

**Databook for 2014 Cost Trends Report**  
**Health Policy Commission**

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**Table 1.1: Real growth rate in state budgets for health care coverage and other priorities, FY2004-FY2014, FY2014-FY2015**

Percentage growth (annualized and year over year), fiscal year 2004 to fiscal year 2015

	FY04 - FY14 Compound Annual Growth Rate (%)	FY14 - FY15 Growth Rate (%)
GIC, MassHealth, & Other Coverage	1.9%	0.9%
<i>Other Priorities</i>	-0.7%	-2.7%
Mental Health	-1.9%	-1.8%
Public Health	0.5%	-10.0%
Education	-0.4%	-2.2%
Human Services	-1.2%	-0.3%
Infrastructure, Housing & Economic Development	2.4%	-6.0%
Law & Public Safety	-1.0%	-2.4%
Local Aid	-4.7%	-5.7%

Notes: Figures adjusted for Gross Domestic Product (GDP) growth

Source: Massachusetts Budget and Policy Center

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**Table 2.1: Condition and procedure quality measures, MA and U.S.**

Units vary by measure, 2009-2013

	MA	U.S.	90th percentile	Year
<i>Prevention and population health</i>				
Childhood immunization status	80%	75%	81%	2010
Low birth weight rate	8%	8%	6%	2010-2012
Rate of older adults receiving flu shots	66%	63%	70%	2013
Rate of female adolescents receiving HPV vaccine	41%	24%	42%	2010
<i>Chronic care</i>				
Rate of cholesterol management for patients with cardiovascular conditions	92%	89%	94%	2010
Rate of controlling high blood pressure	71%	63%	74%	2010
Rate of diabetes short-term complications admissions (adult)	51 per 100,000	69 per 100,000	46 per 100,000	2010
Number of admissions for CHF	349 per 100,000	333 per 100,000	211 per 100,000	2010
Number of adults admitted for asthma*	137 per 100,000	119 per 100,000	61 per 100,000	2010
Number of COPD admissions	240 per 100,000	212 per 100,000	130 per 100,000	2010
<i>Hospital readmission rates†</i>				
Acute myocardial infarction readmission rate	20%	20%	N/A	2011
Pneumonia readmission rate	19%	18%	N/A	2011
Heart failure readmission rate	26%	25%	N/A	2011
<i>Hospital mortality rates†</i>				
Acute myocardial infarction mortality rate	15%	16%	N/A	2011
Pneumonia mortality rate	11%	12%	N/A	2011
Heart failure mortality rate	10%	11%	N/A	2011
<i>Patient safety</i>				
Rate of iatrogenic pneumothorax (risk-adjusted)	0.41 per 1,000	0.42 per 1,000	N/A	2009-2011
Rate of postoperative respiratory failure	6.6 per 1,000	8.3 per 1,000	N/A	2009-2011
Rate of central venous catheter-related blood stream infections	0.28 per 1,000	0.39 per 1,000	N/A	2009-2011
<i>Patient experience</i>				
Patients at each hospital who reported that "yes" they were given information about what to do during recovery	87%	85%	88%	April 2012-March 2013
Patients who reported that staff "always" explained about medicines before giving it to them	64%	64%	67%	April 2012-March 2013
Patients who reported that their pain was "always" well controlled	70%	71%	73%	April 2012-March 2013
Patients who reported that their nurses "always" communicated well	79%	78%	81%	April 2012-March 2013

\* Admissions for asthma per 100,000 population, age 18 and over. NQF measure counts all discharges of age greater than 18 and less than 40 years old.

† Readmission and mortality rates are for Medicare population only.

Source: Massachusetts Health Quality Partners, Clinical Quality report 2009-2012, Patient Experiences survey data 2011; Kaiser Family Foundation, State Health Facts; Agency for Healthcare Research and Quality; Massachusetts Immunization Action Partnership; Centers for Disease Control and Prevention; Centers for Medicare & Medicaid Services; Center for Health Information and Analysis, Annual Quality Report; National Immunization Survey; HPC analysis

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**Table 4.1: Comparison of post-acute care settings**

	HHAs	SNFs	IRFs	LTCHs
Patient selection	Treats patients who are unable to leave home without considerable effort	Treats patients after an acute inpatient stay of three or more days	Treats patients who can tolerate and benefit from three hours of therapy per day at least five days per week	Treats patients with chronic critical illness
Scope of services	Provides skilled nursing, therapy (physical, occupational, speech language), aide services, and medical social work in the patient's home	Provides skilled nursing or rehabilitation services on a daily basis in an inpatient setting	Provides inpatient hospital-level care; uses multi-disciplinary team; at least 60 percent of patients have one of several medical conditions that require intensive therapy	Provides inpatient hospital-level care; must have average Medicare length of stay greater than 25 days
Common conditions treated	Skin ulcer, heart failure, osteoarthritis, joint replacements	Septicemia, stroke, kidney and urinary tract infections, joint replacements	Stroke, brain and spinal cord injuries, hip fracture, joint replacements	Respiratory diagnosis with prolonged mechanical ventilation; severe septicemia or sepsis
Average LOS (FY2010)	2 episodes	27 days	13.1 days	26.6 days
Medicare payment unit	Per 60-day episode	Per day	Per discharge	Per discharge
Medicare (FFS) spending (FY2010)	\$2,839 per episode	\$10,808 per stay	\$17,085 per discharge	\$38,582 per discharge

Source: National Health Policy Forum; DHG Healthcare; Medicare Payment Advisory Commission

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**Table 4.2: Massachusetts and U.S. discharge destination by payer**

Percent of discharges by discharge destination by payer, 2011

*For all discharges*

	Commercial			Medicare			Medicaid			Total		
	MA	US	% Difference	MA	US	% Difference	MA	US	% Difference	MA	US	% Difference
Routine	75.5%	83.9%	-8.4%	36.4%	48.2%	-11.8%	74.7%	85.8%	-11.1%	58.4%	<b>70.1%</b>	-11.6%
Home Health	15.4%	7.9%	7.5%	24.7%	17.4%	7.3%	13.7%	5.1%	8.5%	18.9%	10.9%	8.0%
Institutional	7.6%	6.5%	1.1%	35.0%	30.3%	4.7%	8.1%	6.6%	1.6%	19.6%	<b>16.0%</b>	3.6%
Other*	1.5%	1.7%	-0.2%	4.0%	4.1%	-0.1%	3.4%	2.5%	0.9%	3.1%	3.1%	0.0%

*For DRG 470 (joint replacement)*

	Commercial			Medicare			Medicaid			Total		
	MA	US	% Difference	MA	US	% Difference	MA	US	% Difference	MA	US	% Difference
Routine	4.1%	33.0%	-28.8%	2.4%	17.0%	-14.7%	10.1%	28.3%	-18.2%	3.6%	24.1%	-20.6%
Home Health	65.8%	49.3%	16.5%	27.4%	32.8%	-5.4%	49.9%	38.2%	11.7%	44.8%	39.5%	5.4%
Institutional	30.1%	17.6%	12.5%	70.2%	49.8%	20.4%	39.8%	33.3%	6.4%	51.5%	36.1%	15.4%
Other*	0.0%	0.2%	-0.2%	0.1%	0.4%	-0.3%	0.2%	0.2%	0.1%	0.1%	0.3%	-0.2%

*For DRG 236 (CABG)*

	Commercial			Medicare			Medicaid			Total		
	MA	US	% Difference	MA	US	% Difference	MA	US	% Difference	MA	US	% Difference
Routine	12.8%	61.5%	-48.7%	9.0%	44.3%	-35.3%	13.0%	57.4%	-44.4%	11.5%	53.6%	-42.0%
Home Health	80.0%	34.7%	45.4%	55.9%	39.2%	16.7%	75.9%	33.9%	42.1%	67.4%	36.0%	31.4%
Institutional	7.2%	3.3%	3.9%	34.7%	16.1%	18.6%	9.3%	8.1%	1.2%	20.8%	10.0%	10.8%
Other*	0.0%	0.5%	-0.5%	0.4%	0.4%	0.0%	1.9%	0.6%	1.2%	0.3%	0.5%	-0.2%

\*Other includes Against Medical Advice (AMA); died; alive destination unknown; and not recorded.

Note: Institutional includes Skilled Nursing Facility (SNF); Short-term hospital; Intermediate Care Facility (ICF); and Another Type of Facility.

Source: HPC analysis of Healthcare Cost and Utilization Project, Massachusetts SID (State Inpatient Databases) & Nationwide Inpatient Sample survey, 2011

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**Table 4.3: Medicare spending in Massachusetts by post-acute care facility type**

Total spending by fee-for-service Medicare in Massachusetts, 2012

Facility type	Spending (in millions)
<i>Home health</i>	\$510
<i>Institutional</i>	\$1,342
Skilled nursing facility	\$959
Inpatient rehabilitation facility	\$183
Long-term care facility	\$200
<i>Total</i>	\$1,852

Source: HPC and Oliver Wyman analysis of Medicare claims data, 2012

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**Table 4.4: Distribution of discharge destination following joint replacement by hospital type**

Percentage of total discharges for DRG 470 by post-acute care settings, by hospital type, 2012

	Length of stay (days)	Routine/Home	Home Health Agency	Institutional
Academic Medical Centers	3.3	11.3%	34.2%	54.1%
Teaching Hospitals	3.4	5.7%	36.4%	55.1%
Community Hospitals (2)	3.5	5.7%	31.9%	61.6%
New England Baptist Hospital	3.1	0.8%	69.9%	29.2%

Source: HPC analysis of Massachusetts Health Data Consortium inpatient discharge database, 2012

**Table 4.5: Distribution of discharge destination following coronary bypass by hospital type**

Percentage of total discharges for DRG 236 by post-acute care setting and by hospital type, 2012

	Length of stay (days)	Routine/Home	Home Health Agency	Institutional
Academic Medical Centers	6.8	26.8%	55.7%	17.0%
Major Teaching Hospitals	6.3	6.8%	75.2%	17.9%

Source: HPC analysis of Massachusetts Health Data Consortium inpatient discharge database, 2012



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**Table 5.1: Selected examples of wasteful spending in Massachusetts**

Dollars , 2009 and 2010

	Estimate of wasteful spending (MA)	Definition of category
<i>Opportunities for coordinated action across care settings</i>		
Excess hospital readmissions*	\$700 M	Hospital readmissions that could be prevented through higher quality care during the initial hospitalization, adequate discharge planning, adequate post-discharge follow-up, and/or improved coordination between inpatient and outpatient health-care teams
Avoidable Emergency Department (ED) visits†	\$550 M	Visits to the emergency room that are either non-emergent, treatable in a primary care setting, or preventable given timely and effective primary care

\* Estimated costs associated with "potentially preventable readmissions" (PPR) in FY 2009 and established through 3M's PPR attribution methodology.

† The data for this report include all outpatient emergency department visits, including Satellite Emergency Facility visits, by patients whose visits result in neither an outpatient observation stay nor an inpatient admission at the reporting facility from FY 2006 to FY 2010.

Source: Division of Health Care Finance and Policy, 2010 and 2011

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**Table 8.1: Health Maintenance Organization (HMO) members covered by Alternative Payment Methods (APMs)**

Members covered by APMs, 2013

	Percent of HMO members covered by APMs	HMO members as percent of total members	Percent of members covered by APMs
BCBS	90%	54%	49%
HPHC	36%	73%	26%
THP	60%	66%	41%
All other	33%	43%	13%
Total	61%	55%	34%

Note: Data was calculated based on an earlier version of the data source, which was the most recently available at the time of publication. Exact percentages may vary slightly.

Source: HPC Analysis of CHIA 2014 Annual Report APM Data Book, 2013

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**Appendix A: Acute care hospitals in MA by type of hospital, FY 2014**

Major Teaching Hospitals (15)	Community Hospitals (46)	
Academic Medical Centers (6)	<i>Anna Jaques Hospital</i>	<i>Merrimack Valley Hospital</i>
<i>Beth Israel Deaconess Medical Center</i>	<i>Athol Memorial Hospital</i>	<i>MetroWest Medical Center</i>
<i>Boston Medical Center</i>	<i>Baystate Franklin Medical Center</i>	<i>Milford Regional Medical Center</i>
<i>Brigham and Women's Hospital</i>	<i>Baystate Mary Lane Hospital</i>	<i>Morton Hospital</i>
<i>Massachusetts General Hospital</i>	<i>Beth Israel Deaconess Hospital - Milton</i>	<i>Nantucket Cottage Hospital</i>
<i>Tufts Medical Center</i>	<i>Beth Israel Deaconess Hospital - Needham</i>	<i>Nashoba Valley Medical Center</i>
<i>UMass Memorial Medical Center</i>	<i>Jordan Hospital</i>	<i>Newton-Wellesley Hospital</i>
Teaching Hospitals (9)	<i>Cape Cod Hospital</i>	<i>Noble Hospital</i>
<i>Baystate Medical Center</i>	<i>Clinton Hospital</i>	<i>North Adams Regional Hospital</i>
<i>Berkshire Medical Center</i>	<i>Cooley Dickinson Hospital</i>	<i>North Shore Medical Center</i>
<i>Brigham and Women's Faulkner Hospital</i>	<i>Emerson Hospital</i>	<i>Northeast Hospital</i>
<i>Cambridge Health Alliance</i>	<i>Fairview Hospital</i>	<i>Quincy Medical Center</i>
<i>Lahey Clinic</i>	<i>Falmouth Hospital</i>	<i>Saints Medical Center</i>
<i>Mount Auburn Hospital</i>	<i>Hallmark Health</i>	<i>Signature Healthcare Brockton Hospital</i>
<i>Saint Vincent Hospital</i>	<i>Harrington Memorial Hospital</i>	<i>South Shore Hospital</i>
<i>Steward Carney Hospital</i>	<i>HealthAlliance Hospital</i>	<i>Southcoast Hospitals Group</i>
<i>Steward St. Elizabeth's Medical Center</i>	<i>Heywood Hospital</i>	<i>Steward Good Samaritan Medical Center</i>
Specialty Hospitals (6)	<i>Holyoke Medical Center</i>	<i>Steward Holy Family Hospital</i>
<i>Boston Children's Hospital</i>	<i>Lawrence General Hospital</i>	<i>Steward Norwood Hospital</i>
<i>Dana-Farber Cancer Institute</i>	<i>Lowell General Hospital</i>	<i>Steward Saint Anne's Hospital</i>
<i>Kindred Hospital- Boston</i>	<i>Marlborough Hospital</i>	<i>Sturdy Memorial Hospital</i>
<i>Kindred Hospital- Boston North Shore</i>	<i>Martha's Vineyard Hospital</i>	<i>Winchester Hospital</i>
<i>Massachusetts Eye and Ear Infirmary</i>	<i>Mercy Medical Center</i>	<i>Wing Memorial Hospital</i>
<i>New England Baptist Hospital</i>		

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Notes: (A) Academic Medical Centers (AMCs) are a subset of Major Teaching Hospitals. AMCs are characterized by (1) extensive research and teaching programs and (2) extensive resources for tertiary and quaternary care, and are (3) principal teaching hospitals for their respective medical schools and (4) full service hospitals with case mix intensity greater than 5% above the statewide average. (B) Teaching Hospitals are those hospitals that report at least 25 full-time equivalent medical school residents per 100 inpatient beds in accordance with Medicare Payment Advisory Commission (MedPAC), and are not classified as AMCs. (C) "Community Hospitals" are not Major Teaching Hospitals and include hospitals with public payer mix of less than 63%, as well as "Disproportionate Share Hospitals (DSH) that have a public payer mix greater than 63%.

Source: Center for Health Information and Analysis