Health care spending in Massachusetts

Progress and opportunities

Health Policy Commission

Staff presentation
October 1, 2013
Overall trend: Health care spending as a proportion of the economy declined from 2009-2012

Personal health care expenditures\(^1\) relative to size of economy

Percent of respective economy\(^2\)

- **MA (CMS NHE)**
- **US**
- **MA (estimated)\(^3\)**

<table>
<thead>
<tr>
<th>Year</th>
<th>MA (CMS NHE)</th>
<th>US</th>
<th>MA (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>12.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>12.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>11.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>12.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>11.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>12.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>16.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>16.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>15.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>14.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>14.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>16.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Differentiating between spend and trend**

- **Spend:** levels of expenditures in a given year
- **Trend:** change in expenditures over time

---

1 Personal health care expenditures (PHC) are a subset of national health expenditures. PHC excludes administration and the net cost of private insurance, public health activity, and investment in research, structures and equipment.

2 Measured as gross domestic product (GDP) for the US and gross state product (GSP) for Massachusetts.

3 CMS state-level personal health care expenditure data have only been published through 2009. 2010-2012 MA figures were estimated based on 2009-2012 growth rates provided by CMS for Medicare, ANF budget information statements for MassHealth, CHIA, and pre-filed testimony from commercial payers.

Source: Centers for Medicare and Medicaid Services; ANF; CHIA; pre-filed testimony from commercial payers for 2013 annual cost trends hearing; HPC analysis.
Understanding Massachusetts health care expenditures

- Spend
- Trend
How does Massachusetts compare to the US?

Expenditures
How much do we spend on health care?
Expenditures: Massachusetts spent 36% more than the US on a per capita basis in 2009

Personal health care expenditures¹
Dollars per capita, 2009

- Massachusetts spent the most per capita in 2009 (excluding DC)
- Difference for public payers was smaller
  - 8% more for Medicare per beneficiary
  - 21% more for Medicaid per beneficiary
- We can infer a larger difference for non-public spending, where Massachusetts spent greater than 36% higher than the US average

¹ Personal health care expenditures (PHC) are a subset of national health expenditures. PHC excludes administration and the net cost of private insurance, public health activity, and investment in research, structures and equipment.

Source: Centers for Medicare and Medicaid Services; HPC analysis
Expenditures: Massachusetts spent more per capita across all categories

<table>
<thead>
<tr>
<th>Personal health care expenditures¹</th>
<th>Absolute difference</th>
<th>Relative difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dollars per capita, 2009</td>
<td>Dollars per capita</td>
<td>Percent</td>
</tr>
<tr>
<td>Hospital care</td>
<td>$2,475</td>
<td>$3,505</td>
</tr>
<tr>
<td>Long-term care and home health²</td>
<td>$1,069</td>
<td>$1,840</td>
</tr>
<tr>
<td>Professional services³</td>
<td>$2,201</td>
<td>$2,781</td>
</tr>
<tr>
<td>Drugs and other medical non-durables</td>
<td>$956</td>
<td>$1,033</td>
</tr>
<tr>
<td>Medical durables</td>
<td>$114</td>
<td>$119</td>
</tr>
</tbody>
</table>

1 Personal health care expenditures (PHC) are a subset of national health expenditures. PHC excludes administration and the net cost of private insurance, public health activity, and investment in research, structures and equipment.
2 Includes nursing home care, home health care, and other health, residential, and professional care.
3 Includes physician and clinical services, dental services, and other professional services.

Source: Centers for Medicare and Medicaid Services; HPC analysis
How does Massachusetts compare to the US?

Demographics
How are we different?

Expenditures
How much do we spend on health care?
### Demographics: Population is older, wealthier, and almost universally insured

<table>
<thead>
<tr>
<th>Population over 65</th>
<th>US</th>
<th>MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>85+</td>
<td>1.8%</td>
<td>2.3%</td>
</tr>
<tr>
<td>75-84</td>
<td>4.3%</td>
<td>4.5%</td>
</tr>
<tr>
<td>65-74</td>
<td>7.2%</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Median household income</th>
<th>US</th>
<th>MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>85+</td>
<td>$50,502</td>
<td>$62,859</td>
</tr>
<tr>
<td>75-84</td>
<td>$50,502</td>
<td>$62,859</td>
</tr>
<tr>
<td>65-74</td>
<td>$50,502</td>
<td>$62,859</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unemployment rate</th>
<th>US</th>
<th>MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>85+</td>
<td>8.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td>75-84</td>
<td>8.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td>65-74</td>
<td>8.9%</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uninsured population</th>
<th>US</th>
<th>MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>85+</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>75-84</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>65-74</td>
<td>16%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Note: All data from 2011

Source: American Community Survey 1-year estimates; Kaiser Family Foundation; CHIA; HPC analysis
How does Massachusetts compare to the US?

Demographics
How are we different?

Expenditures
How much do we spend on health care?

Population health
Are we sicker?
### Overview of population health

#### 2011

<table>
<thead>
<tr>
<th>Risk factors</th>
<th>MA</th>
<th>US</th>
<th>MA quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults current smokers</td>
<td>18.2%</td>
<td>21.2%</td>
<td>1</td>
</tr>
<tr>
<td>Overweight or obese</td>
<td>59.3%</td>
<td>63.5%</td>
<td>1</td>
</tr>
<tr>
<td>Participated in physical activity in past 12 months</td>
<td>76.5%</td>
<td>73.8%</td>
<td>2</td>
</tr>
<tr>
<td>Diabetes</td>
<td>8.0%</td>
<td>9.5%</td>
<td>1</td>
</tr>
<tr>
<td>Angina / coronary heart disease</td>
<td>3.8%</td>
<td>4.1%</td>
<td>2</td>
</tr>
<tr>
<td>Cancer</td>
<td>12.0%</td>
<td>12.4%</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>16.7%</td>
<td>17.5%</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Disease prevalence

- **Adults current smokers**: MA is healthier than the US
- **Overweight or obese**: MA is healthier than the US
- **Participated in physical activity in past 12 months**: MA is healthier than the US
- **Diabetes**: MA is healthier than the US
- **Angina / coronary heart disease**: MA is healthier than the US
- **Cancer**: MA is closer to the US average than the US
- **Depression**: MA is closer to the US average than the US

Source: Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System; HPC analysis
How does Massachusetts compare to the US?

- Demographics: How are we different?
- Expenditures: How much do we spend on health care?
- Population health: Are we sicker?
- Quality: How well do we deliver care?
### Quality: Massachusetts performs better than average across quality measures

<table>
<thead>
<tr>
<th>Category of measures</th>
<th>Massachusetts score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of care</strong></td>
<td></td>
</tr>
<tr>
<td>Preventive measures</td>
<td>Strong</td>
</tr>
<tr>
<td>Acute care measures</td>
<td>Average</td>
</tr>
<tr>
<td>Chronic care measures</td>
<td>Strong</td>
</tr>
<tr>
<td><strong>Setting of care</strong></td>
<td></td>
</tr>
<tr>
<td>Hospital measures&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Strong</td>
</tr>
<tr>
<td>Ambulatory care measures&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Average</td>
</tr>
<tr>
<td>Nursing home measures</td>
<td>Strong</td>
</tr>
<tr>
<td>Home health care measures</td>
<td>Strong</td>
</tr>
</tbody>
</table>

1 Covers hospital inpatient measures
2 Covers hospital outpatient measures

Source: AHRQ; HPC analysis
How does Massachusetts compare to the US?

Demographics
How are we different?

Expenditures
How much do we spend on health care?

Utilization
What is the quantity of services we use?

Price
How much do we pay for each service?

Population health
Are we sicker?

Quality
How well do we deliver care?

How much do we spend on health care?
Utilization: Massachusetts utilizes both more inpatient and outpatient hospital care

<table>
<thead>
<tr>
<th>Hospital utilization rates across all payers</th>
<th>% difference</th>
<th>State rank¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per 1,000 persons, 2011</td>
<td>MA relative to US</td>
<td>Rank 1 = highest</td>
</tr>
<tr>
<td>Inpatient admissions</td>
<td>+13%</td>
<td>13</td>
</tr>
<tr>
<td>112</td>
<td>127</td>
<td></td>
</tr>
<tr>
<td>Outpatient visits</td>
<td>+60%</td>
<td>8</td>
</tr>
<tr>
<td>2,106</td>
<td>3,375</td>
<td></td>
</tr>
</tbody>
</table>

1 Ranked in descending order (1 represents state with highest volume; 51 represents state with lowest volume); includes District of Columbia

Source: Kaiser Family Foundation; American Hospital Association; HPC analysis
Price: An area for further study

- In contrast to utilization, price is difficult to compare nationally
  - Most states do not report on commercial prices (Massachusetts is on the forefront among states)
  - There are limitations to existing national databases (e.g. inclusion of non-claims payments, breadth of payers included)

- Still, we believe there are important questions to study on prices
  - Prices reflect operating efficiency and effectiveness of market function
  - Chapter 224 has furthered price transparency for consumers in Massachusetts

- CHIA’s study of relative prices has found significant variation between providers within Massachusetts, with volume concentrated at higher price providers
How does Massachusetts compare to the US?

Demographics
How are we different?

Population health
Are we sicker?

Expenditures
How much do we spend on health care?

Utilization
What is the quantity of services we use?

Price
How much do we pay for each service?

Quality
How well do we deliver care?
How does Massachusetts compare to the US?

**Expenditures**
Spent 36% more than US per capita average in 2009

**Utilization**
What is the quantity of services we use?

**Population health**
Are we sicker?

**Price**
How much do we pay for each service?

**Quality**
How well do we deliver care?
How does Massachusetts compare to the US?

- **Demographics**
  Older, wealthier, universally insured

- **Population health**
  Are we sicker?

- **Expenditures**
  Spent 36% more than US per capita average in 2009

- **Utilization**
  What is the quantity of services we use?

- **Price**
  How much do we pay for each service?

- **Quality**
  How well do we deliver care?
How does Massachusetts compare to the US?

**Demographics**
Older, wealthier, universally insured

**Expenditures**
Spent 36% more than US per capita average in 2009

**Utilization**
What is the quantity of services we use?

**Price**
How much do we pay for each service?

**Population health**
Lower risk factors and disease prevalence

**Quality**
How well do we deliver care?
How does Massachusetts compare to the US?

- **Demographics**: Older, wealthier, universally insured
- **Expenditures**: Spent 36% more than US per capita average in 2009
- **Utilization**: What is the quantity of services we use?
- **Population health**: Lower risk factors and disease prevalence
- **Price**: How much do we pay for each service?
- **Quality**: At or above US across many measures
How does Massachusetts compare to the US?

### Demographics
- Older, wealthier, universally insured

### Population health
- Lower risk factors and disease prevalence

### Expenditures
- Spent 36% more than US per capita average in 2009

### Utilization
- Use more inpatient and outpatient hospital services

### Price
- Significant variation within MA

### Quality
- At or above US across many measures
How does Massachusetts compare to the US?

- **Demographics**
  Older, wealthier, universally insured

- **Population health**
  Lower risk factors and disease prevalence

- **Expenditures**
  Spent 36% more than US per capita average in 2009

- **Utilization**
  Use more inpatient and outpatient hospital services

- **Price**
  Significant variation within MA

- **Quality**
  At or above US across many measures
Understanding Massachusetts health care expenditures

- Spend
- Trend
National trend: Recent growth in Massachusetts has been slower than the US as a whole

Growth in personal health care expenditures per capita
Nominal per capita compound annual growth rate

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-09</td>
<td>5.7%</td>
<td>6.8%</td>
</tr>
<tr>
<td>2009-12</td>
<td>3.1%</td>
<td>1.9%1</td>
</tr>
</tbody>
</table>

1 CMS state-level personal health care expenditure data have only been published through 2009. 2009-2012 MA figures were estimated based on 2009-2012 growth rates provided by CMS for Medicare, ANF budget information statements for MassHealth, CHIA TME reports, and pre-filed testimony from commercial payers.

Source: Centers for Medicare and Medicaid Services; ANF; CHIA; pre-filed testimony from commercial payers for 2013 annual cost trends hearing; HPC analysis
Statewide trend: Growth in health care spending has been low for the past few years across all payer types

### Growth in per member/beneficiary medical expenditures

<table>
<thead>
<tr>
<th>Massachusetts (all-payer estimate)</th>
<th>Membership by payer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual growth rate</td>
</tr>
<tr>
<td></td>
<td>2009-2010</td>
</tr>
<tr>
<td></td>
<td>2.4%</td>
</tr>
<tr>
<td>Medicare¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.7%</td>
</tr>
<tr>
<td>MassHealth²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>Commercial³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.7%</td>
</tr>
</tbody>
</table>

1 Trend for Medicare fee-for-service (Parts A, B, and D)
2 MassHealth cash spending and enrollment figures are reported by state fiscal year. Figures presented here are estimates of trend on a calendar-year time period. The negative growth in FY12 is due to cash management, contract efficiencies, reprocurement, and savings strategies implemented by MassHealth. 
3 Figures for 2009-2010 and for 2010-2011 are based on CHIA analysis of Total Medical Expenses, while 2011-2012 growth is estimated based on pre-filed testimony submitted by payers

Source: Centers for Medicare and Medicaid Services; ANF; CHIA; pre-filed testimony from commercial payers for 2013 annual cost trends hearing; HPC analysis
Overall trend: Health care spending as a proportion of the economy declined from 2009-2012

Personal health care expenditures\(^1\) relative to size of economy

Percent of respective economy\(^2\)

---

1 Personal health care expenditures (PHC) are a subset of national health expenditures. PHC excludes administration and the net cost of private insurance, public health activity, and investment in research, structures and equipment.
2 Measured as gross domestic product (GDP) for the US and gross state product (GSP) for Massachusetts
3 CMS state-level personal health care expenditure data have only been published through 2009. 2010-2012 MA figures were estimated based on 2009-2012 growth rates provided by CMS for Medicare, ANF budget information statements for MassHealth, CHIA, and pre-filed testimony from commercial payers.

Source: Centers for Medicare and Medicaid Services; ANF; CHIA; pre-filed testimony from commercial payers for 2013 annual cost trends hearing; HPC analysis
Summary: how does Massachusetts compare to the US?

- Opportunities are present in both utilization and price

- Three-fourths of the difference between Massachusetts and US per capita expenditures is explained by spending in hospital care and long-term and home health care

- Difference in non-public spending from US average is significantly greater than differences from US average in public payers

Massachusetts has made progress recently, growing at a slower rate than the nation after a decade of faster growth.
For discussion

▪ How can we maintain the progress of the last few years?
▪ Where can we go further on utilization and price?
▪ Where are opportunities for plans, providers, employers, consumers, and the state to play a role?