death is inevitable, medical caregivers will not support them in dying peacefully, but will impose futile and painful medical interventions. Although gaps in insurance coverage have combined with the recent era of tight managed care restrictions on care and financial incentives to caregivers to underserve spurred great public concern about under-treatment, concerns about end-of-life care often focus on over-treatment. There is also wide recognition that hospice care is under-used in the U.S., and that expanding use of hospice care for terminally-ill patients would be valuable, to permit more of our citizens to receive compassionate, comforting care in their last weeks or month of life.

Thus, one measure for comparing states on the appropriateness of care at the end of life is use of hospice care. Wennberg and colleagues recently analyzed the care of severely chronically ill Medicare patients in their last two years of life, reporting data hospital-by-hospital for each state.

Nationwide, the share of these Medicare patients who were admitted to hospice care in the last six months of their lives was 26.4 percent. Yet despite the national recognition that hospice care is under-used, in this study of terminally-ill Medicare patients, only seven hospitals in Massachusetts (including only one in Boston) reached or exceeded the national average in use of hospice care. [43]

***Buying progress?***

Some have asserted that, over time, higher health spending as a share of the economy is worth the money because it finances technological change that substantially improves health outcomes.[44]

We are not reassured by this line of argument.

- First, this argument tends to be used to rationalize health cost increases that we consider unaffordable in themselves and the enemy of both extending coverage to people who lack it and retaining coverage for people who have it.
- Second, it is possible to live longer than Americans do, on average, while spending much less. Other wealthy nations have proven this. Seven wealthy nations that spent, on average, just 46.2 percent as much on health care per person in 2003 as did the U.S.A., enjoyed average life expectancy at birth of 79.7, 2.5 years above the U.S. level. [45]
- Third, even if more costly technology meant better outcomes over time, it could not explain—or explain away—differences in health care spending per person across the states. [46]

Cutler has asserted that "even though the amount of money spent on healthcare in the state [Massachusetts] may pose hardships for some, and likely includes considerable waste, the overall benefits of buying more medical goods and services are worth it."

Cutler continued, " `Really, what's happening is we're buying more stuff and on average that stuff is good for our health.' " Further, "Problems associated with the cost of healthcare `are more than offset by the benefits of living longer, healthier lives,' he said." [47]

Cutler seems to rest this assertion on his analyses that, over time, higher spending buys better outcomes. But, even if that were true over time, we wonder whether it holds cross-sectionally, among the different states. Wennberg's and his colleagues' analyses suggest that it does not hold true across space.

We therefore ask, can it be demonstrated that our state's health care outcomes are one-third better than the national average, in keeping with our spending one-third more per person than the national average on personal health care?

More generally, are our state's moderately better health outcomes attributable to our state's extraordinarily high health care spending, or to other causes?

***Better coverage***

Viewed across the states, higher spending on health care is indeed associated with improved insurance coverage. According to Current Population Survey data for 2003 and 2004 combined, some 11.2 percent of people in Massachusetts were uninsured, compared with a national share of 15.7 percent. [48] The Massachusetts rate was only 71.3 percent of the national share.

But, unfortunately, rising health care costs nationally are associated with declines in insurance coverage.

Gilmer and Kronick assert that the rise in U.S. health insurance costs overwhelmingly accounts for the rise in the share of Americans lacking health insurance coverage. [49] Many believe that rising health insurance premiums in Massachusetts will result in a rise in the number of uninsured people. [50]

But this relation does not hold cross-sectionally, among the states, at any one time.

Our own analyses indicate that, across the 50 states, states with higher health spending per person tended to have substantially lower uninsured population shares ($r_p$ = -0.569, significant at p = 0.000). This association does strongly run counter to the longitudinal finding for the U.S. as a whole, over time. [51]

Still, seven wealthy democratic nations covered virtually all residents in 2003 while spending an average of $2,604 per person that year—just over 46 percent as much as the U.S. did to cover some 85 percent of our people. [52]

### *Political choice*

Some might assert that Massachusetts has made an overt political choice to spend more money on health care. This is far from clear. If there has been a choice, it is one about which many people are probably not aware. Is that a real choice?

It is our caregivers—mainly physicians—who tell most of us what care we need to diagnose and treat our medical ills.

Most citizens of Massachusetts consider health care a right, and that employers and governments will pay for most of the care we need. Many people who receive insurance coverage through the job—perhaps most—suppose that the employer is paying most of the cost. Few appreciate that higher employer spending on health care means lower take-home pay, other things equal.

Hospitals have asserted that higher health care spending is good for the economy. As major employers, hospital and insurance industry executives play prominent roles as members of business organizations. They help to disarm employer opposition to health insurance premium increases.

Hospital, physician, and other caregiver groups lobby the legislature for higher revenues.

But—higher costs are partly attributable to our state's elaborate and expensive pattern of care, which is (as discussed later) caused in part by having so many physicians seeking patients to serve, the nation's highest share of patients served in costly teaching hospitals, and the like.

None of these forces manifest overt political choices.

<u>Neither villains nor heroes</u>

There are no villains here. Our state's high costs are mainly the results of accidents of history—philanthropic, economic, medical, insurance, and other forces that forged the shape of our hospitals and doctors.

But there are few heroes here, either. There is little political support for cost control today. The loudest voices are those demanding more money—voices coming from hospitals, physician groups, drug makers, and others. But few leaders in government, business, or health care itself insist on containing health care spending as part of a plan to cover all people.

In this sense, today's political, business, and health care leaders are failing in their fiduciary duty to shape high-quality health care that is durably affordable for all who need it, give it, and pay for it.

### *Higher cost of living and higher incomes*

The cost of living in Massachusetts is above the national average, though this is not easy to measure.

Incomes here are also above the national average, second-highest in the nation, on average, in 2005. [53]

But Massachusetts ranks 5th-highest among the states on income inequality, measured by the ratio between the top one-fifth and the bottom one-fifth. This indicates that many people cannot afford to buy health insurance. [54]

The problems of unaffordable insurance premiums and waste therefore demand the closest attention of state government. Soaring premiums mean that the average individual, family, and employer in Massachusetts faces a heavier cost burden year after year.

Today's regressive insurance financing, combined with high costs, penalizes people with lower incomes

The peculiarly regressive nature of health insurance financing aggravates this problem. In the United States, health insurance through the job is generally financed by imposing a fixed cost per individual or a fixed cost per family. Such fixed costs necessarily absorb a bigger share of lower incomes.

The high share of health care spending that is wasted points to genuinely affordable opportunities for covering all people, rounding out coverage for people who are under-insured, improving quality, and containing costs.

Health care costs in Massachusetts are clearly growing faster than does the economy as a whole, and much faster than prices.

Between 1980 and 2005, the average annual rise in Massachusetts total health cost per person was 8.1 percent. The gross state product here rose by an average of 6.7 percent annually. And the consumer price index for the Boston metropolitan statistical area rose by an average of only 3.9 percent. [55]

### *Economic risks—high health costs contribute to higher cost of doing business*

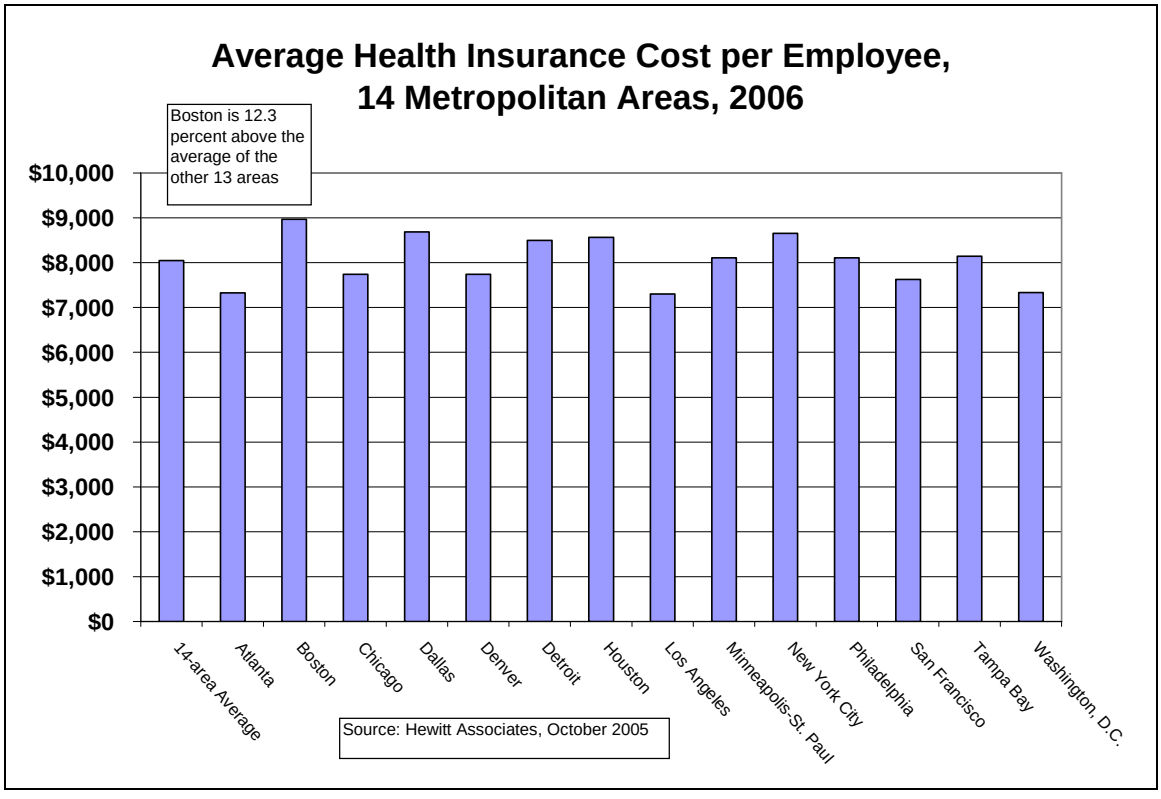
It seems clear from available national data that private health insurance premiums are higher in Massachusetts than elsewhere.

Fairly recent data from the Mercer health benefits firm indicate that health care costs per employee in Massachusetts were 20.4 percent above the national average in 2006.[56]

Strikingly, the Massachusetts excess is clear even at the level of the metropolitan area. Comparisons among 14 areas with generally high costs of living reveal that Boston's health care costs per employee were highest in 2006, according to data from Hewitt Associates. [57]

As shown in the following exhibit, Boston area health insurance costs per employee averaged 12.3 percent above the average of the 14 areas. The 112 percent rise in Boston costs over the seven years from 1996 to 2002 was shown earlier, in Exhibit 19.

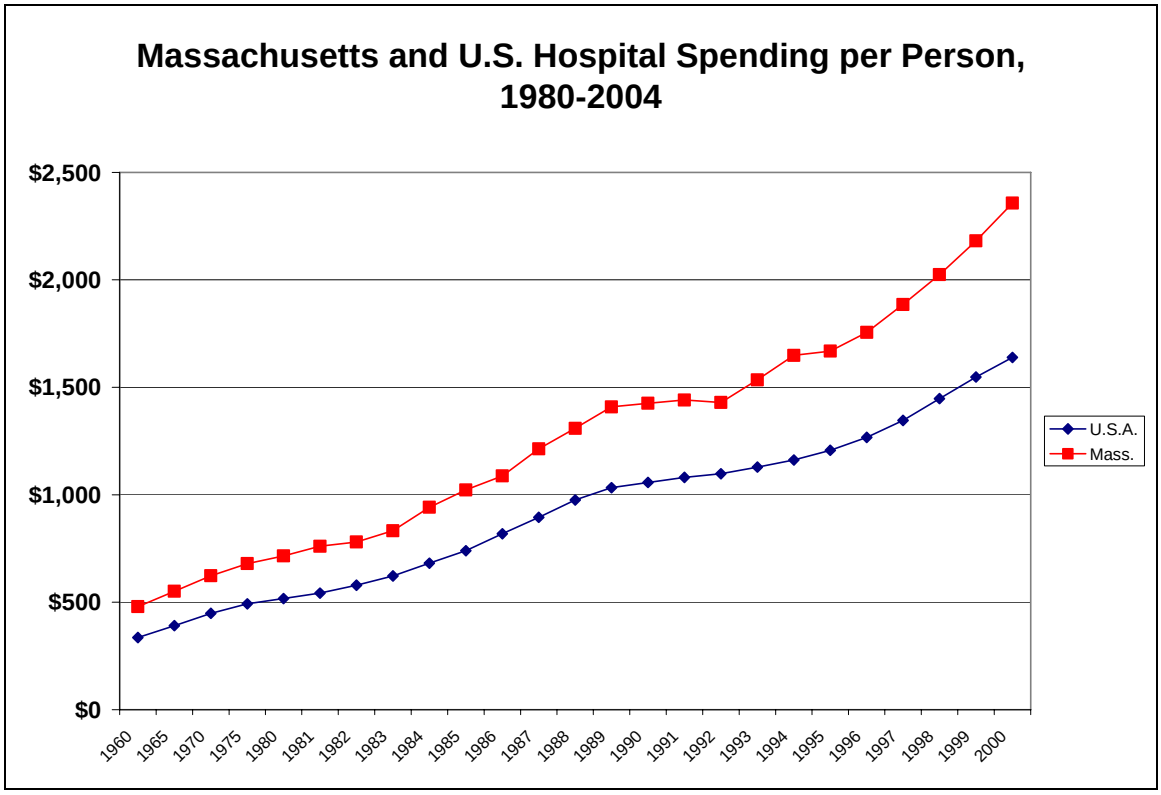
***Exhibit 25***



***High hospital costs—are they justified?***

Massachusetts hospital costs per person are highest in the nation and therefore highest in the world. In 2004, they rose to 43.8 percent above the national average, according to data from the American Hospital Association. [58] The following exhibits display spending per person over the quarter-century from 1980 to 2004, and also the Massachusetts percentage excess over U.S. spending per person.

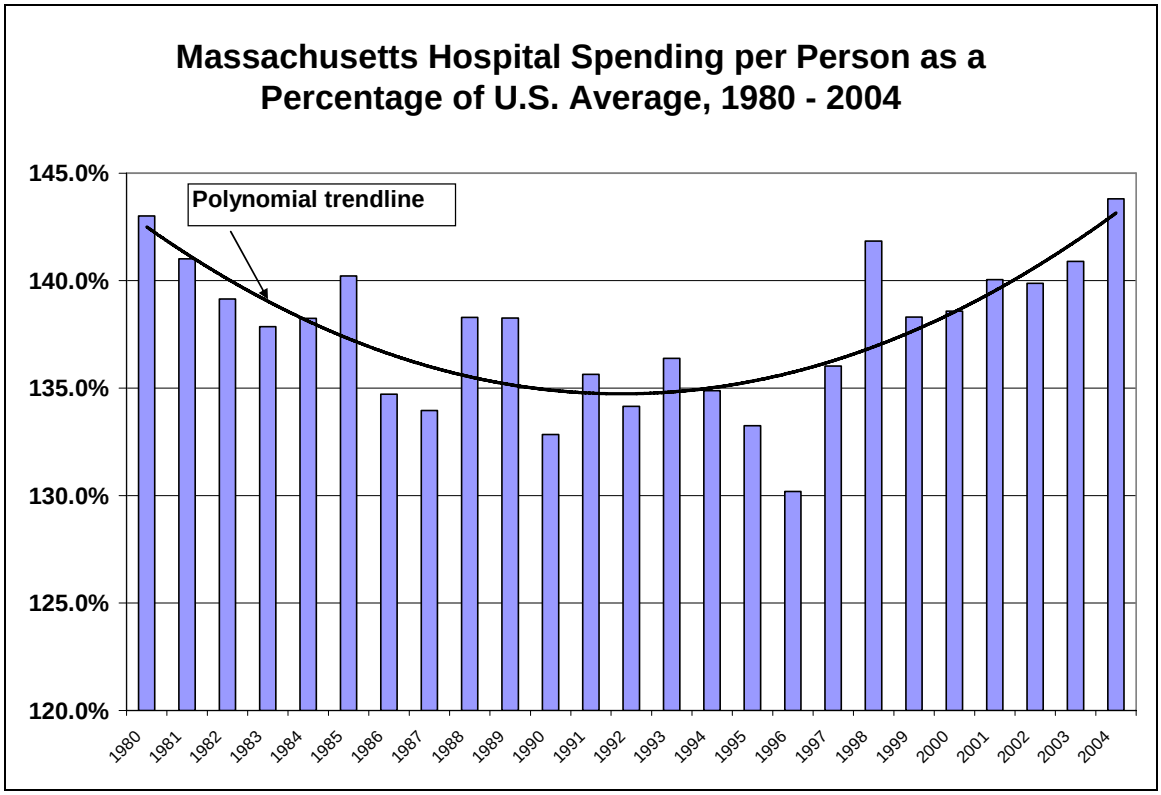
***Exhibit 26***




In 2004, hospital spending per person in Massachusetts was fully $718 (43.8 percent) above the national average, according to the AHA data. The CMS data on personal health spending actually indicate a slightly greater Massachusetts excess—45.2 percent—in 2004. The analysis that follows rests on the AHA data because these are consistent with the other AHA information used here.

As the following exhibit indicates, Massachusetts hospital spending per person fell relative to the national average from 1980 to about the mid-1990s and has since risen to its initial height. All-payer hospital rate setting and other aggressive efforts to contain hospital costs—by state government and by private employers and insurers—may be partly responsible for the dip in spending in the earlier years.

***Exhibit 27***




But hospitals succeeded in wrestling much higher rate regulation and partial deregulation from the legislature in the 1988 Massachusetts universal health care law, chapter 23 of the Acts of 1988. [59] Hospital prices were completely deregulated in 1991. These two legislative acts—and the hospital mergers they helped to provoke—precede the rise in hospital spending per person in Massachusetts (relative to the national average) back to the levels prevailing during the early 1980s.

In a 1991 study, we suggested that only a small fraction of higher hospital costs in Massachusetts are justified by durably legitimate factors, such as an older population, service to out-of-state patients, teaching, research, and the like.[60]

Instead, we suggested, a large share of our state's excess costs were attributable to an elaborate and expensive pattern of care that was not justified by superior outcomes commensurate with higher costs. [61]

These problems appear to persist.

The 2004 AHA data indicate that

- the rate of surgery per 1,000 residents of the Commonwealth in Massachusetts hospitals is 25.9 percent above the national average;
- the visits to hospital outpatient clinics (non-emergency visits) per 1,000 residents is 61.4 percent above the national average—but the hospital tends to be a much more costly site for care than the main alternative—the doctor's own office; [62] and
- the number of full-time-equivalent hospital employees per 1,000 is 32.2 percent above the national average.

Hospital groups trumpet bed closings and shorter lengths-of-stay as signs of dedication to cost control. [63] We disagree. The beds closed have typically been at low-cost hospitals. Massachusetts hospital costs per person have been rising relative to the national average even as our beds per person have fallen eight percent below average. Further, no hospital staffs empty beds. Cutting hospital stays means cutting low-cost days at the end of the say, often by paying instead for home health care or skilled nursing facility care outside the hospital.

One core problem is that Massachusetts relies more heavily on costly teaching hospitals for inpatient hospital care than do the people of any other state. For example, according to a summary by the Massachusetts Division of Health Care Financing and Policy, "National data show that Massachusetts residents are hospitalized in teaching hospitals three times more often per 1,000 population than residents of other states who rely more heavily on community hospitals." [64]

Heavy reliance on costly teaching hospitals is attributable in part to the closing of most of our non-teaching community hospitals since 1960. (No teaching hospitals have closed.) At the same time, teaching hospitals have added beds and other capacity.

Some might suggest that this reflects patient preferences. We suggest, rather, that it reflects the preferences of their physicians and also the differential ability of teaching hospitals to garner revenues.

- For example, state government rashly let the Brigham and Mass. General hospitals merge in 1994-1995, without even a public hearing. The resulting Partnership had such a large share of specialists, beds and more that it became indispensable to all HMO and insurer networks. That let Partners garner considerably higher payment increases than they could have gained were the Brigham and General still competing—not cooperating. [65]

- Another example is found in the ability of hospitals to pry some $500 million in higher Medicaid payments from the legislature and governor (as part of the chapter 58 compromise law) for the three state fiscal years starting in 2007. A markedly disproportionate share of this added money—about one-half, we earlier calculated—goes to the 20 largest and most prosperous of the state's hospitals—arguably the teaching hospitals that least need higher payments.[66]

***State action is essential to contain hospital costs and protect all needed hospitals***

Regulation is needed to identify and protect all needed and low-cost, efficient hospitals. One of the main reasons our hospitals' costs are so high is that we are tops in the nation in the share of care delivered in costly teaching hospitals.

One of the main reasons we are tops in the nation in the share of care delivered in costly teaching hospitals is that 70 community hospitals have closed since 1960. No teaching hospitals closed. With so many hospitals closed, we should assume that all surviving hospitals are needed unless proven otherwise. The burden of proof should be on those who would allow another hospital to close.

Efficiency does not protect hospitals. Evidence from our national study of 1,200 hospitals in 52 cities shows efficiency confers no survival value on hospitals. Indeed, efficient hospitals are actually slightly likelier to close, even after controlling for teaching/non-teaching status. Often, hospitals are profitable because they are able to deliver care that pays better, such as much heart surgery and certain other kinds of costly high-tech care, not because they are efficient. Another reason for profit is higher volume. Hospitals that own doctors' practices find it easier to direct more volume to those hospitals.

Hospital closings don't arise from patients voting with their feet—in some free market game of musical beds—in pursuit of value for money. Rather, hospitals close because they are unable to attract doctors. Patients tend to go where their doctors admit them.

Many community hospitals have trouble attracting enough of the doctors they need. Wealthy teaching hospitals offer more prestige, equipment, and stability. That's true even though Massachusetts had 3.92 patient care doctors per 1,000 citizens in 2002, 54 percent above the national ratio of 2.54. And our physician excess above the national average keeps growing.

No free market exists to identify and stabilize the hospitals and emergency rooms our state needs. It's wrong to worship the market. It's not a golden calf. Especially when it isn't working in the hospital care field.

When hospital finances in this state were deregulated and revenue caps lifted in 1991, the ostensible intent was that competition would force the inefficient hospitals to close and others to cut costs. But instead of increased efficiency, the state's teaching hospitals (and then others) focused on boosting market power through mergers. Many community hospitals have been forced to put on gang colors to walk safely around the neighborhood—to partner with other hospitals to be able to stay open and deliver needed care.

State government mainly stands on the sidelines, unwilling or unable to identify and stabilize all needed hospitals and emergency rooms. This reflects in part the great political and lobbying power of large teaching hospitals—which are generally more confident that they can survive in current arrangements. The teaching hospitals dominate the hospital association and powerfully influence major employer associations.

Because the hospital field lacks either a functioning free market or a competent state or federal government, the result is hospital anarchy. Our hospitals are addicted to more money for business as usual. They clamor for financial relief in the form of across-the-board Medicaid increases, even though, as noted above, one-half of the increase would go to the state's 20 most prosperous hospitals—and do little to protect many of our needed, lower-cost, but endangered hospitals.

A concrete example: Witness the Waltham Hospital fiasco of 2002 - 2003. Everyone agreed the hospital was needed. In March of 2002, in accord with state law, the Massachusetts Department of Public Health studied the hospital and found that each of its services was essential. The hospital was forced to close 16 months later, in July of 2003, despite good intentions and a moderate amount of state aid. If a hospital is deemed essential to protect the health of the public, it should not be allowed to close. (Disclosure: One of us—Alan Sager—served as a trustee of Waltham Hospital during the year before it closed.)

Clearly, current state law is too weak to protect and stabilize all needed hospitals.

Identifying and protecting all needed hospitals and emergency rooms

State legislation is needed to begin the job of identifying and stabilizing all needed hospitals. This year, H. 2666, a bill that would have accomplished these functions, received a favorable report from the Committee on Public Health, but was killed by the Committee on Health Care Financing.[67]

That bill would have accomplished several valuable things.

First, the Department of Public Health would be charged with determining annually which hospitals and hospital services in the Commonwealth are essential to protect the health of their communities.

The Department would consider five factors—availability of care, location and travel time, openness to persons vulnerable to deprivation of needed care, acceptability and ease of use, and comparative cost, safety, and efficacy of care.

Second, the Department would set and employ standards to identify hospitals in danger of closing. This needs to be done far enough in advance to allow time to intervene before a hospital has deteriorated irreversibly. Hospitals at risk would be identified at least annually.

Third, the bill would allow a receiver to be appointed by the state to protect, conserve, stabilize, and rehabilitate endangered hospitals that were important to keep open. The bill empowers the Department or other parties to bring action to have a receiver appointed to operate a hospital under three main specified circumstances—to maintain needed health services that would not otherwise be available or adequate; to particularly protect patients who are vulnerable to medical under-service or denial of needed care; and to sustain effective or potentially effective low-cost facilities.

Fourth, the bill would establish an essential acute hospital stabilization and preservation trust fund, to be financed by a one-quarter of one percent assessment on hospital revenues statewide. This year, that would generate some $44 million. The money would be used to help needed but distressed hospitals by financing technical or administrative assistance or cash grants. Cash could be used to cover operating losses or to cover special capital costs. This measure would thereby recycle a small share of hospital industry revenue within the industry itself to help the hospitals most at risk.

The combination of receivership and trust fund would offer legal, administrative, and financial protection to help stabilize needed hospitals—particularly the lower-cost community hospitals whose continued erosion will undermine access to care while driving costs still higher.

Receivership and a modest trust fund are not enough to complete the job of protecting all needed hospitals. But they are an essential beginning. And they buy time to craft durable long-term changes in hospital financing and other solutions that protect hospitals at an affordable cost.

Durable changes would include negotiating a flexible budget with each hospital that is identified as needed to protect the health of the people of Massachusetts. Such a budget would provide revenue adequate to cover the fixed and variable costs of high-quality care at each such hospital, as long as the hospital was operated efficiently. Hospitals would have flexibility in spending money, but they would, collectively, be obliged to provide needed hospital care to all residents of the Commonwealth.

***The Physician Cost and Income Paradox***

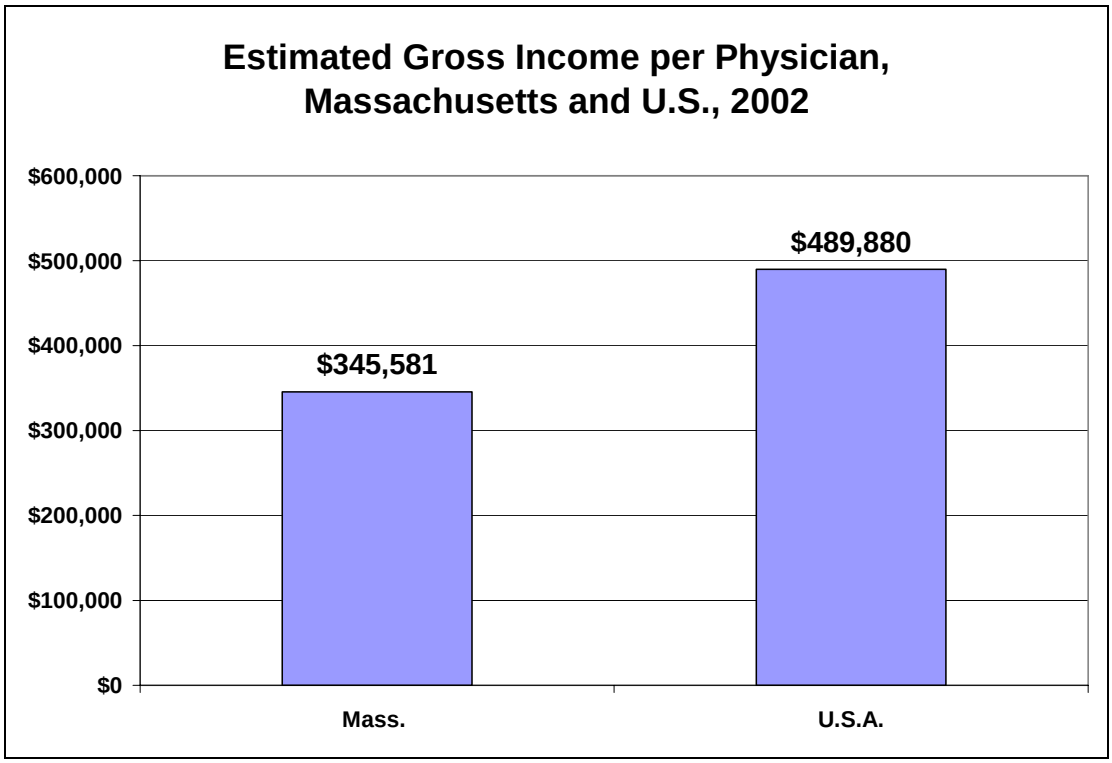
Some 22 percent of personal health care spending in 2004 went to physicians, we reported earlier. We call this doctors' gross revenue since it includes sums used for running the office, hiring clerks to obtain revenue from insurers, buy malpractice insurance, and the like. Doctors retained only about 48 percent of gross revenue as net revenue, as noted shortly. So just under 11 cents on the health dollar goes to doctors' before-tax net incomes. The arrangements under which this money finds its way to physicians powerfully shape health care.

Spending on physicians in Massachusetts in 2004 averaged $1,574 per resident of the Commonwealth, a level 15.6 percent above the national average physician spending per American. Personal health care spending on Massachusetts physicians totaled some $10.1 billion in 2004.

Remarkably, though, spending *per* Massachusetts physician is well below the national average.

We have calculated that for 2002-2003, average spending per active physician in Massachusetts was $346,000, while the comparable figure nationally was $490,000. The national average spending per physician was therefore 41.8 percent greater.[68] These two incomes are compared in the following exhibit.

***Exhibit 28***



This apparent paradox is quickly explained by noting that Massachusetts has many more physicians per 1,000 people than nationally. A somewhat bigger spending pie is divided up among many, many more physicians, resulting in a smaller slice per physician.

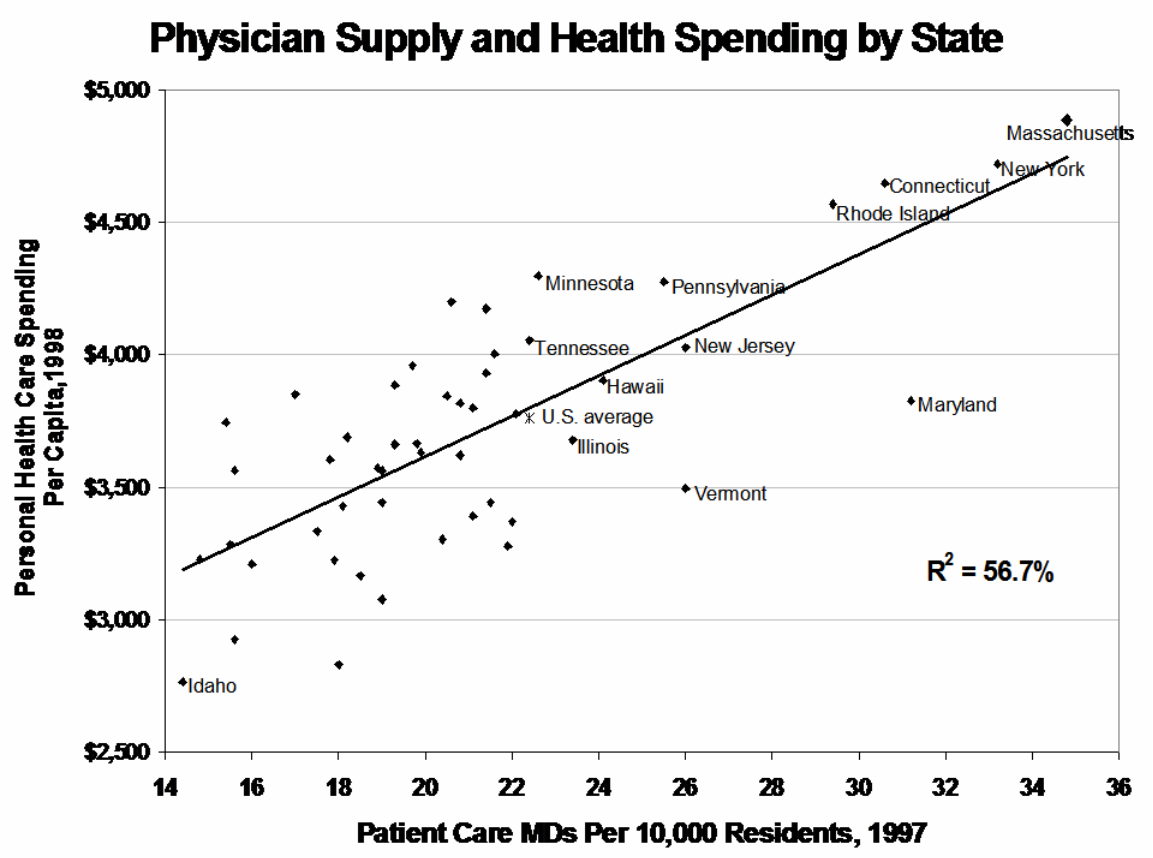
According to American Medical Association data, the number of patient care physicians per 1,000 people in Massachusetts was 54 percent above the national average in 2002—3.92 per 1,000 people here versus 2.54 per 1,000 people nationally. [69] That was the most of any state, as Exhibit 30 shows, and over twice as many as in the states with the lowest physician-to-population ratio.

In 2002, we had 64 percent more specialist physicians per 1,000 people than were found nationally.

Moreover, as indicated in Exhibit 31, the excess of physicians in Massachusetts, above the national average, has been rising fairly steadily despite equally steady (and often justified) complaints about physicians' lot from the Massachusetts Medical Society.

As Exhibit 29 shows, physician supply and health spending per person were closely correlated in 1997-1998, with supply explaining some 32 percent of differences in personal health care spending per person across the states. High health costs in Massachusetts, apparently engendered in part by delivery of large volumes of supply-sensitive care, create an environment that is not friendly toward raising physicians' net incomes. Unless something changes.

***Exhibit 29***



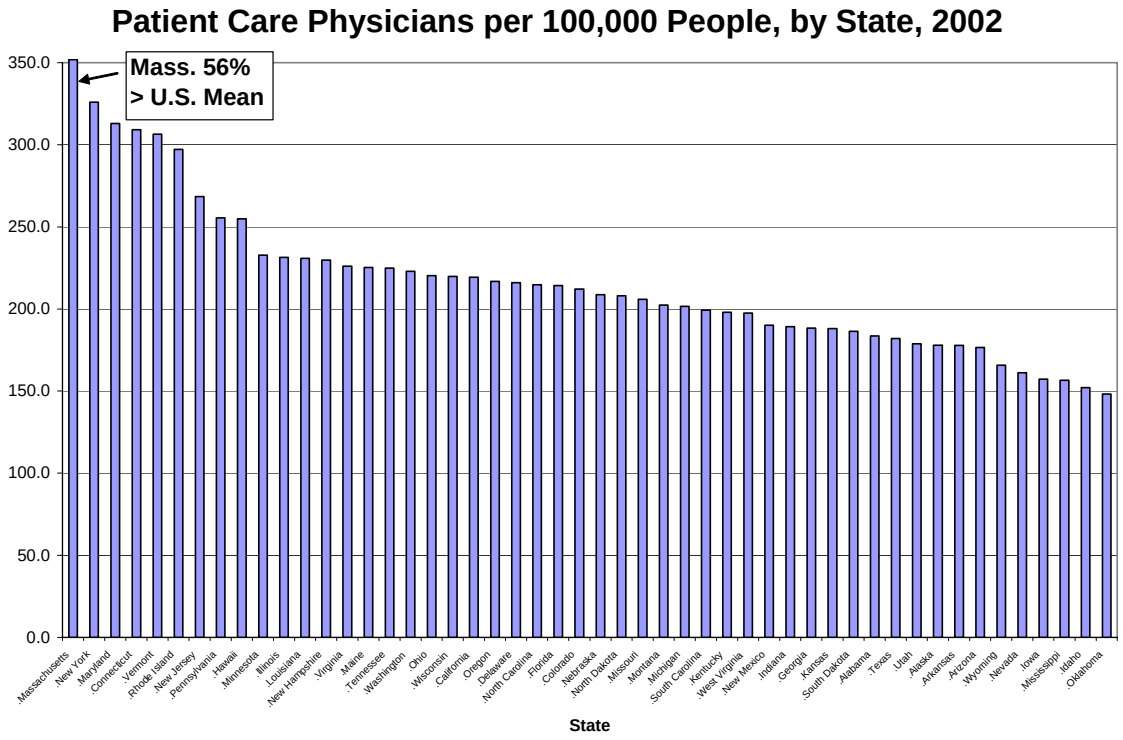
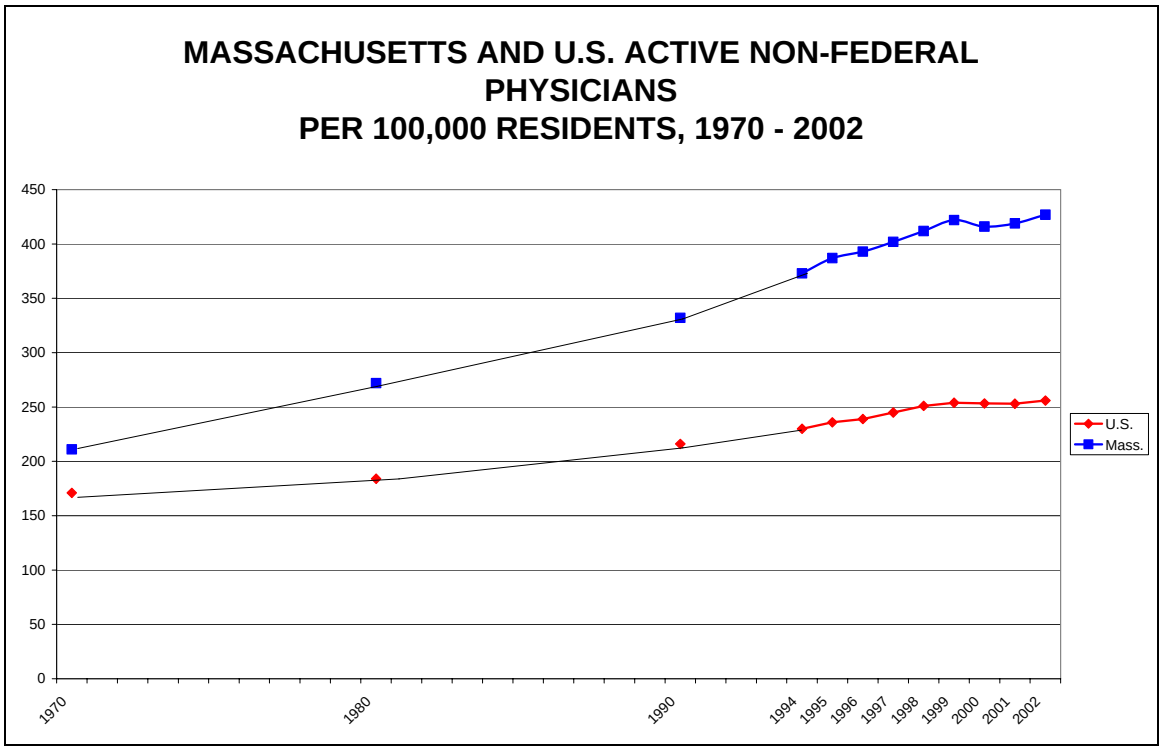

Patient Care Physicians per 100,000 People, by State, 2002
Mass. 56%
> U.S. Mean
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Massachusetts
New York
Maryland
Connecticut
Vermont
Rhode Island
New Jersey
Pennsylvania
Hawaii
Minnesota
Illinois
Louisiana
New Hampshire
Virginia
Maine
Tennessee
Washington
Ohio
Wisconsin
California
Oregon
Delaware
North Carolina
Florida
Colorado
Nebraska
North Dakota
Missouri
Montana
Michigan
South Carolina
Kentucky
West Virginia
New Mexico
Indiana
Georgia
Kansas
South Dakota
Alabama
Texas
Utah
Alaska
Arkansas
Arizona
Wyoming
Nevada
Iowa
Mississippi
Idaho
Oklahoma
State

***Exhibit 31***


MASSACHUSETTS AND U.S. ACTIVE NON-FEDERAL PHYSICIANS
PER 100,000 RESIDENTS, 1970 - 2002
450
400
350
300
250
200
150
100
50
0
1970
1980
1990
1994
1995
1996
1997
1998
1999
2000
2001
2002
U.S.
Mass.

Boosting physicians' net incomes while containing costs

We suggest that many more physicians and more specialized ones probably means much more done to patients. Consider the state's abnormally high surgery rate in hospitals, 25.9 percent above the U.S. average, noted earlier.

The work of Wennberg and others on "supply-sensitive" care and supplier-induced demand, over the past three decades indicates that more physicians per 1,000 people indeed means more care and higher spending, but it may not mean better quality of care.

We have long said that we believe there are essentially no villains in health care. When physicians have more time to see patients, give more tests and treatments as they practice defensively for fear of being sued, and generally make more money when they provide more care because most are paid piece rates (fee-for-service), it is not surprising to find more care when the physician supply is larger.

The Massachusetts Medical Society has have long asserted that their incomes are below the national average while their costs of living are higher. We believe that both of these things are true. The evidence on the income side is certainly unambiguous, and we believe that the evidence on the cost side is credible.

We fear, though, that it will be impossible for Massachusetts physicians to improve their lot by seeking still higher fees, in the absence of substantial reforms. That is because higher fees will persuade still more physicians trained in Massachusetts to remain here, and even induce physicians trained elsewhere to move here in greater numbers.

When that happens, either doctors' market positions will weaken further, driving incomes back down to today's levels, or public outcry against the high costs of paying more doctors more money to provide still more care will certainly galvanize cost controls. The only uncertainty is whether those cost controls will be carefully thought out or will be result from the customary policy-by-spasm.

We suggest that Massachusetts physicians' incomes can only be raised toward national levels in two complementary ways—cutting doctors' practice expenses and negotiating a comprehensive peace treaty between physicians and all who receive care or pay for it.

The gross and the net

Our analyses of data provided in a recent invaluable paper by Rodwin and colleagues, focusing on malpractice premium expenses, shows that doctors' gross incomes nationally have risen much more rapidly than net incomes before taxes. [70]

Between 1970 and 2000, U.S. physicians' total gross incomes rose by 62 percent, from $294,000 to $476,000, in constant dollars adjusted for consumer price index inflation, as the following exhibit shows.

But net revenue (income) before taxes rose by only 23 percent, again adjusted for inflation. Why did this happen? Because total expenses rose by 129 percent. Expenses' fastest-growing component was probably malpractice insurance premiums, up 210 percent, but these rose from only 5.5 percent of total expenses to 7.5 percent.

It is reasonable to suppose that other components of practice expenses—billing clerks and reimbursement experts, managers, rent, equipment, and the like—are responsible for the great share of the rise in the expenses of physicians in private practice.

Physicians have been garnering more money but retaining a much smaller share of the total. Their net revenue fell from 63 percent of gross revenue in 1970 to only 48 percent of gross revenue in 2000.

Aiming to protect their incomes, doctors have long fought against cost controls. In the past, doctors have been able to game cost controls and thereby sustain growth in their gross incomes. But a growing share of that gross has been absorbed by practice expenses—many of them associated with the billing staff, consultants, computer software and other administrative burdens added to aid in gaming cost controls and overcoming payer denials.

Fighting and gaming traditional cost controls is a failed strategy for Massachusetts physicians.

We suggest that that a different type of cost control, one negotiated with doctors—not imposed on doctors— is in doctors' best short-term and long-term interests.

Cost control is also essential to making health care affordable for all people in Massachusetts today—and financially sustainable for caregivers, payers, and patients alike tomorrow. Doctors will benefit from making a deal instead of continuing to play a game.

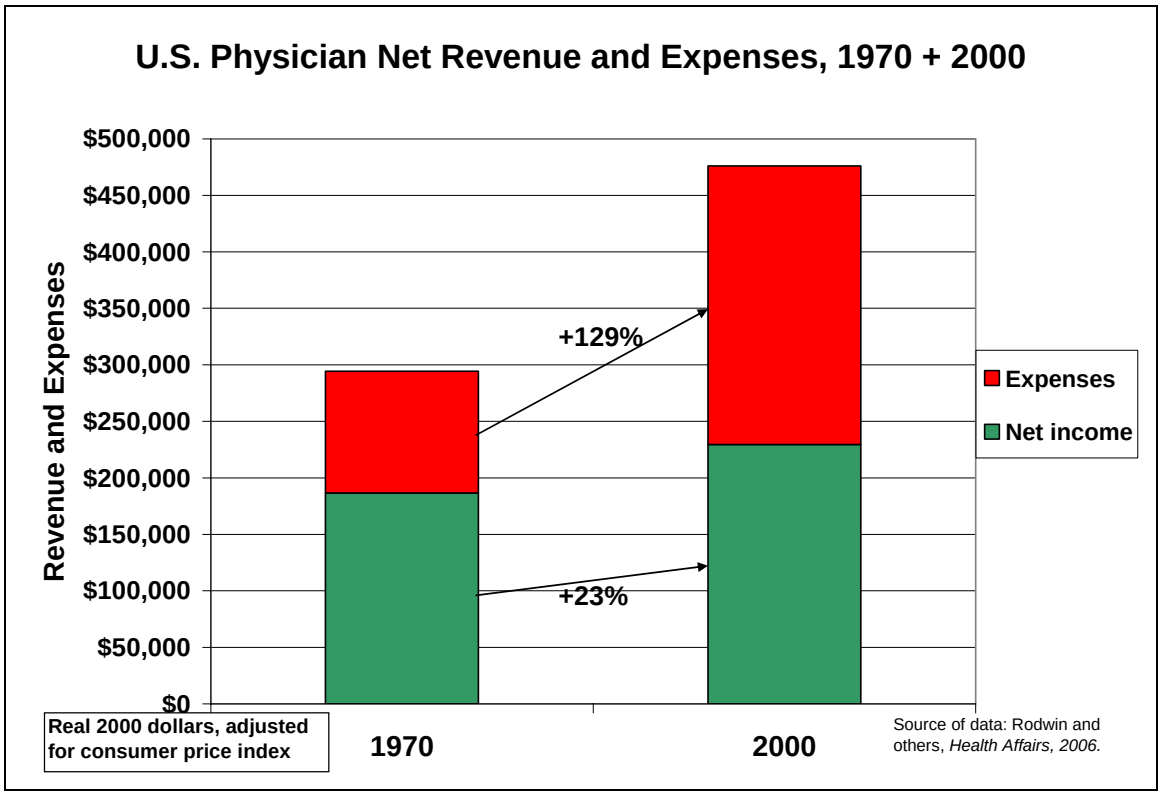
Further, cost control is impossible without doctors' active and whole-hearted engagement. One financial reason is that doctors' decisions control almost 90 percent of personal health costs, as will be shown shortly. A clinical reason is that only doctors can identify and squeeze out, patient-by-patient, much of the vast amounts of clinical waste that now clogs health care. (We call this *retail* cost control, to distinguish it from the *wholesale* cost control that entails cuts in doctors' fees, and the like.) An administrative reason is that most paperwork waste in health care stems from mistrust, and it will be impossible to reduce this waste until doctors are paid in ways that essentially allow payers to trust physicians. A political reason is that no reforms can work without doctors' cooperation. If they don't like a new way of doing things, they can tell patients that "I could have saved your life, but the government won't let me spend the money."

***Exhibit 32***

***Gross and Net Incomes of Physicians in Private Practice, U.S.A., 1970 and 2000***

| | 1970 | 2000 | % rise |
|---|---|---|---|
| | | | |
| Net revenue | $186,515 | $229,500 | 23% |
| Total expenses | $107,851 | $246,600 | 129% |
| Gross revenue | $294,366 | $476,100 | 62% |
| | | | |
| Malpractice premiums | $5,934 | $18,400 | 210% |
| (incl. in tot exp) | | | |
| | | | |
| Malp. Prem. % of Tot Exp | 5.5% | 7.5% | |
| | | | |
| Net rev % of gross rev | 63% | 48% | |

***Exhibit 33***




Falling physician net incomes, 1995-2003

New data from the Center for Studying Health System Change present an even more ominous picture. Examining changes in physicians' inflation-adjusted net incomes (after expenses but before taxes) from 1995 to 2003, the Center found a drop in the average's physician's income of 7.1 percent. Primary care physicians' incomes fell 10.2 percent. [71]

***So what?***

Even if high and soaring health care costs in Massachusetts can be explained—or partly justified—three core questions remain:

Is the cost of health care in our state affordable today?

Are the projected spending increases sustainable—economically, politically, and socially?

Will our high costs—substantially higher than previously realized— interfere with the state's ability to implement the chapter 58 legislation to extend health insurance to almost all residents of the Commonwealth?

***Massachusetts health care needs a plan to cope with the threat of financial disaster. Our health care spending increases are not sustainable. For how many more years can Massachusetts health costs grow so much faster than the state's economy?***

With the combined U.S. trade deficit and federal deficit approaching 10 percent of the U.S. economy, we suggest that a major recession is likely to hit within the next five years. If a recession were to hit the nation, Congress might well face political and financial pressure to slow the growth in Medicare and Medicaid spending further—or even to cut spending. Private employers would find it impossible to finance their share of soaring health insurance premiums.

The number of insured people will shrink. People who retain insurance coverage will face much higher out-of-pocket costs.

Nationally, hospital, doctors, nursing homes, drug makers, and other caregivers are accustomed to substantial increases in revenue annually—revenue growth well in excess of the rise in either the consumer price index or the size of the economy as a whole. This is certainly true in Massachusetts as well, as shown earlier.

Further, caregivers have not prepared financial contingency plans to cope with the cessation of real revenue growth—or the actual drop in real revenue—that could accompany a serious recession. Caregivers are beginning to plan for bird flu, bioterrorism, natural disasters, and the like. But they have not at all begun to plan for the greatest potential threat facing them today—a financial disaster occasioned by a bad recession.

***Real reform—physicians' role Is central***

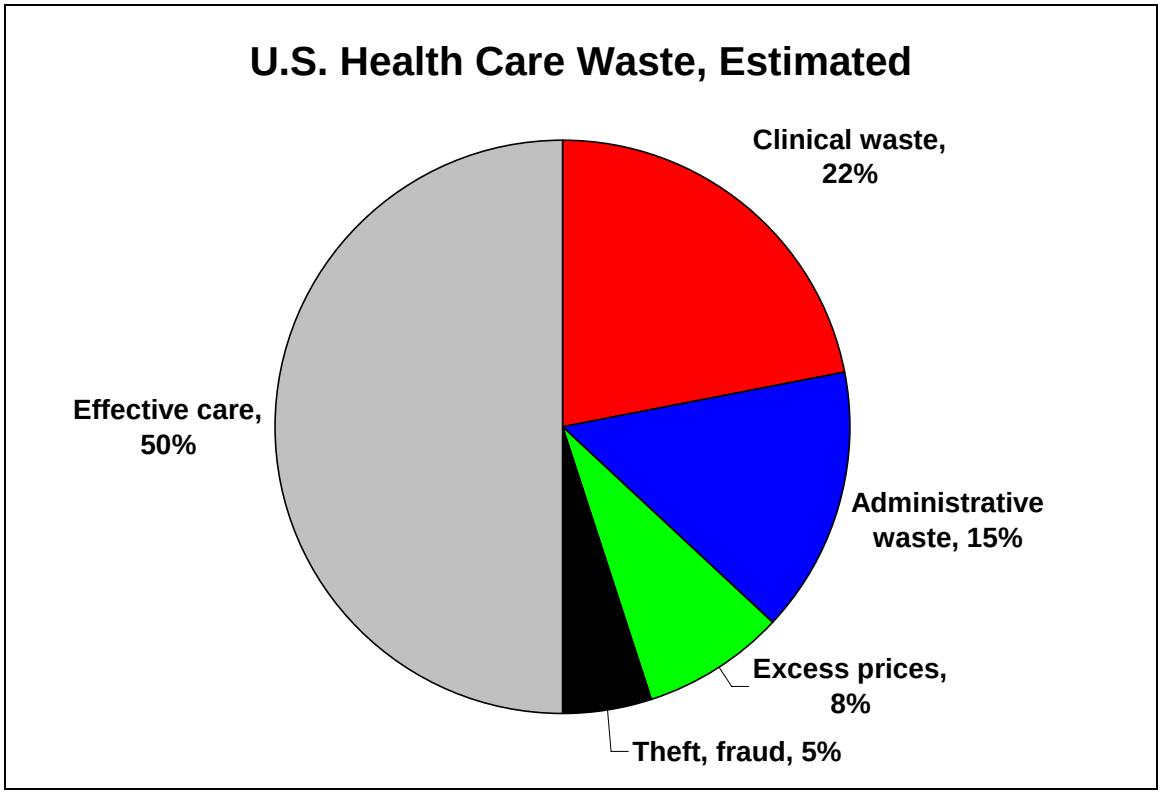
Massachusetts health spending is already adequate to finance full medical security for all who live here, as several analyses (including ours) have shown. Realizing this requires recognizing that—

<u>One-half of current health care spending in Massachusetts is wasted and no cost containment can succeed if it does not focus on squeezing out much of this waste.</u>

The four types of waste are

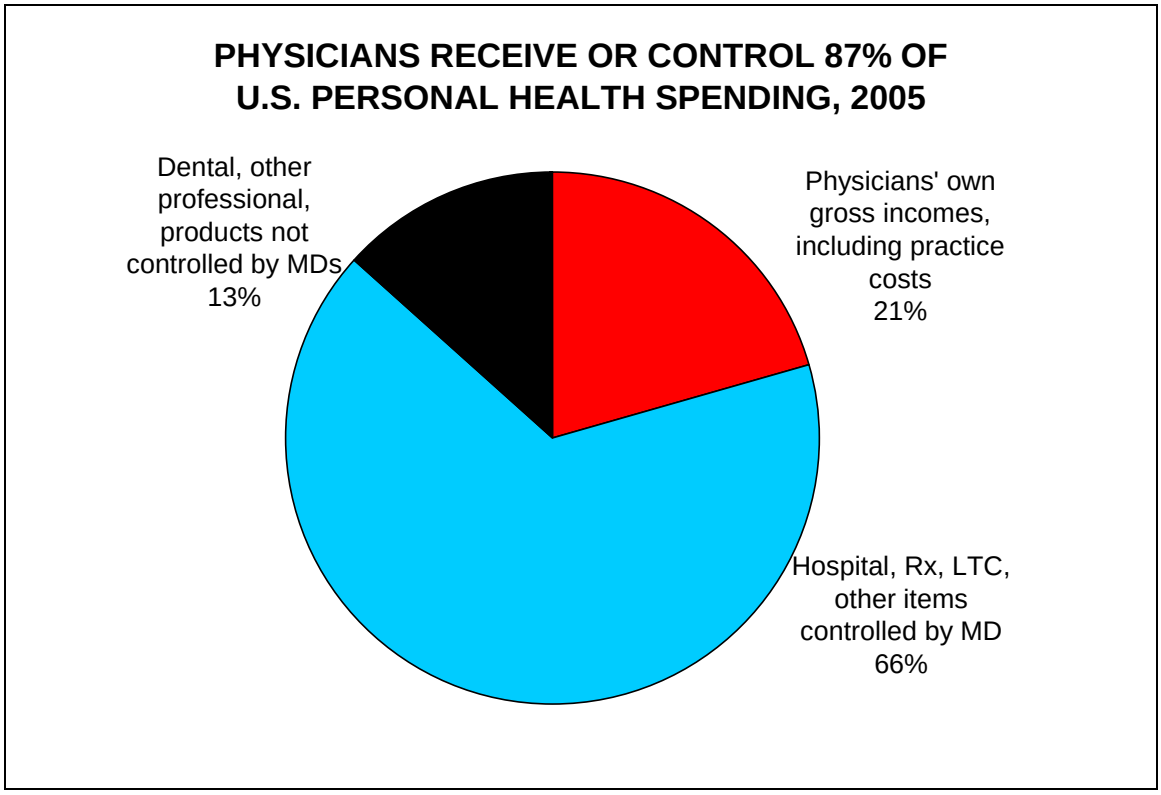
- Clinical waste, caused by financial incentives to over-serve, defensive medicine, lack of scientific knowledge about how to diagnose and treat, failure to use existing knowledge, and uneven physician training and clinical practice
- Administrative waste, caused partly by the complexity of determining eligibility, managing dozens of insurers' rules about preferred treatments, referrals, and formularies; and caused mainly by mistrust between insurers and the doctors and hospitals they pay.
- High prices of medications, some salaries, durable medical equipment, and the like.
- Outright theft and fraud, caused partly by mild punishments for white collar crime and partly by a belief that theft does not kill since more money will always be appropriated to replace what was stolen.

***Exhibit 34***



Physicians' decisions control some 87 percent of personal health care spending

***Exhibit 35***




Very few health care cost controls attempted during the past 30 years have worked. That is because they have not centrally engaged physicians.

Engaging physicians in cost control requires negotiating a peace treaty. These negotiations will have financial, clinical, ethical, political, and legal elements.

Physicians might be granted complete relief from being sued for malpractice and relief from 90 percent of their paperwork if they undertake to squeeze out clinical waste and accept responsibility for stretching the vast sums already available to care for all 6.4 million residents of the Commonwealth. [72]

Physicians may be essential to careful containment of Massachusetts health costs and to covering all people, but that does not make it easy to involve them. Accustomed to today's clinical patterns and financial incentives, it will not be easy to persuade physicians to take on larger roles. Accustomed to independence—what some might call freedom without responsibility—physicians may be reluctant to accept financial limits, let alone take on the job of allocating resources. Evidence about the usefulness of many medical interventions is lacking. Physicians often don't know the costs of various services. Many physicians prefer market-driven cost containment methods. [73]

**Physicians detest fee cuts and other threats to their incomes. Physicians understandably have criticized skimpy health insurance policies that deny coverage for essential patients services, require high patient cost-sharing which squeezes doctors whose patients cannot pay, or impose burdensome bureaucratic rules requiring doctors to get prior approval and the like. The alternative to such external constraints, however, is for physicians to take responsibility for wisely using available resources—operating within a very large but finite budget—to achieve the maximum benefit for patients.**

Creating physician-directed cost controls and enabling them to work will probably require at least 15 main things:

1. Capping annual health care spending in Massachusetts and covering all residents of the Commonwealth; this makes it clear to all parties that dollars are finite, that waste must be cut to finance better care for all, and that trade-offs are inevitable;

2. Developing simple, fair, and sturdy structures for enrolling all patients and administering budgets;

3. Persuading doctors that taking on the job of cost containment—rather than leaving such decisions to insurers—is essential to their long-term economic well-being, to their professional self-esteem, and even to making health care durably affordable for all Americans;

4. Organizing doctors to empower them to act as more capable, effective negotiating partners, and to provide them with skills needed to act more collegially;

5. Encouraging, empowering, rewarding, and educating physicians to take on the role of fiduciaries, holding in trust the prime responsibility for marshaling the available resources to serve all Americans.

6. Organizing doctors to empower them act as more capable, effective negotiating partners, and to provide them with skills needed to act collegially;

7. Establishing three health care budgets, one to pay physicians their own incomes, a second to cover all of the other costs that doctors control (hospital diagnostic and therapeutic services, medications, long-term care, and the like), and a third to cover all the costs that doctors don't control (such as services of dentists and chiropractors, construction, public health services, and the cost of administering health care finance and delivery;

8. Ending the malpractice system as we know it today, because it engenders unaffordable amounts of defensive medicine cost, and because it fails to either weed out dangerous physicians, improve physician practices, or fairly compensate victims of clinical harm (and replacing malpractice with a sound method of improving or removing dangerous doctors, and with social insurance programs to restore income lost from medical misadventure);

9. Eliminating almost all of hospitals' and physicians time and cost associated with billing and payment;

10. Paying physicians in ways that reward competence, effort, and kindness, that markedly reduce incentives to over-serve or under-serve, and that therefore make it clear to each patient that a physician will deny care only when it is ineffective or when another patient has greater need of the resources;

11. Providing physicians with increasingly valid, clear, unbiased evidence about the clinical value of all important diagnostic and therapeutic interventions, and simple information about the marginal cost of each;

12. Educating and orienting physicians to use this information to offer—or deny—care with one eye on the needs of the patient before them and the other eye on the needs of all other patients;

13. Ensuring standards of equity of patient care by gender, race, ethnicity, geography, religion, age, disability, sexual orientation, and other characteristics;

14. Encouraging physicians to work more cooperatively with nurses and other clinicians, and with administrators who will help them manage budgets and spend money more carefully; and

15. Educating and supporting physicians in sharing decision-making responsibilities with patients and families, as appropriate.

We expect that Massachusetts physicians, frustrated by their low average gross incomes (compared with the national average) , and by the rising share of their gross incomes absorbed by practice expenses, may be open to undertaking negotiations like these. Such negotiations, if successful, would help to boost doctors' net incomes and would have the added advantages of

- allowing physicians to follow clinical evidence, not financial incentives;
- doing more of what's needed for their patients;
- spending more time on care and less on financial paperwork;
- helping to contain the cost of health care; help to improve quality of care; and
- helping to make Massachusetts health care durably affordable.

## *C. DATA TABLES—State and Federal Total and per Person Cost* [74]

### *Exhibit 36*

### *Personal Health Care Spending and Total Health Spending, Massachusetts, 1980 – 2014*

### *$ million*

| | Personal Health Care Spending | Total Health Spending |
|---|---|---|
| | | |
| 1980 | $6,654 | $7,876 |
| 1981 | $7,572 | $8,961 |
| 1982 | $8,427 | $10,010 |
| 1983 | $9,219 | $10,969 |
| 1984 | $10,107 | $12,083 |
| 1985 | $10,893 | $12,930 |
| 1986 | $11,951 | $13,995 |
| 1987 | $13,256 | $15,427 |
| 1988 | $15,102 | $17,692 |
| 1989 | $16,958 | $20,021 |
| 1990 | $18,679 | $22,057 |
| 1991 | $20,093 | $23,570 |
| 1992 | $21,439 | $25,179 |
| 1993 | $23,050 | $27,306 |
| 1994 | $24,243 | $28,756 |
| 1995 | $25,418 | $30,030 |
| 1996 | $26,596 | $31,340 |
| 1997 | $28,171 | $33,157 |
| 1998 | $29,848 | $35,313 |
| 1999 | $30,737 | $36,547 |
| 2000 | $32,721 | $38,995 |
| 2001 | $35,833 | $42,632 |
| 2002 | $38,830 | $46,547 |
| 2003 | $41,815 | $50,345 |
| 2004 | $45,331 | $54,552 |
| 2005 | $48,167 | $57,916 |
| 2006 | $51,693 | $62,078 |
| 2007 | $54,958 | $66,319 |
| 2008 | $58,685 | $70,920 |
| 2009 | $62,602 | $75,711 |
| 2010 | $66,719 | $80,654 |
| 2011 | $71,040 | $85,840 |
| 2012 | $75,589 | $91,323 |
| 2013 | $80,389 | $97,116 |
| 2014 | $85,427 | $103,163 |

## *Exhibit 37*

## *Personal Health Care Spending per Person and Total Health Spending per Person, Massachusetts, 1980 – 2014*

| | Massachusetts personal health care spending per person | Massachusetts total health spending per person |
|---|---|---|
| | | |
| 1980 | $1,160 | $1,373 |
| 1981 | $1,313 | $1,553 |
| 1982 | $1,460 | $1,734 |
| 1983 | $1,590 | $1,891 |
| 1984 | $1,730 | $2,069 |
| 1985 | $1,852 | $2,199 |
| 1986 | $2,025 | $2,371 |
| 1987 | $2,233 | $2,599 |
| 1988 | $2,525 | $2,959 |
| 1989 | $2,819 | $3,328 |
| 1990 | $3,104 | $3,665 |
| 1991 | $3,339 | $3,917 |
| 1992 | $3,551 | $4,171 |
| 1993 | $3,801 | $4,503 |
| 1994 | $3,970 | $4,709 |
| 1995 | $4,138 | $4,889 |
| 1996 | $4,301 | $5,068 |
| 1997 | $4,524 | $5,324 |
| 1998 | $4,744 | $5,613 |
| 1999 | $4,833 | $5,746 |
| 2000 | $5,143 | $6,129 |
| 2001 | $5,604 | $6,667 |
| 2002 | $6,056 | $7,260 |
| 2003 | $6,516 | $7,845 |
| 2004 | $7,075 | $8,514 |
| 2005 | $7,528 | $9,051 |
| 2006 | $8,046 | $9,662 |
| 2007 | $8,519 | $10,280 |
| 2008 | $9,059 | $10,948 |
| 2009 | $9,625 | $11,640 |
| 2010 | $10,216 | $12,349 |
| 2011 | $10,833 | $13,090 |
| 2012 | $11,480 | $13,869 |
| 2013 | $12,159 | $14,689 |
| 2014 | $12,868 | $15,540 |

## *Exhibit 38*

## *U.S.A. and Massachusetts Total Health Spending Per Person, 1980 - 2014*

| | U.S. Total Health Spending per Person | Mass. Total Health Spending per Person | Massachusetts as a Percent of U.S.A. |
|---|---|---|---|
| | | | |
| 1981 | $1,284 | $1,553 | 121.0% |
| 1982 | $1,430 | $1,734 | 121.3% |
| 1983 | $1,566 | $1,891 | 120.8% |
| 1984 | $1,709 | $2,069 | 121.0% |
| 1985 | $1,853 | $2,199 | 118.7% |
| 1986 | $1,969 | $2,371 | 120.4% |
| 1987 | $2,122 | $2,599 | 122.5% |
| 1988 | $2,353 | $2,959 | 125.7% |
| 1989 | $2,595 | $3,328 | 128.3% |
| 1990 | $2,868 | $3,665 | 127.8% |
| 1991 | $3,097 | $3,917 | 126.5% |
| 1992 | $3,319 | $4,171 | 125.7% |
| 1993 | $3,522 | $4,503 | 127.9% |
| 1994 | $3,667 | $4,709 | 128.4% |
| 1995 | $3,828 | $4,889 | 127.7% |
| 1996 | $3,978 | $5,068 | 127.4% |
| 1997 | $4,139 | $5,324 | 128.6% |
| 1998 | $4,330 | $5,613 | 129.6% |
| 1999 | $4,548 | $5,746 | 126.3% |
| 2000 | $4,814 | $6,129 | 127.3% |
| 2001 | $5,171 | $6,667 | 128.9% |
| 2002 | $5,583 | $7,260 | 130.0% |
| 2003 | $5,985 | $7,845 | 131.1% |
| 2004 | $6,394 | $8,514 | 133.2% |
| 2005 | $6,797 | $9,051 | 133.2% |
| 2006 | $7,256 | $9,662 | 133.2% |
| 2007 | $7,720 | $10,280 | 133.2% |
| 2008 | $8,222 | $10,948 | 133.2% |
| 2009 | $8,742 | $11,640 | 133.2% |
| 2010 | $9,274 | $12,349 | 133.2% |
| 2011 | $9,830 | $13,090 | 133.2% |
| 2012 | $10,416 | $13,869 | 133.2% |
| 2013 | $11,031 | $14,689 | 133.2% |
| 2014 | $11,670 | $15,540 | 133.2% |

## *Exhibit 39*

## *Medicare and Medicaid Shares of Personal Health Spending, 2004, Alphabetical by State*

| | **Medicare** % Personal Health Spending | **Medicaid** % Personal Health Spending | Medicare + Medicaid % Personal Health Spending |
|---|---|---|---|
| | | | |
| USA | 19.2% | 17.4% | 36.6% |
| | | | |
| Alabama | 21.9% | 13.4% | 35.3% |
| Alaska | 7.4% | 20.4% | 27.8% |
| Arizona | 20.4% | 17.7% | 38.1% |
| Arkansas | 21.7% | 19.2% | 41.0% |
| California | 19.0% | 17.1% | 36.1% |
| Colorado | 14.8% | 11.1% | 25.8% |
| Connecticut | 19.0% | 17.3% | 36.3% |
| Delaware | 16.1% | 14.0% | 30.1% |
| Florida | 26.6% | 12.5% | 39.1% |
| Georgia | 16.5% | 22.5% | 39.0% |
| Hawaii | 15.6% | 13.1% | 28.7% |
| Idaho | 16.4% | 16.6% | 33.1% |
| Illinois | 18.3% | 15.5% | 33.8% |
| Indiana | 18.4% | 14.5% | 32.9% |
| Iowa | 17.3% | 15.2% | 32.5% |
| Kansas | 18.4% | 12.2% | 30.6% |
| Kentucky | 19.5% | 17.9% | 37.4% |
| Louisiana | 23.0% | 19.8% | 42.7% |
| Maine | 16.5% | 25.3% | 41.7% |
| Maryland | 18.9% | 14.2% | 33.1% |
| Massachusetts | 17.7% | 18.2% | 36.0% |
| Michigan | 22.3% | 14.4% | 36.7% |
| Minnesota | 14.4% | 17.1% | 31.5% |
| Mississippi | 22.2% | 24.0% | 46.2% |
| Missouri | 19.8% | 17.9% | 37.7% |
| Montana | 17.2% | 14.2% | 31.4% |
| Nebraska | 17.3% | 14.5% | 31.8% |
| Nevada | 19.5% | 9.1% | 28.5% |
| New Hampshire | 16.5% | 14.9% | 31.4% |
| New Jersey | 21.0% | 15.4% | 36.4% |
| New Mexico | 16.6% | 25.9% | 42.5% |

| | | | |
|---|---|---|---|
| New York | 17.8% | 31.7% | 49.5% |
| North Carolina | 18.7% | 18.0% | 36.7% |
| North Dakota | 17.0% | 12.6% | 29.7% |
| Ohio | 19.0% | 17.1% | 36.2% |
| Oklahoma | 21.9% | 14.9% | 36.8% |
| Oregon | 17.9% | 13.9% | 31.9% |
| Pennsylvania | 22.0% | 16.9% | 38.9% |
| Rhode Island | 17.4% | 22.2% | 39.6% |
| South Carolina | 19.5% | 17.9% | 37.4% |
| South Dakota | 16.9% | 12.6% | 29.5% |
| Tennessee | 19.9% | 19.3% | 39.2% |
| Texas | 18.9% | 14.5% | 33.4% |
| Utah | 14.3% | 12.6% | 27.0% |
| Vermont | 14.1% | 21.1% | 35.2% |
| Virginia | 16.7% | 10.3% | 27.0% |
| Washington | 14.8% | 15.3% | 30.2% |
| West Virginia | 21.5% | 18.2% | 39.7% |
| Wisconsin | 15.7% | 13.6% | 29.3% |
| Wyoming | 14.7% | 15.9% | 30.6% |

## *Exhibit 40*

## *Personal Health Spending, Medicare Spending, Medicaid Spending—2004*
## *Ranked by Medicare-Medicaid Shares of Health Spending*

| | Personal Health Care Spending | Medicare Spending on Personal Health Care | Medicaid Spending on Personal Health Care | Medicare % of Personal Health Spending | Medicaid % Personal Health Spending | Medicare + Medicaid % of Personal Health Spending |
|---|---|---|---|---|---|---|
| | ($ million) | ($ million) | ($ million) | | | |
| USA | $1,560,242 | $299,569 | $271,042 | 19.2% | 17.4% | 36.6% |
| | | | | | | |
| New York | $127,918 | $22,749 | $40,535 | 17.8% | 31.7% | 49.5% |
| Mississippi | $13,929 | $3,092 | $3,348 | 22.2% | 24.0% | 46.2% |
| Louisiana | $23,799 | $5,464 | $4,706 | 23.0% | 19.8% | 42.7% |
| New Mexico | $7,976 | $1,323 | $2,067 | 16.6% | 25.9% | 42.5% |
| Maine | $7,986 | $1,314 | $2,017 | 16.5% | 25.3% | 41.7% |
| Arkansas | $12,988 | $2,823 | $2,496 | 21.7% | 19.2% | 41.0% |
| West Virginia | $10,210 | $2,194 | $1,860 | 21.5% | 18.2% | 39.7% |
| Rhode Island | $6,867 | $1,195 | $1,523 | 17.4% | 22.2% | 39.6% |
| Tennessee | $33,563 | $6,681 | $6,467 | 19.9% | 19.3% | 39.2% |
| Florida | $94,758 | $25,203 | $11,856 | 26.6% | 12.5% | 39.1% |
| Georgia | $41,387 | $6,830 | $9,325 | 16.5% | 22.5% | 39.0% |
| Pennsylvania | $74,660 | $16,422 | $12,642 | 22.0% | 16.9% | 38.9% |
| Arizona | $24,345 | $4,977 | $4,306 | 20.4% | 17.7% | 38.1% |
| Missouri | $32,809 | $6,493 | $5,880 | 19.8% | 17.9% | 37.7% |
| South Carolina | $20,859 | $4,068 | $3,738 | 19.5% | 17.9% | 37.4% |
| Kentucky | $22,612 | $4,403 | $4,044 | 19.5% | 17.9% | 37.4% |
| Oklahoma | $16,709 | $3,654 | $2,493 | 21.9% | 14.9% | 36.8% |
| North Carolina | $44,541 | $8,343 | $7,996 | 18.7% | 18.0% | 36.7% |
| Michigan | $49,159 | $10,959 | $7,071 | 22.3% | 14.4% | 36.7% |
| New Jersey | $49,064 | $10,307 | $7,548 | 21.0% | 15.4% | 36.4% |
| Connecticut | $21,973 | $4,166 | $3,808 | 19.0% | 17.3% | 36.3% |
| Ohio | $65,423 | $12,457 | $11,199 | 19.0% | 17.1% | 36.2% |
| California | $169,060 | $32,185 | $28,833 | 19.0% | 17.1% | 36.1% |
| **Massachusetts** | **$45,331** | **$8,040** | **$8,262** | **17.7%** | **18.2%** | **36.0%** |
| Alabama | $23,673 | $5,173 | $3,175 | 21.9% | 13.4% | 35.3% |
| Vermont | $3,601 | $506 | $760 | 14.1% | 21.1% | 35.2% |
| Illinois | $65,167 | $11,896 | $10,107 | 18.3% | 15.5% | 33.8% |
| Texas | $106,774 | $20,183 | $15,461 | 18.9% | 14.5% | 33.4% |

| | | | | | | |
|---|---|---|---|---|---|---|
| Idaho | $6,068 | $901 | $1,108 | 16.4% | 16.6% | 33.1% |
| Maryland | $5,758 | $947 | $957 | 18.9% | 14.2% | 33.1% |
| Indiana | $30,425 | $5,746 | $4,314 | 18.4% | 14.5% | 32.9% |
| Iowa | $32,957 | $6,062 | $4,786 | 17.3% | 15.2% | 32.5% |
| Oregon | $15,235 | $2,638 | $2,319 | 17.9% | 13.9% | 31.9% |
| Nebraska | $17,536 | $3,145 | $2,443 | 17.3% | 14.5% | 31.8% |
| Minnesota | $9,806 | $1,692 | $1,423 | 14.4% | 17.1% | 31.5% |
| New Hampshire | $31,091 | $4,474 | $5,319 | 16.5% | 14.9% | 31.4% |
| Montana | $6,958 | $1,147 | $1,038 | 17.2% | 14.2% | 31.4% |
| Wyoming | $4,572 | $785 | $650 | 14.7% | 15.9% | 30.6% |
| Kansas | $2,301 | $339 | $366 | 18.4% | 12.2% | 30.6% |
| Washington | $14,110 | $2,593 | $1,726 | 14.8% | 15.3% | 30.2% |
| Delaware | $32,253 | $4,785 | $4,943 | 16.1% | 14.0% | 30.1% |
| North Dakota | $5,266 | $846 | $739 | 17.0% | 12.6% | 29.7% |
| South Dakota | $3,948 | $673 | $498 | 16.9% | 12.6% | 29.5% |
| Wisconsin | $4,392 | $742 | $552 | 15.7% | 13.6% | 29.3% |
| Hawaii | $31,231 | $4,895 | $4,261 | 15.6% | 13.1% | 28.7% |
| Nevada | $6,330 | $988 | $828 | 19.5% | 9.1% | 28.5% |
| Alaska | $10,603 | $2,063 | $963 | 7.4% | 20.4% | 27.8% |
| Virginia | $4,219 | $313 | $860 | 16.7% | 10.3% | 27.0% |
| Utah | $35,807 | $5,985 | $3,697 | 14.3% | 12.6% | 27.0% |
| Colorado | $9,788 | $1,404 | $1,238 | 14.8% | 11.1% | 25.8% |

## *D. DEFINITIONS AND METHODS*

### *1. Total versus Personal Health Care Spending*

Data on health care spending by state from the federal Center for Medicare and Medicaid Services include only on personal health care spending.

Personal health spending includes only services and goods received by individuals—hospital care, physician care, long-term care, dental care, medications, durable medical equipment, and the like.

Spending on personal health care excludes expenses for research, construction, government public health activities, and health insurance (private and public) administration, as well as health insurance company profits.

Personal health care has been hovering around 83 percent of total health care expenses for many years. National data through 2004, estimates for 2005, and projections for 2006 indicate personal health spending to be 83.1 percent in 2004, 83.2 percent in 2005, and 83.3 percent in 2006.

Because the federal government does not estimate state-by-state spending on administration, research, and other items not included in personal health care spending, we divide each state's personal health spending for a given year by the national personal share of total health care spending to estimate each state's total health care spending. This assumes, for simplicity, that all states' research, construction, administration, public health, and insurance administration/profit bear the same relation to personal health care spending.

### *2. Which Year?*

In this report, we focus on health care spending in 2006 for most purposes.

But the allocation of savings to Massachusetts—if we spent at the national average for hospital care, for physician care, and the rest—is for 2004. This is done because all of the underlying data are now available through 2004, and it would be somewhat artificial and unreliable to update each sector's spending through 2006.

Similarly, the comparison of Massachusetts state government's own revenue with health care spending runs only through 2005 since complete data on state revenue are available through 2005.

For convenience, we speak of each year as if there were only one. This obscures the differences among calendar years (for which the state and federal health care data are reported), state fiscal years that start on 1 July, federal fiscal years that start on 1 October, and hospital fiscal years that usually start on 1 October.

## Notes

[1] Sean P. Murphy and Scott Helman, " Big Dig Settlement Talks May Be Heating up," *Boston Globe, 4 June 2006.*

[2] We calculate this from the data posted by CMS Center for Medicare and Medicaid Services, Department of Health and Human Services, "Health Expenditures by States," http://www.cms.hhs.gov/NationalHealthExpendData/05_NationalHealthAccountsStateHealthAccounts.asp#TopOfPage, access confirmed 16 June 2006. Our calculations of personal health spending per person are scaled up to total health spending per person in proportion to the nation-wide ratio between the two, estimated at 83.3 percent in 2006.

[3] Robert Greenstein, James Horney, and Richard Kogan, *Gregg Bill Would Make Far-reaching Changes in Budget Rules,* Washington: Center on Budget and Policy Priorities, revised 23 June 2006, http://www.cbpp.org/6-19-06bud.pdf, access confirmed 26 June 2006.

[4] Denial, despair, and doing something are the words employed by Al Gore in the movie, *An Inconvenient Truth* (2006) to describe those who try to avoid the reality of global warming.

[5] See Organization for Economic Cooperation and Development, "OECD Health Data 2005—Frequently Requested Data," http://www.oecd.org/document/16/0,2340,en_2649_34631_2085200_1_1_1_1,00.html, access confirmed 16 June 2006.

[6] Jeffrey Krasner, "Healthcare Premiums to Leap Again: Rates Could Increase Ranks of the Uninsured, *Boston Globe,* 2 August 2005.

[7] See Organization for Economic Cooperation and Development, "Total Health Expenditure per Capita, $US PPP," *Health Data 2005,* http://www.oecd.org/document/16/0,2340,en_2649_34631_2085200_1_1_1_1,00.html, access confirmed 16 June 2006. The seven nations used for this comparison are Australia, Canada, France, Germany, Italy, Japan, and the U.K.

[8] Commonwealth of Massachusetts, Chapter 58 of the Acts of 2006, http://www.mass.gov/legis/laws/seslaw06/sl060058.htm.

[9] For the latest state-level data, updated to calendar year 2004 by state of provider, see Center for Medicare and Medicaid Services, Department of Health and Human Services, "Health Expenditures by States,"

http://www.cms.hhs.gov/NationalHealthExpendData/05_NationalHealthAccountsStateHealthAccounts.asp#TopOfPage, access confirmed 16 June 2006.

For national health spending through 2004, see Center for Medicare and Medicaid Services, Department of Health and Human Services, "National Health Expeditures by type of service and source of funds, CY 1960-2004," http://www.cms.hhs.gov/NationalHealthExpendData/downloads/nhe2004.zip, access confirmed 16 June 2006.

For national health spending from 2005 through 2015, see Center for Medicare and Medicaid Services, Department of Health and Human Services, "NHE Historical and Projections, 1965-2015," http://www.cms.hhs.gov/NationalHealthExpendData/downloads/nhe65-15.zip, access confirmed 16 June 2006.

[10] Jeffrey Krasner, "Health Costs Rising Faster than Average," Boston Globe, 21 November 2005.

[11] Alan Sager and Deborah Socolar, "Massachusetts Health Care Realities, 2006," 3 March 2006 update.

[12] For the international data, see Organization for Economic Cooperation and Development, "Total Health Expenditure per Capita, $US PPP," *Health Data 2005,* http://www.oecd.org/document/16/0,2340,en_2649_34631_2085200_1_1_1_1,00.html, access confirmed 16 June 2006.

[13] This saving is calculated by taking 15.0 percent of projected gross state product of $363.6 billion for 2006.

[14] Cynthia Smith, Cathy Cowan, Stephen Heffler, Aaron Catlin, and others, "National Health Spending in 2004," *Health Affairs,* Vol. 25, No. 1 (January/February 2006), pp. 186-196, exhibit 1.

[15] For the state's own revenue, see Commonwealth of Massachusetts, Office of the State Comptroller, *Statutory Basis Financial Report*, Ten-Year Schedule of Revenue, various years. For 2005, see http://www.mass.gov/osc/Reports/05SBFR/SBFR_2005.html.

[16] Alan Sager and Deborah Socolar, Alan Sager and Deborah Socolar, "Why Are Massachusetts Health Care Costs Soaring? And Can Anything Be Done About It?" *Municipal Advocate,* Vol. 22, No. 1 (Summer 2005), pp. 11-15, 34, also posted at www.healthreformprogram.org.

[17] Center for Medicare and Medicaid Services, "State Health Expenditure Accounts by Provider Location, 2004 Highlights," May 2006, p. 2, http://www.cms.hhs.gov/NationalHealthExpendData/05_NationalHealthAccountsStateHealthAccounts.asp#TopOfPage

[19] For 2004 hospital spending per person, see American Hospital Association, *Hospital Statistics, 2006 edition*, Chicago: The Association, 2005. The 1987 figure was a drop from 40.7 percent in 1980; both figures calculated from earlier editions of *Hospital Statistics*, and presented in Alan Sager, Peter Hiam, and Deborah Socolar, *Promise and Performance*: First Monitoring Report on "An Act to Make Health Security Available to All Citizens of the Commonwealth and to Improve Hospital Financing" (Chapter 23 of the Acts of 1988), Boston: Access and Affordability Monitoring Project, Boston University School of Public Health, 9 April 1989, p. 26, www.healthreformprogram.org.

[20] As explained below, total health care spending includes not only spending on personal health care, but also expenses for research, government public health activities, insurance administration and profit, and more.

[21] Robert Greenstein, James Horney, and Richard Kogan, *Gregg Bill Would Make Far-reaching Changes in Budget Rules,* Washington: Center on Budget and Policy Priorities, revised 23 June 2006, http://www.cbpp.org/6-19-06bud.pdf, access confirmed 26 June 2006.

[22] Denial, despair, and doing something are the words employed by Al Gore in the movie, *An Inconvenient Truth* (2006) to describe those who try to avoid the reality of global warming.

[23] See, for example, Michigan Hospital Association, *The Economic Impact of Health Care in Michigan 3rd Edition,* Lansing: The Association, June 2006; Hospital and Healthsystem Association of Pennsylvania, *Pennsylvania Hospitals: Partners for Economic Prosperity*, Harrisburg: The Association, Spring 2006; and—nationally—American Hospital Association, *The Economic Contribution of Hospitals,* AHA TrendWatch, May 2005.

[24] James J. Mongan, "The True Cost of Healthcare in Massachusetts," *Boston Globe* op-ed, 23 January 2006.

[25] Chris Rowland, "State's Per-person Health Cost Leads World, Study Says," *Boston Globe,* 22 June 2006..

[26] Cynthia Smith, Cathy Cowan, Stephen Heffler, Aaron Catlin, and others, "National Health Spending in 2004," *Health Affairs,* Vol. 25, No. 1 (January/February 2006), pp. 186-196, exhibit 1.

[27] Health Reform Program analyses of 1998 state-level health care spending data, comparing spending by state of provider (care given in Massachusetts to residents and non-residents alike) with spending by state of resident (care given to residents of Massachusetts, wherever they receive care). Links to the 1998 data by state of provider and the 1998 data by state of residence can be found at http://www.cms.hhs.gov/NationalHealthExpendData/05_NationalHealthAccountsStateHealthAccounts.asp#TopOfPage.

[28] Health Reform Program analyses of 1998 state-level health care spending data, comparing spending by state of provider (care given in Massachusetts to residents and non-residents alike) with spending by state of resident (care given to residents of Massachusetts, wherever they receive care). Links to the 1998 data by state of provider and the 1998 data by state of residence can be found at http://www.cms.hhs.gov/NationalHealthExpendData/05_NationalHealthAccountsStateHealthAccounts.asp#TopOfPage.

[29] Unpublished 1993 U.S. Health Care Financing Administration data, and Joy Basu, "Border-Crossing Adjustment and Personal Health Care Spending by State," *Health Care Financing Review*, Vol. 18, No. 1 (Fall 1996), p. 226, Table 5.

[30] James J. Mongan, "The True Cost of Healthcare in Massachusetts," *Boston Globe* op-ed, 23 January 2006.

[31] Anne B. Martin, Office of the Actuary, CMS, Personal Communication, 27 June 2006.

[32] For convenience, refer to Murphy's Unofficial Medicaid page, http://www.geocities.com/capitolhill/5974/fmappage.htm.

[33] Cynthia Smith, Cathy Cowan, Stephen Heffler, Aaron Catlin, and others, "National Health Spending in 2004," *Health Affairs,* Vol. 25, No. 1 (January/February 2006), pp. 186-196, exhibit 2.

[34] Robert Greenstein, James Horney, and Richard Kogan, *Gregg Bill Would Make Far-reaching Changes in Budget Rules,* Washington: Center on Budget and Policy Priorities, revised 23 June 2006, http://www.cbpp.org/6-19-06bud.pdf, access confirmed 26 June 2006.

[35] Robert Keough, "Why the Bay State's Growing Health Care Industry May be Bad for the Economy," *Boston Globe,* 20 June 2004.

[36] Robert A. Hahn, Steven M. Teutsch, Richard B. Rothenberg, and James S. Marks, "Excess Deaths from Nine Chronic Diseases in the United States," *Journal of the American Medical Association,* Vol. 264, No. 20 (28 November 1990), pp. 2654-2659.

[37] American Public Health Association, *America's Public Health Report Card,* Washington: American Public Health Association, November 1992.
[38] Stephen F. Jencks, Timothy Cuerdon, Dale R. Burwen, and others, "Quality of Medical Care Delivered to Medicare Beneficiaries," *Journal of the American Medical Association,* Vol. 284, No. 13 (4 October 2000), pp. 1670-1676.

[39] U.S. Census Bureau, *Statistical Abstract of the United States, 1990,* Washington: The Bureau, 1990, Table 105.

[40] The Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics, National Vital Statistics Report Volume 54, Number 13, Table 29, April 19, 2006. Available at http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_13.pdf, reported by Kaiser Family Foundation, State Health Facts, http://www.statehealthfacts.org/cgi-bin/healthfacts.cgi?action=compare&category=Health+Status&subcategory=Deaths&topic=Death+Rate+per+100%2c000.

[41] John E. Wennberg, Jean L. Freeman, and William J. Culp, "Are Hospital Services Rationed in New Haven or Over-utilised in Boston?" *The Lancet,* 23 May 1987, pp. 1185-1189; and John E. Wennberg, Jean L. Freeman, Roxanne M. Shelton, and Thomas A. Bubolz, "Hospital Use and Mortality among Medicare Beneficiaries in Boston and New Haven, *New England Journal of Medicine,* Vol. 321, NO. 17 (26 October 1989), pp. 1168-1173.

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[44] See, for example, David M. Cutler and Mark McClellan, "Is Technological Change in Medicine Worth It?" *Health Affairs,* vol. 20, No5 (September – October 2001), pp. 11-29.

[45] See Organization for Economic Cooperation and Development, "OECD Health Data 2005—Frequently Requested Data," http://www.oecd.org/document/16/0,2340,en_2649_34631_2085200_1_1_1_1,00.html, access confirmed 16 June 2006.

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[51] Alan Sager and Deborah Socolar*, State Health Cost Burdens and Coverage, 2005: Wide Differences In Health Crisis Index Across States*, Boston: Health Reform Program, forthcoming.

[52] See Organization for Economic Cooperation and Development, “Total Health Expenditure per Capita, $US PPP,” *Health Data 2005,* http://www.oecd.org/document/16/0,2340,en_2649_34631_2085200_1_1_1_1,00.html, access confirmed 16 June 2006. The seven nations used for this comparison are Australia, Canada, France, Germany, Italy, Japan, and the U.K.

[53] Bureau of Economic Affairs, *State Personal Income, 2005,* News Release, 28 March 2006, Table 1, http://www.bea.gov/bea/newsrelarchive/2006/spi0306.pdf, access confirmed 21 June 2006. .

[54] Jared Bernstein, Heather Boushey, Elizabeth McNichol, and Robert Zahradnik, *Pulling Apart: A State-by-state Analysis of Income Trends,* Washington: Center on Budget and Policy Priorities and Economic Policy Institute, April 2002, Table 2. .

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[57] Hewitt Associates, "U.S. Companies Face Lowest Health Care Cost Increases Since 1999," Press Release, 10 October 2005, and supplementary data provided to the Health Reform Program by Hewitt Associates.

[58] American Hospital Association, *Hospital Statistics, 2006 Edition,* Chicago: The Association, 2006 and earlier years.

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[73] Alan Sager and Deborah Socolar, *Health Costs Absorb One-Quarter of Economic Growth, 2000 – 2005: Recent Federal Report Unintentionally Obscures Massive Rise; Physicians' Decisions Key to Controlling Cost,* Data Brief No. 8, Boston: Health Reform Program, Boston University School of Public Health, 9 February 2005, especially pp. 29-42, www.healthreformprogram.org.

[74] As noted earlier, all data on personal health spending by state through 2004 in this and subsequent data tables rest on CMS's newly released estimates of state health spending. Projections through 2014 are in line with CMS's national projections.