Commonwealth of Massachusetts

# Health Policy Commission

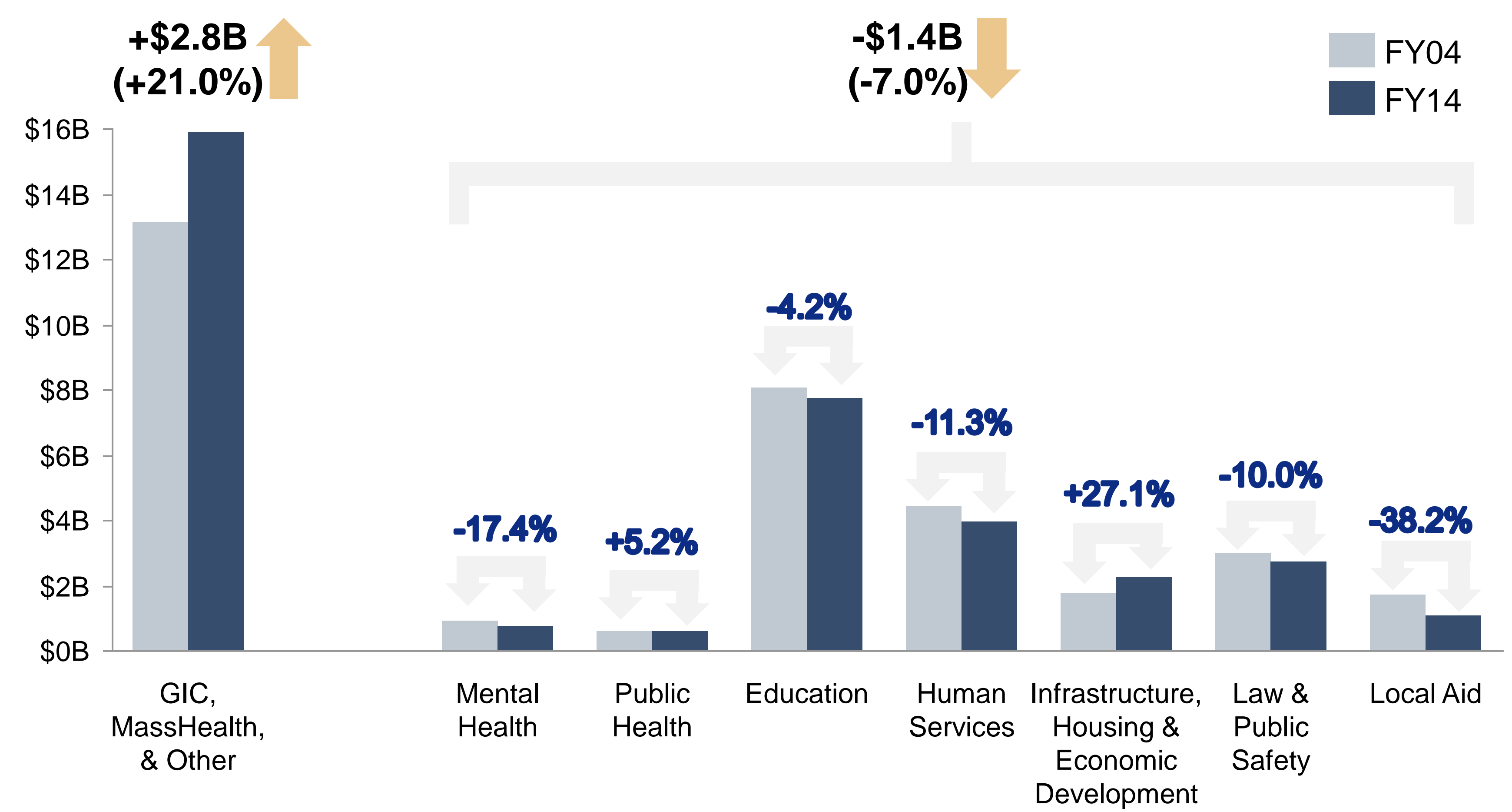
# Chartbook for 2014 Cost Trends Report

# List of figures in 2014 Cost Trends Report

**Figure 1.1**: State budgets for health care coverage and other priorities, FY2004- FY2014
**Figure 2.1:** Annual per-capita spending growth, 2012-2013, by payer type
**Figure 2.2:** Role of price and utilization in per-capita spending growth, major commercial payers
**Figure 2.3:** Annual growth in per-capita healthcare spending: Massachusetts versus the U.S.
**Figure 2.4:** Per-capita spending growth in MA and the U.S., commercial payers
**Figure 2.5:** Per-capita spending growth in MA and the U.S., Medicare FFS
**Figure 2.6:** Per-capita spending growth in MA and the U.S., MassHealth PCC and MCOs combined
**Figure 2.7:** Out-of-pocket spending as a percentage of total commercial spending, by type of condition
**Figure 2.8:** Out-of-pocket spending per member by number of chronic conditions
**Figure 2.9:** Frequency of provider alignment types for which the HPC received Material Change Notices
**Figure 2.10:** Concentration of commercial inpatient care in Massachusetts
**Figure 3.1:** Average spending for hip replacement episodes by hospital type and by hospital
**Figure 3.2:** Average spending for knee replacement episodes by hospital type and by hospital
**Figure 3.3:** Average spending for PCI episodes by hospital type and by hospital
**Figure 3.4:** Readmission rate for total joint replacement and episode cost, hip replacement
**Figure 3.5:** Readmission rate for total joint replacement and episode cost, knee replacement
**Figure 3.6:** Mortality rate and episode cost, low-severity PCI episodes
**Figure 4.1:** Medicare spending on post-acute care, U.S., 2001-2012
**Figure 4.2:** Probability of discharge to any PAC, by hospital, all DRGs
**Figure 4.3:** Probability of discharge to institutional PAC, by hospital, all DRGs
**Figure 4.4:** Probability of discharge to institutional PAC, by hospital, after joint replacement surgery
**Figure 5.1:** Medicare condition-specific readmission rates, MA and U.S.
**Figure 5.2:** ED visits by type
**Figure 5.3:** Outpatient ED visits per capita, by region
**Figure 5.4:** ED visits by payer
**Figure 6.1:** Key clinical conditions, commercial patients with persistently high total costs
**Figure 6.2:** Key clinical conditions, Medicare patients with persistently high total costs
**Figure 6.3:** Key clinical conditions, commercial patients with persistently high ED costs
**Figure 6.4:** Key clinical conditions, Medicare patients with persistently high ED costs
**Figure 7.1:** Medical conditions with large spending difference between patients with and without BH conditions
**Figure 7.2:** Selected activities related to behavioral health by Massachusetts state government agency
**Figure 7.3:** Percentage of members covered by managed behavioral health organizations (MBHOs), by payer
**Figure 8.1:** Alternative payment method (APM) coverage, by payer type
**Figure 8.2:** Alternative payment method (APM) coverage, by major commercial payer
**Figure 8.3:** Statewide use of APMs and projected growth under four scenarios
**Figure 8.4:** Plans to extend APMs, by payer
**Figure 8.5:** Number of quality measures used for payment and public reporting in Massachusetts
**Figure 9.1:** Enrollment in tiered and limited network and high deductible plans
**Figure 9.2:** Distribution of networks by breadth for plans available
**Figure 9.3:** Premium differences between broad and narrow network products

# Figure 1.1: State budgets for health care coverage and other priorities, FY2004- FY2014

*Total budget (dollars in billions) and total real growth percentage, FY2004 – FY2014*

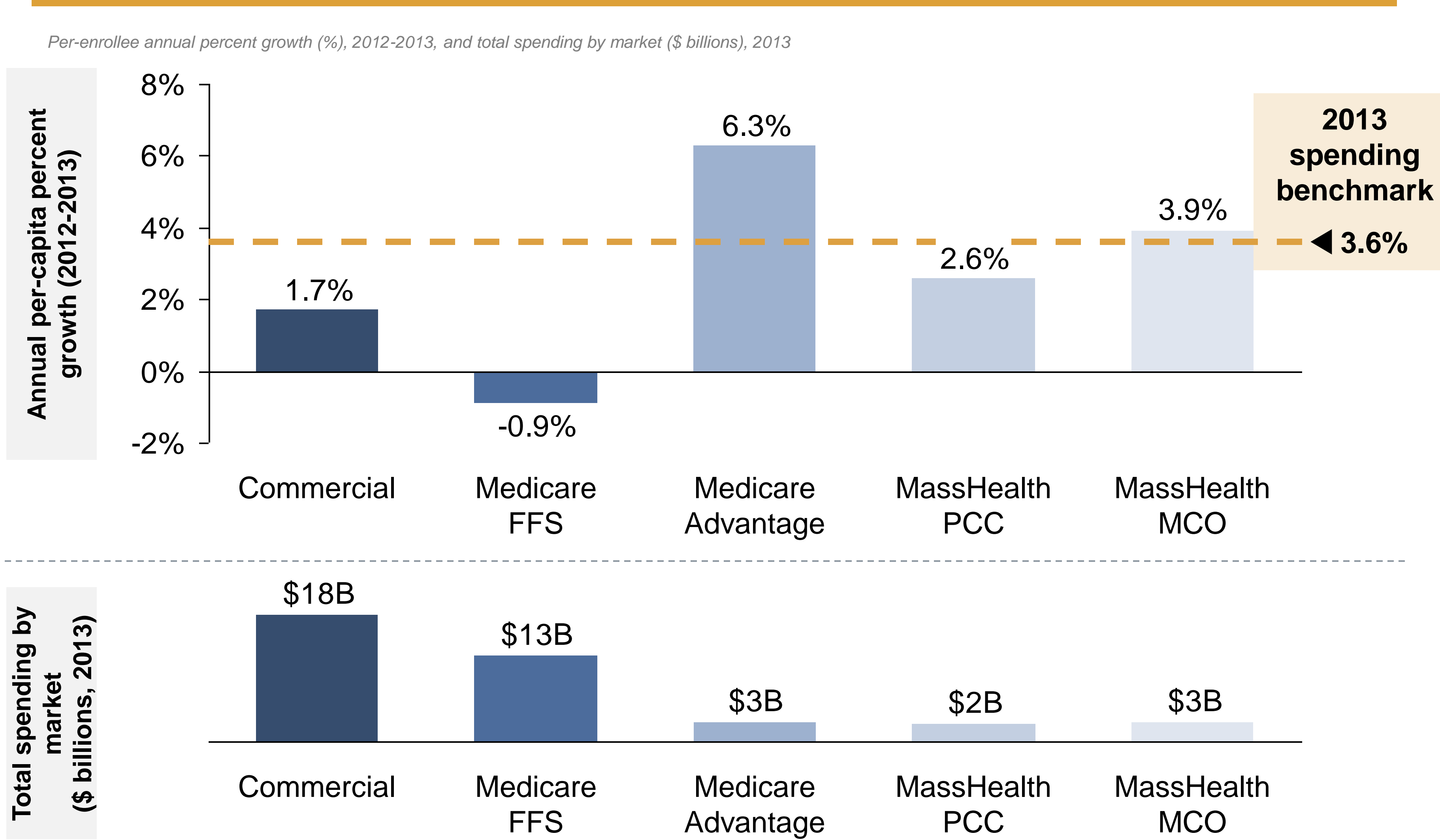



Note: Figures all adjusted for Gross Domestic Product (GDP) growth; GIC = Group Insurance Commission

Source: Massachusetts Budget and Policy Center

# Figure 2.1: Annual per-capita spending growth, 2012-2013, by payer type

*Per-enrollee annual percent growth (%), 2012-2013, and total spending by market ($ billions), 2013*

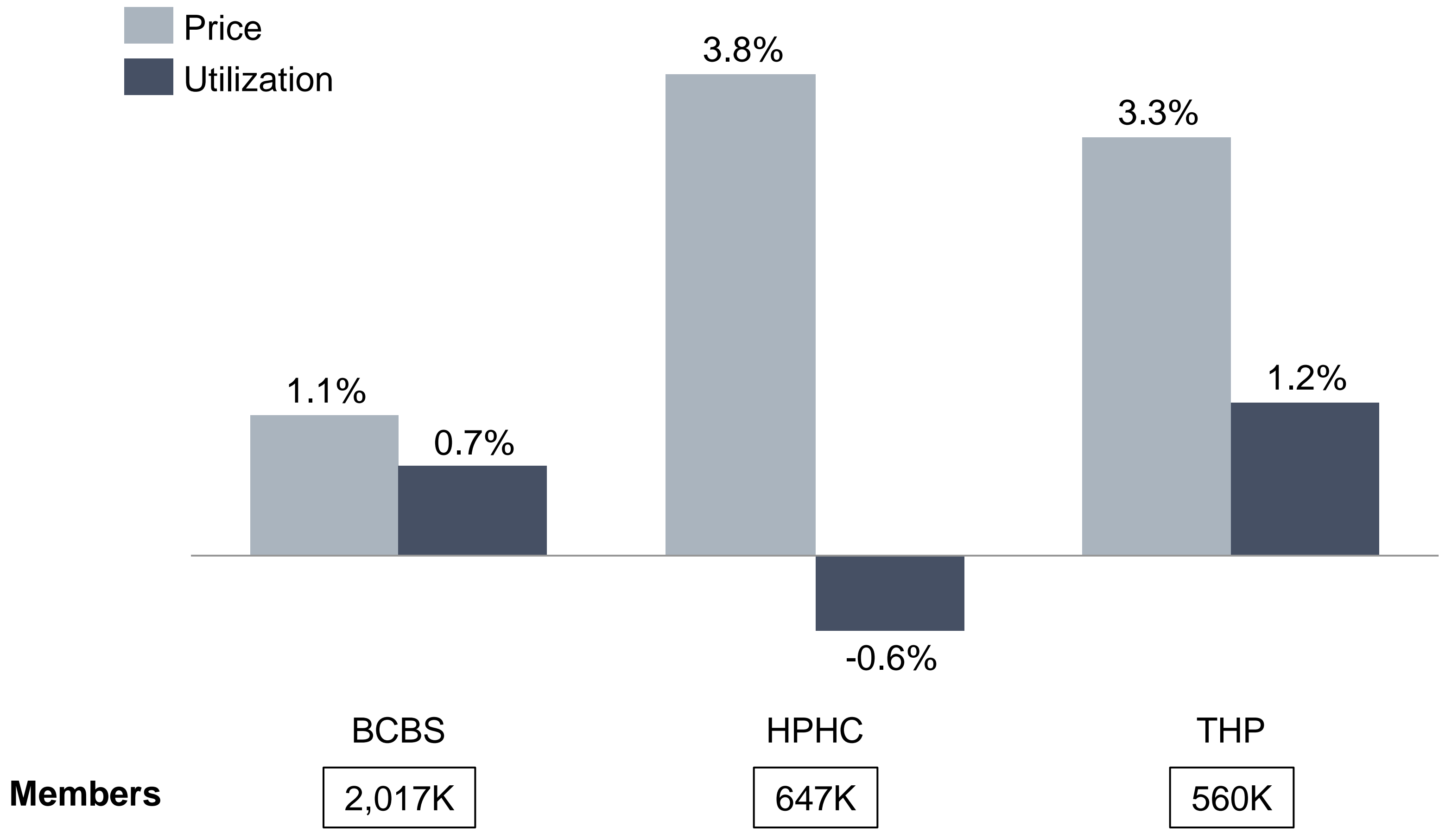



Note: The figures above represent spending for defined population coverage subgroups. Some spending that is included in Total Health Care Expenditures (THCE) is omitted in the figure, such as MassHealth fee-for-service spending (for example, cost-sharing for low-income Medicare beneficiaries), CommCare, and spending under the Veterans Administration. FFS = Fee for service; MCO = Managed care organizations; PCC = Primary Care Clinician

Source: Center for Health Information and Analysis, U.S. Center for Medicare and Medicaid Services; MassHealth

# Figure 2.2: Role of price and utilization in per-capita spending growth, major commercial payers

*Percent growth in per enrollee per year spending, decomposed into price and utilization for commercial payers in Massachusetts, 2012 - 2013*



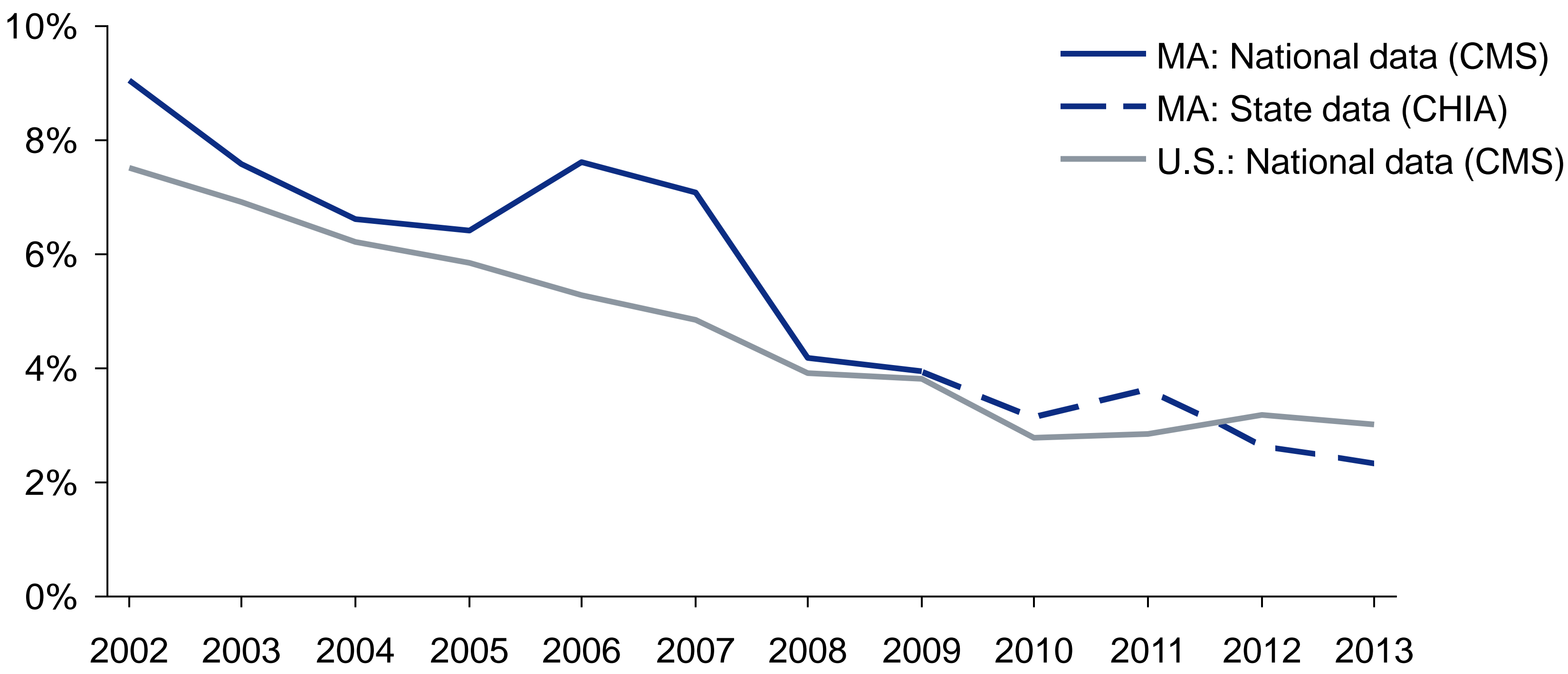

Note: Price and utilization calculations are submitted by payers with no health status adjustment and no analysis performed by the HPC. Some payers also broke down spending growth into provider and service mix components (not shown).

BCBS = Blue Cross Blue Shield; HPHC = Harvard Pilgrim Health Care; THP = Tufts Health Plan

Source: Pre-filed Testimony submitted to the HPC for the 2014 Cost Trends Hearings

# Figure 2.3: Annual growth in per-capita healthcare spending in MA and the U.S.

*Percentage growth from previous year, 2002 - 2013*

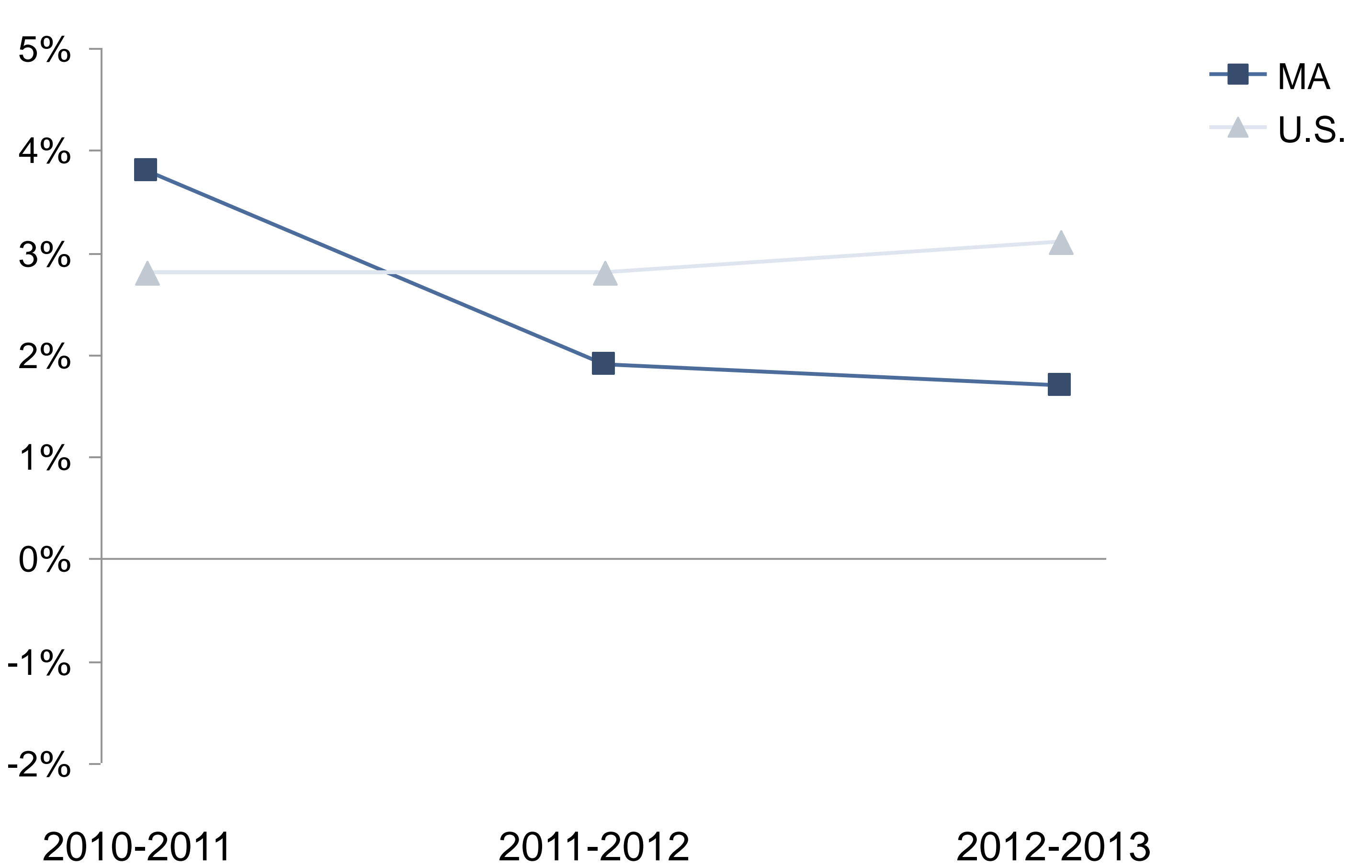



Note: Solid lines indicate CMS data; dashed line indicates Massachusetts-specific data. Specifically; CMS NHE & SHEA 2002-2009,US NHE 2009 – 2013, MA TME 2009 – 2012, MA THCE 2012-2013

Source: Centers for Medicare & Medicaid Services, Massachusetts Center for Health Information and Analysis, United States Census Bureau

# Figure 2.4: Per-capita spending growth in MA and the U.S., commercial payers

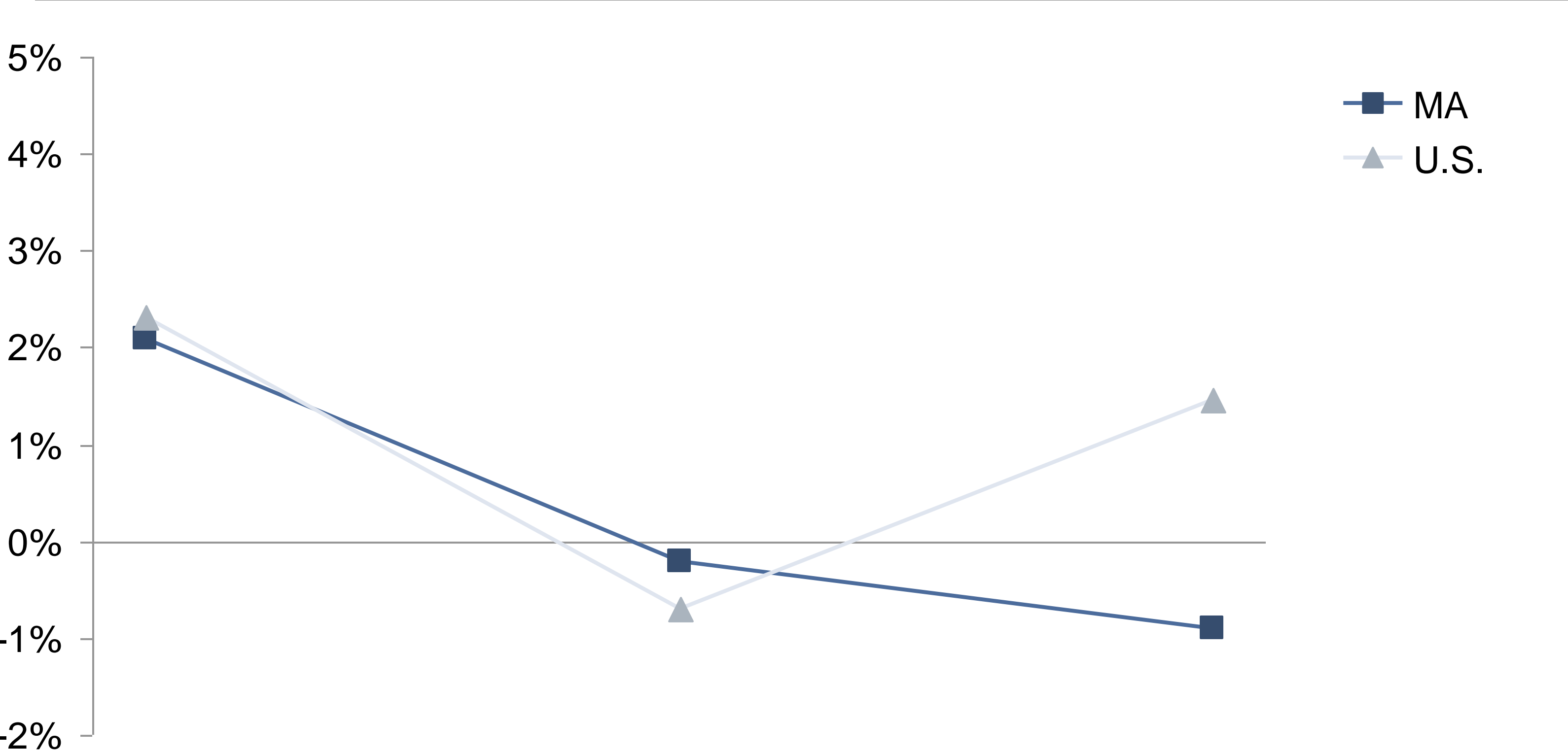
*Percentage growth in per member per year spending for commercial enrollees in Massachusetts and in the U.S., 2010 - 2013*




Source: Center for Health Information and Analysis; Centers for Medicare & Medicaid Services, National health expenditure accounts ("private health insurance")

# Figure 2.5: Per-capita spending growth in MA and the U.S., Medicare FFS

*Percentage growth in per beneficiary per year spending for Medicare FFS beneficiaries in Massachusetts and in the US, 2010 - 2013*

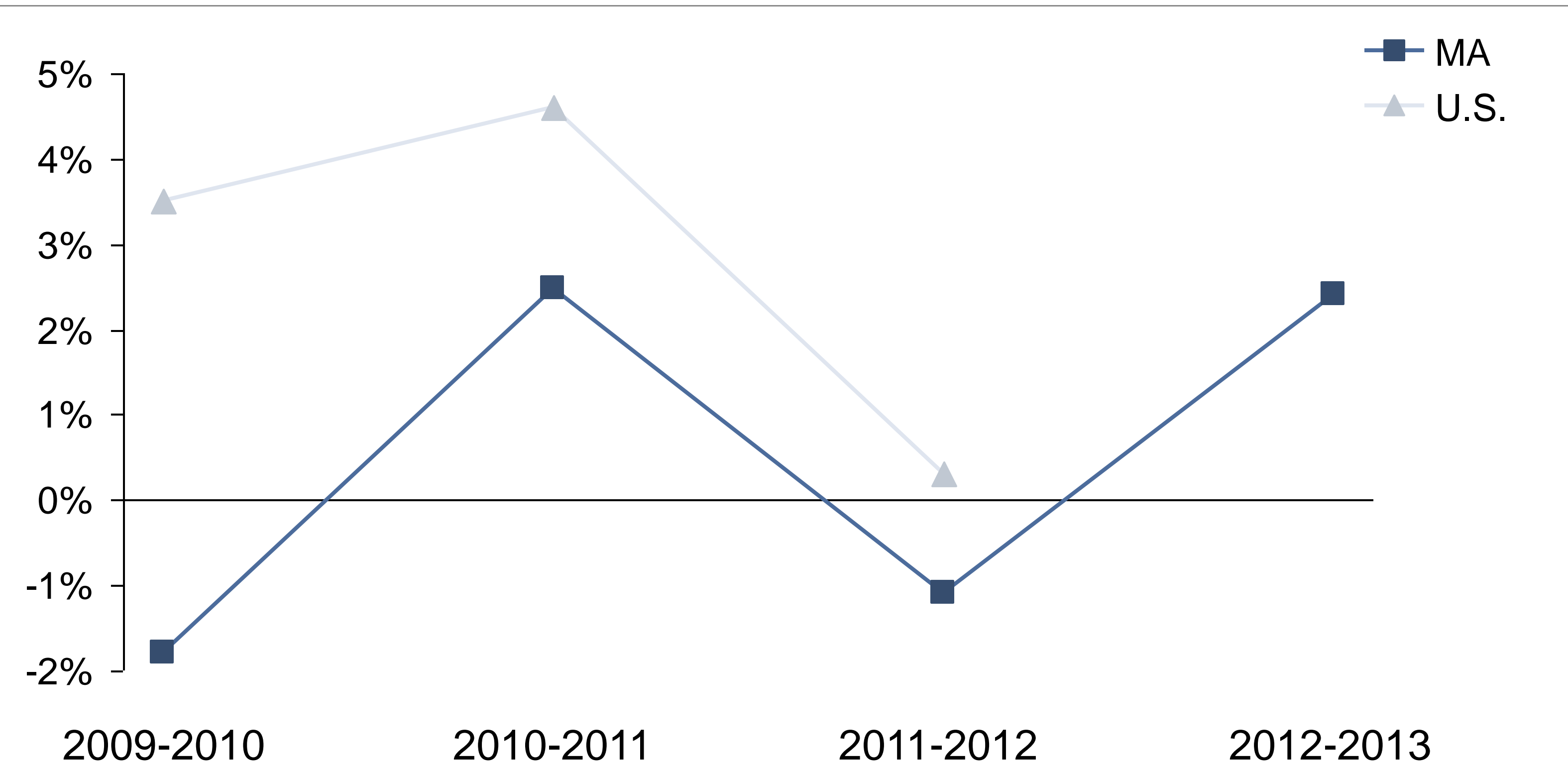



Note: Figure reports spending on traditional Medicare parts A and B, and includes part D prescription drug coverage.

Source: Centers for Medicare & Medicaid Services, National health expenditure accounts

# Figure 2.6: Per-capita spending growth in MA and the U.S., MassHealth PCC and MCOs combined

*Percentage growth in per enrollee per year spending in Massachusetts and in the US, 2009 - 2013*

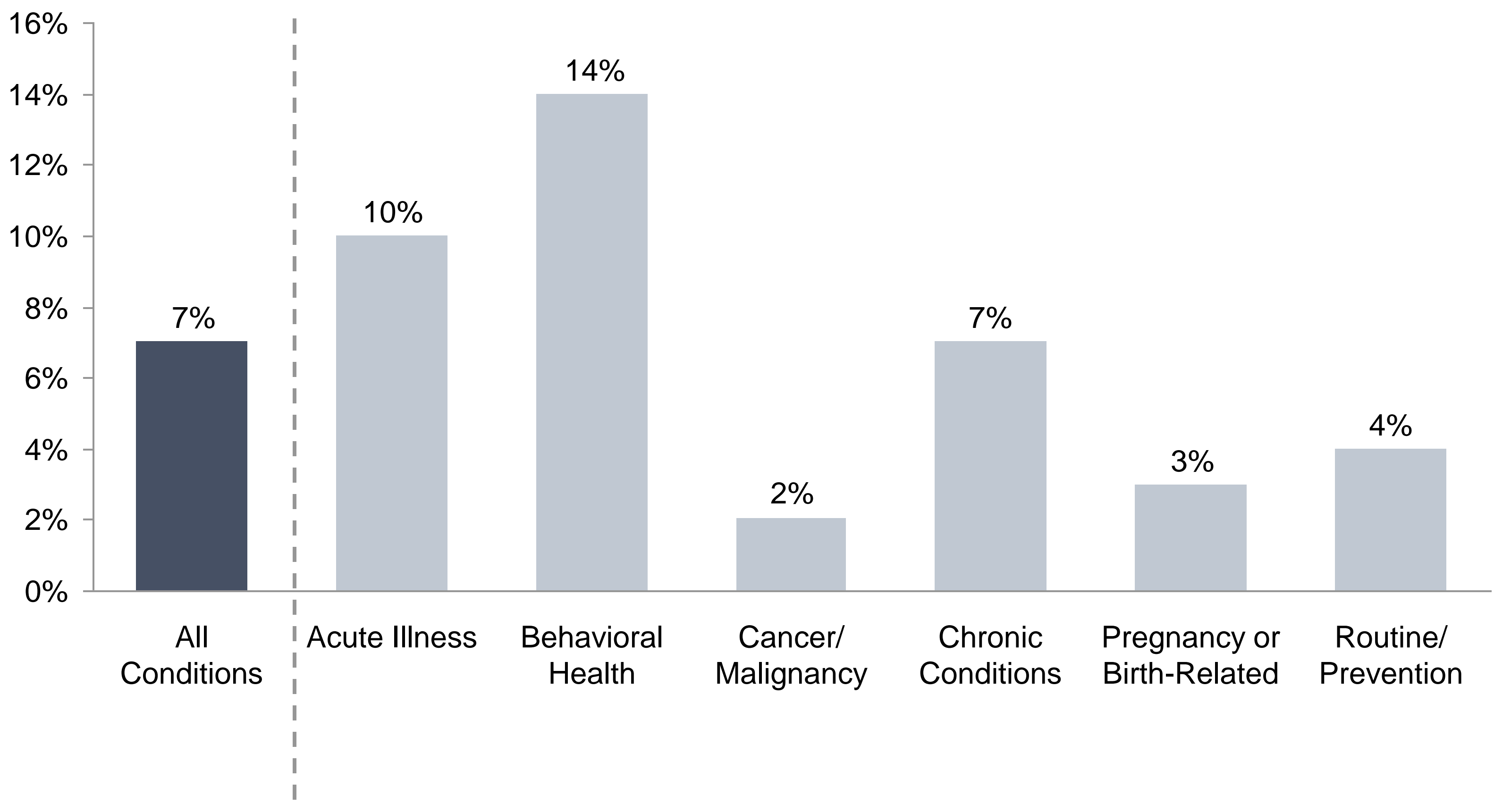



Note: Massachusetts: Data includes primary care clinician plans (PCC), managed care organizations (MCO) and CommCare, but excludes other programs. Spending does not include third party, Medicare, or other agency payments. Year-over-year variation may be attributable to a variety of factors, including changes in the population's acuity, changes in fee-for-service rates, mid-year (9C) budget reductions and changes in managed care enrollment patterns. U.S.: Populations include adult and child populations ("family"), and exclude aged, disabled, and special populations. See Technical Appendix B2 for details.

Source: Center for Health Information and Analysis; MassHealth; Kaiser Family Foundation's analysis of Medicaid Statistical Information System

# Figure 2.7: Out-of-pocket spending as a percentage of total commercial spending, by type of condition

*Out-of-pocket spending as a percentage of total allowed spending, 2012*

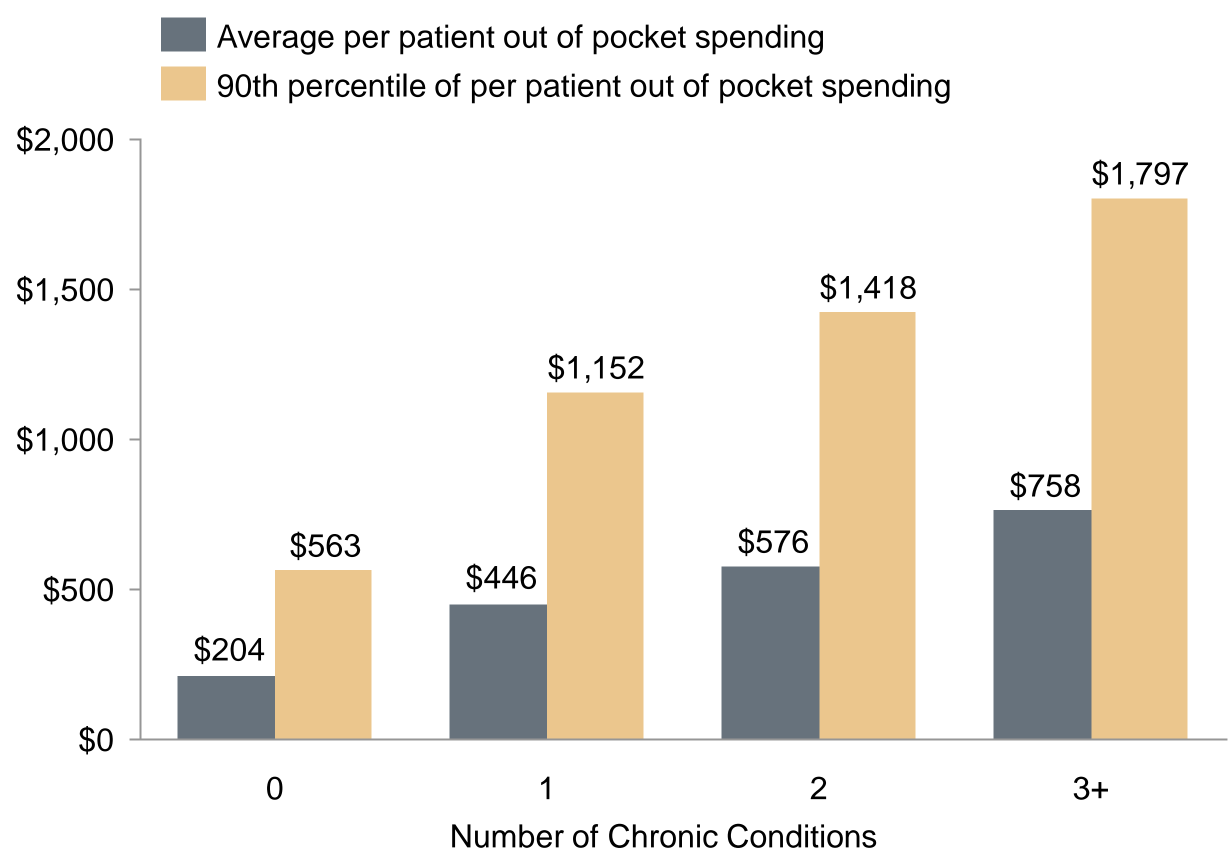



Note: Spending by condition is determined using Optum's ETG episode grouper.

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012

# Figure 2.8: Out-of-pocket spending by number of chronic conditions

*Dollars per person, 2012*

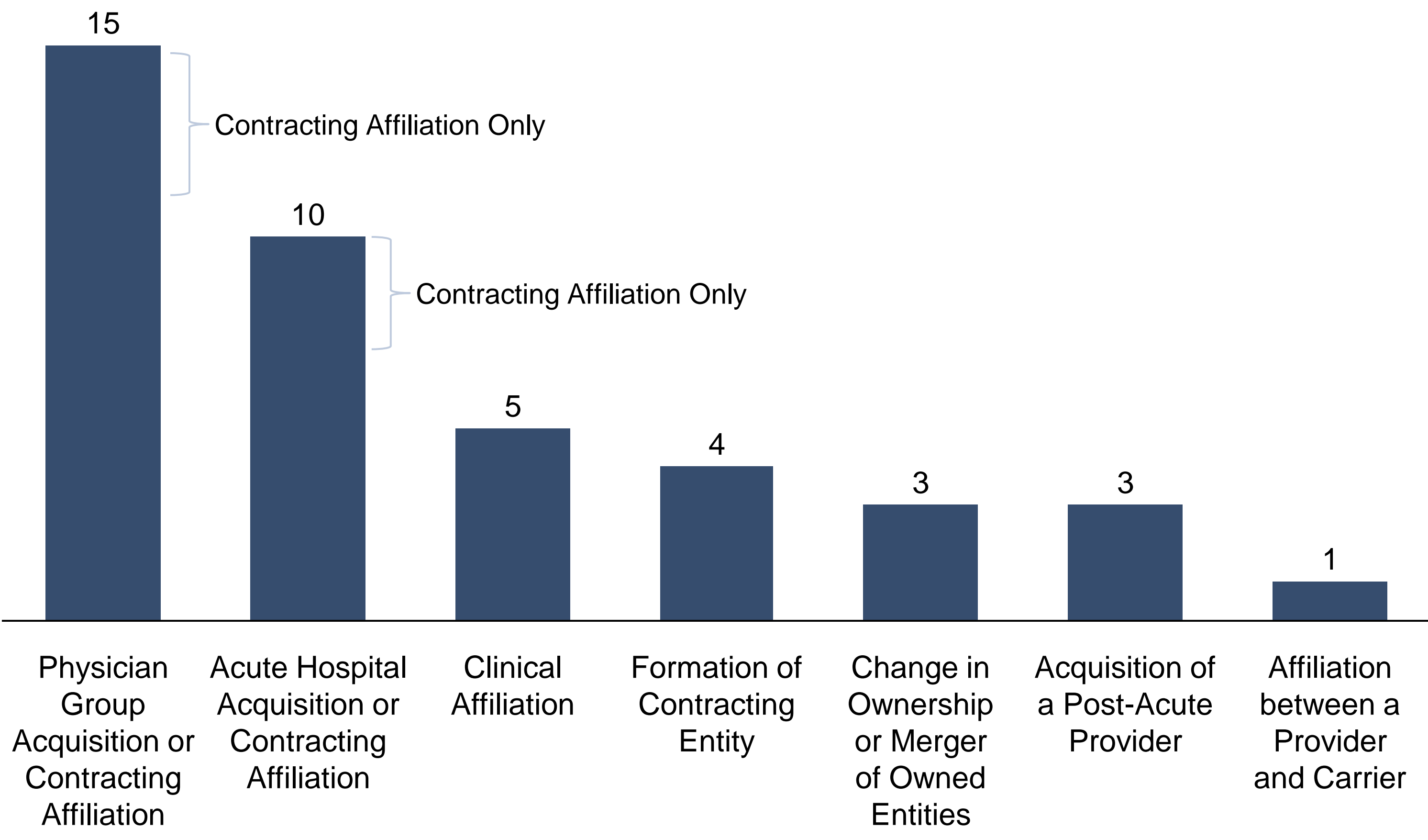



Note: The presence of a chronic condition is determined using Optum's ERG episode risk groups.

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012

# Figure 2.9: Frequency of provider alignment types for which the HPC received Material Change Notices

*Number of transactions received April 2013 through December 2014*




Note: HPC received notice of 33 transactions, in total, between April 2013 and December 2014. Some transactions involve more than one type of provider alignment.

Source: Material Change Notice Filings, Health Policy Commission

# Figure 2.10: Concentration of commercial inpatient care in Massachusetts

*Percentage of total inpatient discharges*

51%
5%
7%
7%
8%
25%

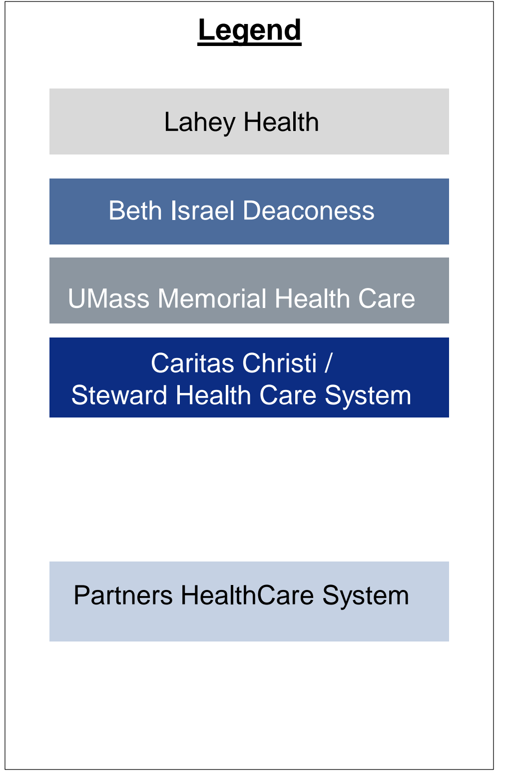
56%
7%
8%
7%
8%
26%

61%
7%
8%
7%
8%
32%

2012 Actual

2014 Estimate
(Pre-PHS transactions)

2014 Estimate
(Post-PHS transactions)



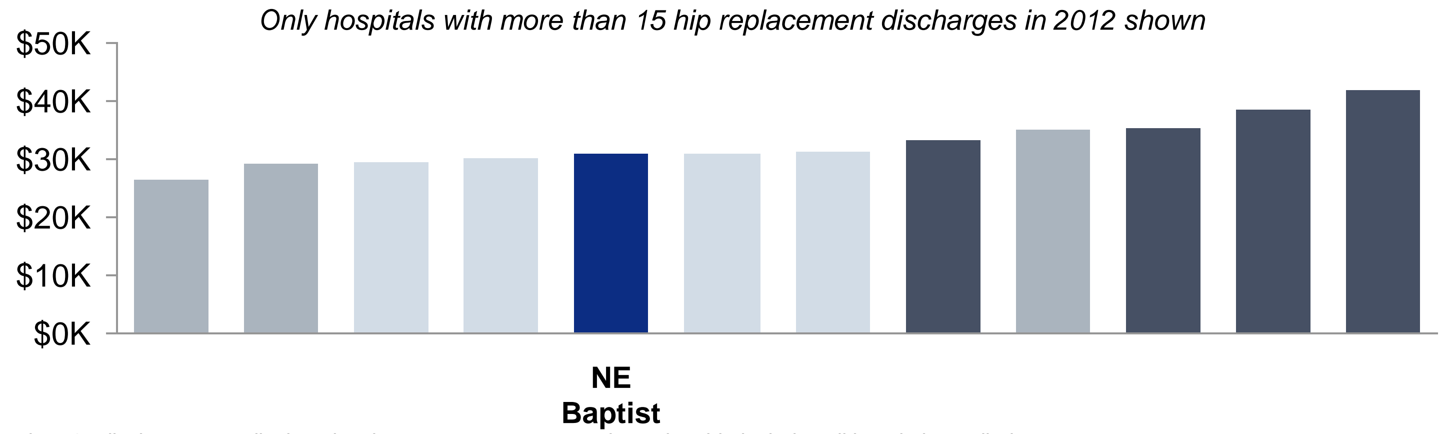

Note: PHS = Partners HealthCare System. Pre-PHS transactions are based on applying systems established by 2014 (including 2013 Partners HealthCare acquisition of Cooley Dickinson and 2014 Lahey Health acquisition of Winchester hospital) to 2012 inpatient discharge data. Post-PHS transactions estimate includes South Shore Hospital and Hallmark Health hospitals joining Partners HealthCare System. Figures may not add to totals due to rounding.

Source: Center for Health Information and Analysis; HPC analysis

# Figure 3.1: Average spending for hip replacement episodes by type of hospital and by hospital*

*Average spending, in dollars*

| | Average spending per hip replacement episode for each type of hospital (*Average includes all hospitals studied*) | Percent difference compared to NE Baptist | |
|---|---|---|---|
| NE Baptist | $30.6K | - | *Reference Hospital* |
| AMC | $37.7K | +23% | |
| Affiliated | $32.8K | +7% | *Non-AMC hospitals* |
| Unaffiliated | $29.5K | -4% | *Non-AMC hospitals* |




*Only hospitals with greater than 15 discharges are displayed as bars; average payment shown in table includes all hospitals studied

Note: NE Baptist = New England Baptist; AMC = Academic Medical Center (see Appendix A)

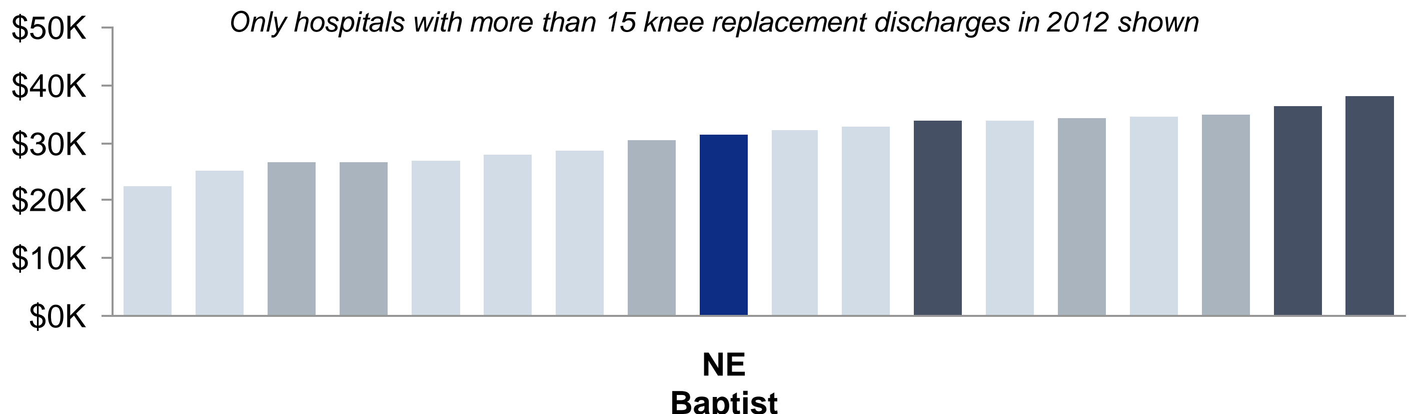
In this context, affiliated hospital means a non-AMC hospital that has a corporate affiliation with an AMC; unaffiliated hospital means a non-AMC hospital that does not have a corporate affiliation with an AMC. AMCs, teaching, and community hospitals defined by the Center for Health Information and Analysis. See Appendix A and Technical Appendix B3 for more details.

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012

# Figure 3.2: Average spending for knee replacement episodes by type of hospital and by hospital*

*Average spending, in dollars*

| | Average spending per knee replacement episode for each type of hospital<br>*(Average includes all hospitals studied)* | Percent difference compared to NE Baptist | |
|---|---|---|---|
| NE Baptist | $31.3K | - | *Reference Hospital* |
| AMC | $36.1K | +15% | |
| Affiliated | $29.8K | -5% | *Non-AMC hospitals* |
| Unaffiliated | $28.6K | -9% | |




*Only hospitals with greater than 15 discharges are displayed as bars; average payment shown in table includes all hospitals studied

Note: NE Baptist = New England Baptist; AMC = Academic Medical Center (see Appendix A)

In this context, affiliated hospital means a non-AMC hospital that has a corporate affiliation with an AMC; unaffiliated hospital means a non-AMC hospital that does not have a corporate affiliation with an AMC. AMCs, teaching, and community hospitals defined by the Center for Health Information and Analysis. See Appendix A and Technical Appendix B3 for more details.

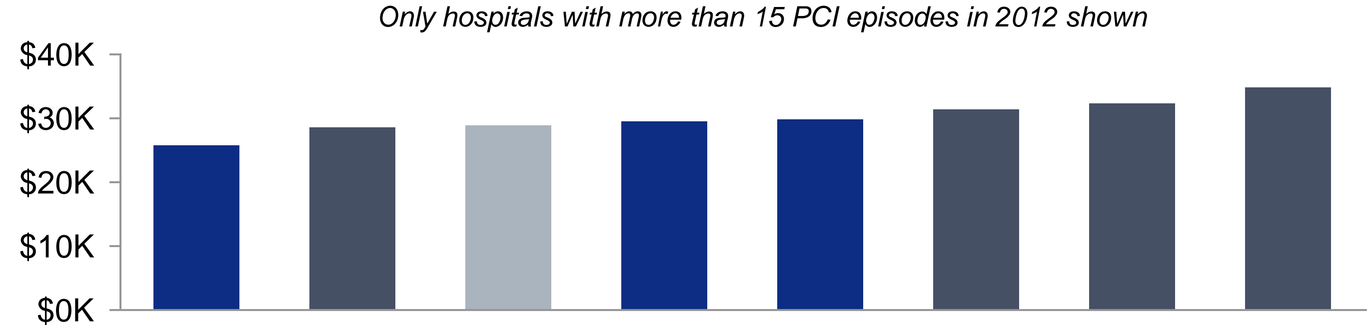
Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012

# Figure 3.3. Average spending for PCI episodes by hospital type and by hospital*

*Average spending, in dollars*

| | Average spending per PCI episode for each type of hospital (Average includes all hospitals studied) | Percent difference compared to average teaching hospital |
|---|---|---|
| Teaching | $28.1K | - (Reference hospitals) |
| AMC | $31.2K | +11% |
| Community | $26.6K | -5% |

*Only hospitals with more than 15 PCI episodes in 2012 shown*



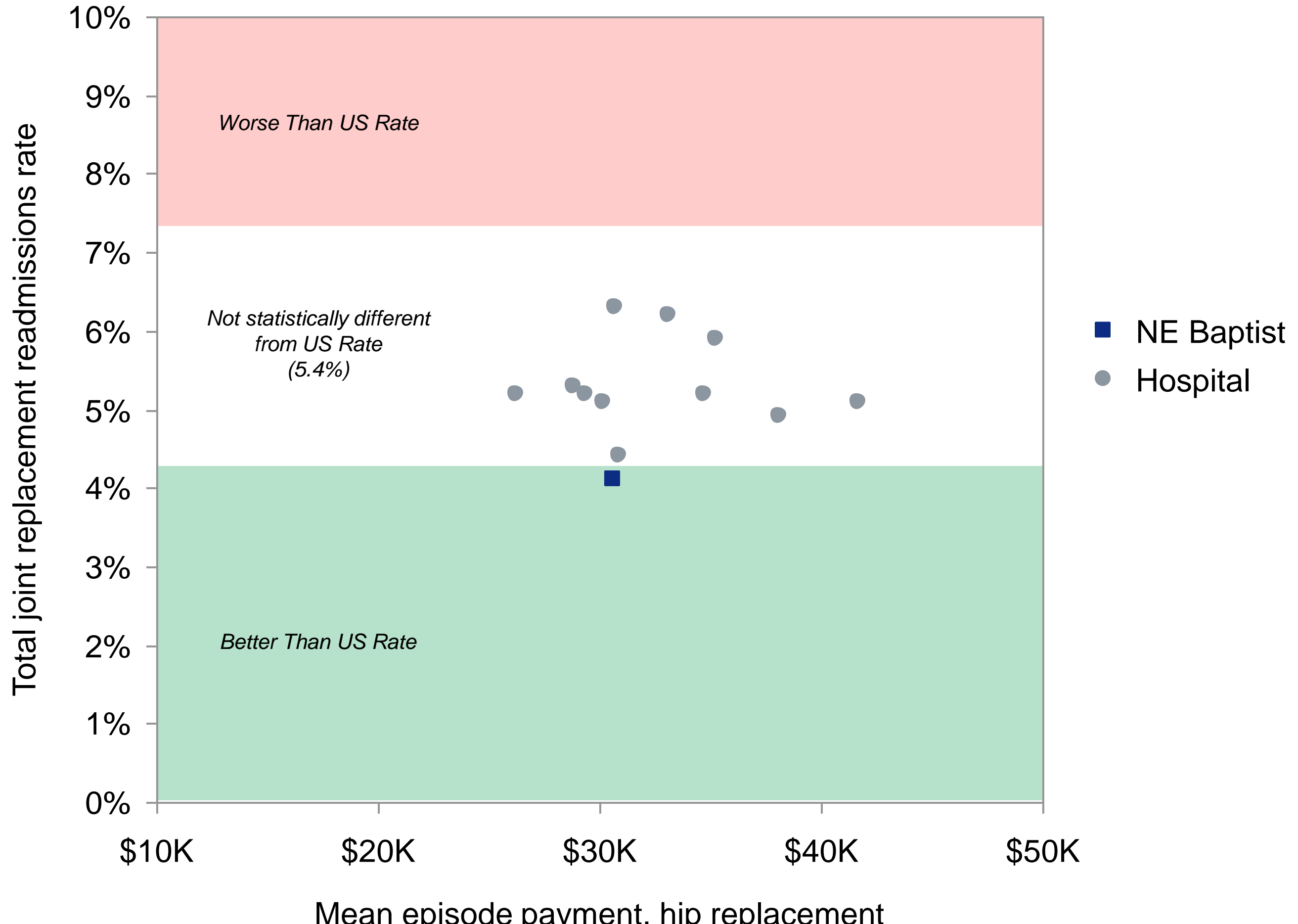

*Only hospitals with greater than 15 discharges are displayed as bars; average payment shown in table includes all hospitals studied

Note: AMC = Academic medical center (see Appendix A). Teaching and Community Hospitals defined by the Center for Health Information and Analysis.

Source: HPC Analysis of All-Payer Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012

# Figure 3.4: Readmission rate for total joint replacement and episode cost, hip replacement

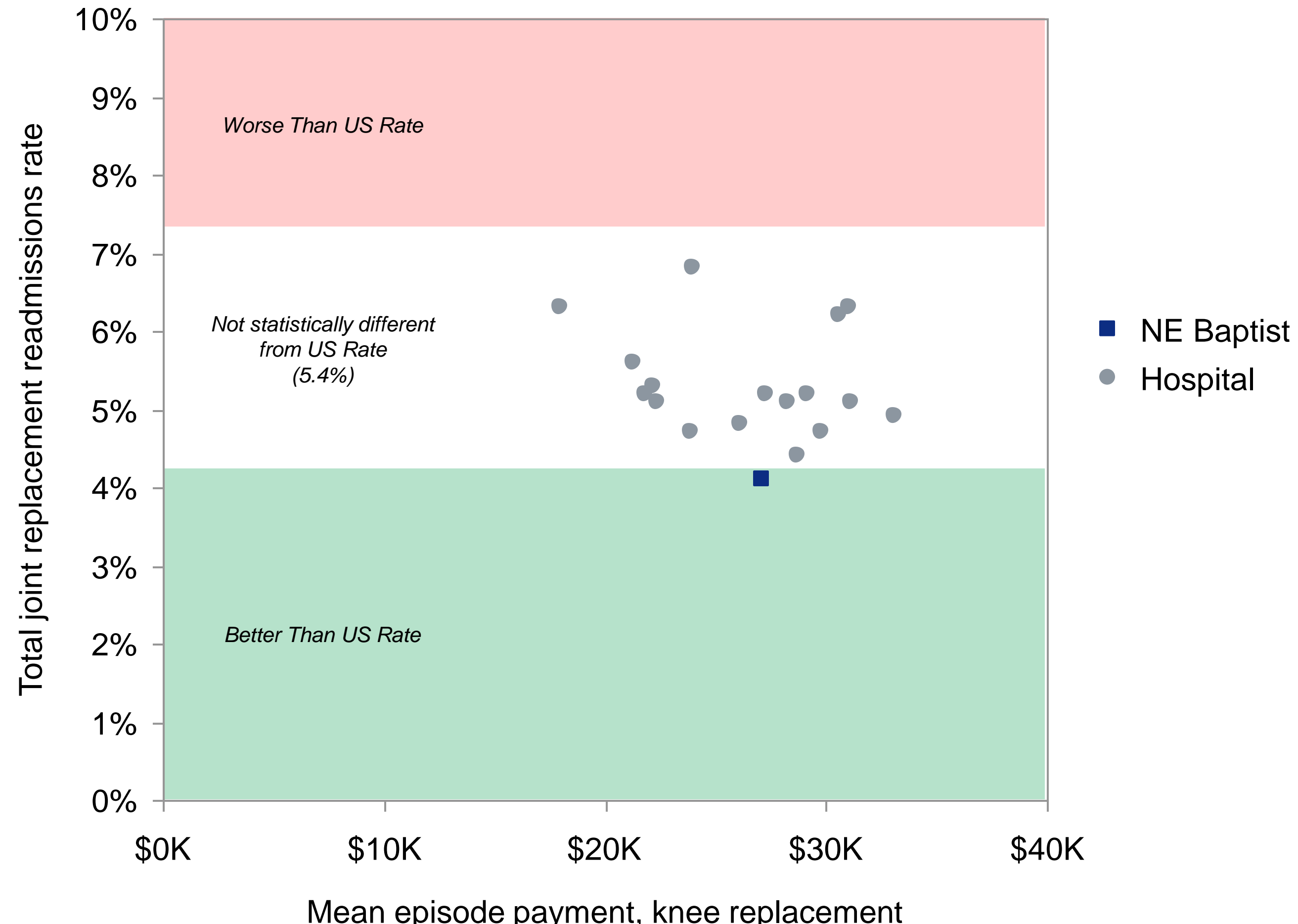
*Readmission rate for hip and knee replacement compared to average total spending per episode of care by hospital for top three commercial payers, 2012*




Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012; Center for Medicare & Medicaid Services, Hospital Compare 2010-2012

# Figure 3.5: Readmission rate for total joint replacement and episode cost, knee replacement

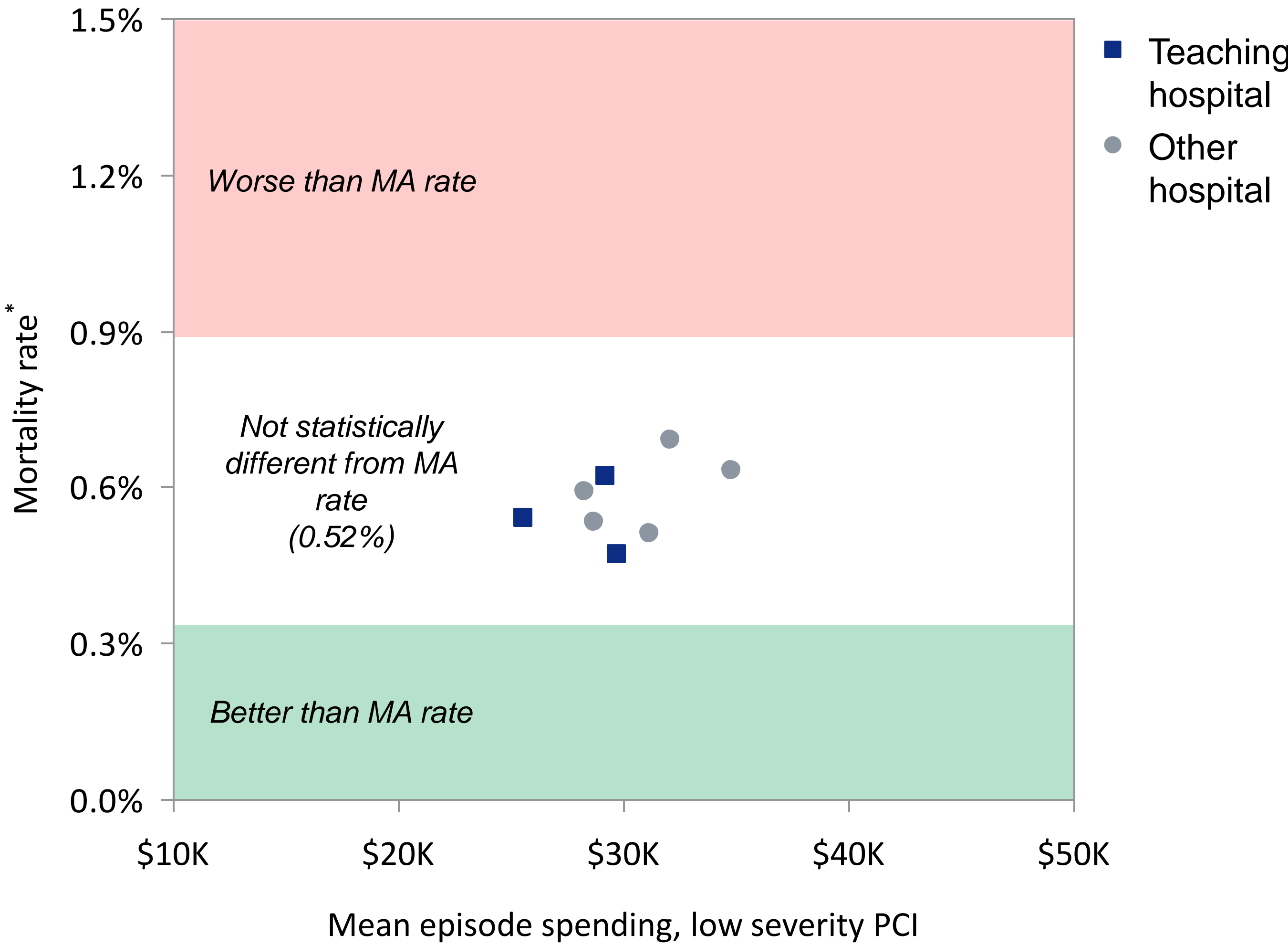
*Readmission rate for knee replacement compared to average total spending per episode of care by hospital for top three commercial payers, 2012*




Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012; Center for Medicare & Medicaid Services, Hospital Compare 2010-2012

# Figure 3.6: Mortality rate and episode cost, low-severity PCI episodes

*Mortality rate for low severity PCI compared to average total spending per episode of care by hospital, for top three commercial payers, 2012*

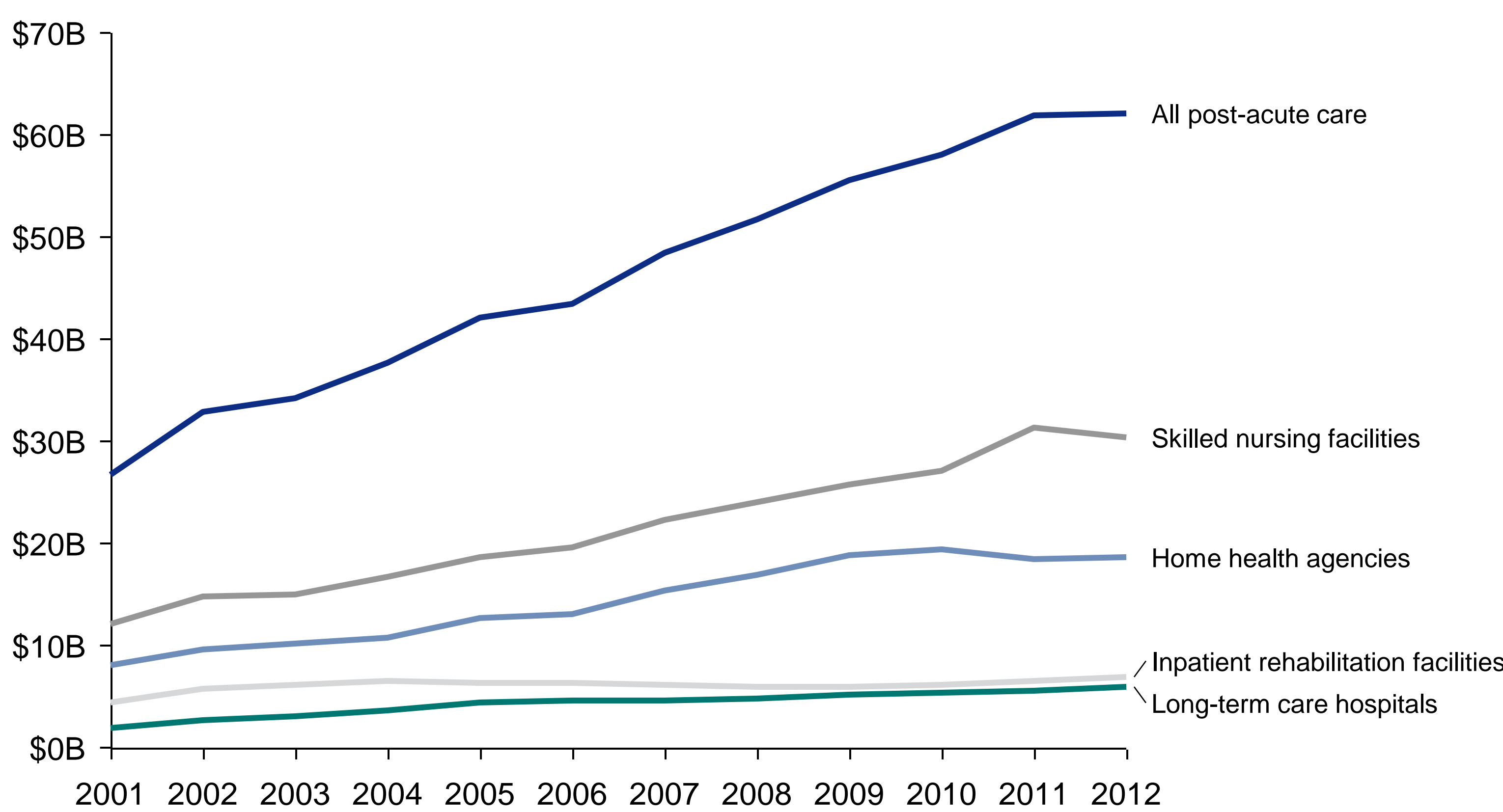



*None of the acute care facilities in the sample have mortality rates statistically different from the statewide average mortality rate.

Note: Mortality rate is for PCI admissions with no shock and no segment elevation myocardial infarction (STEMI)

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012; Center for Medicare & Medicaid Services, Hospital Compare 2010-2012

# Figure 4.1: Medicare spending on post-acute care, U.S., 2001-2012

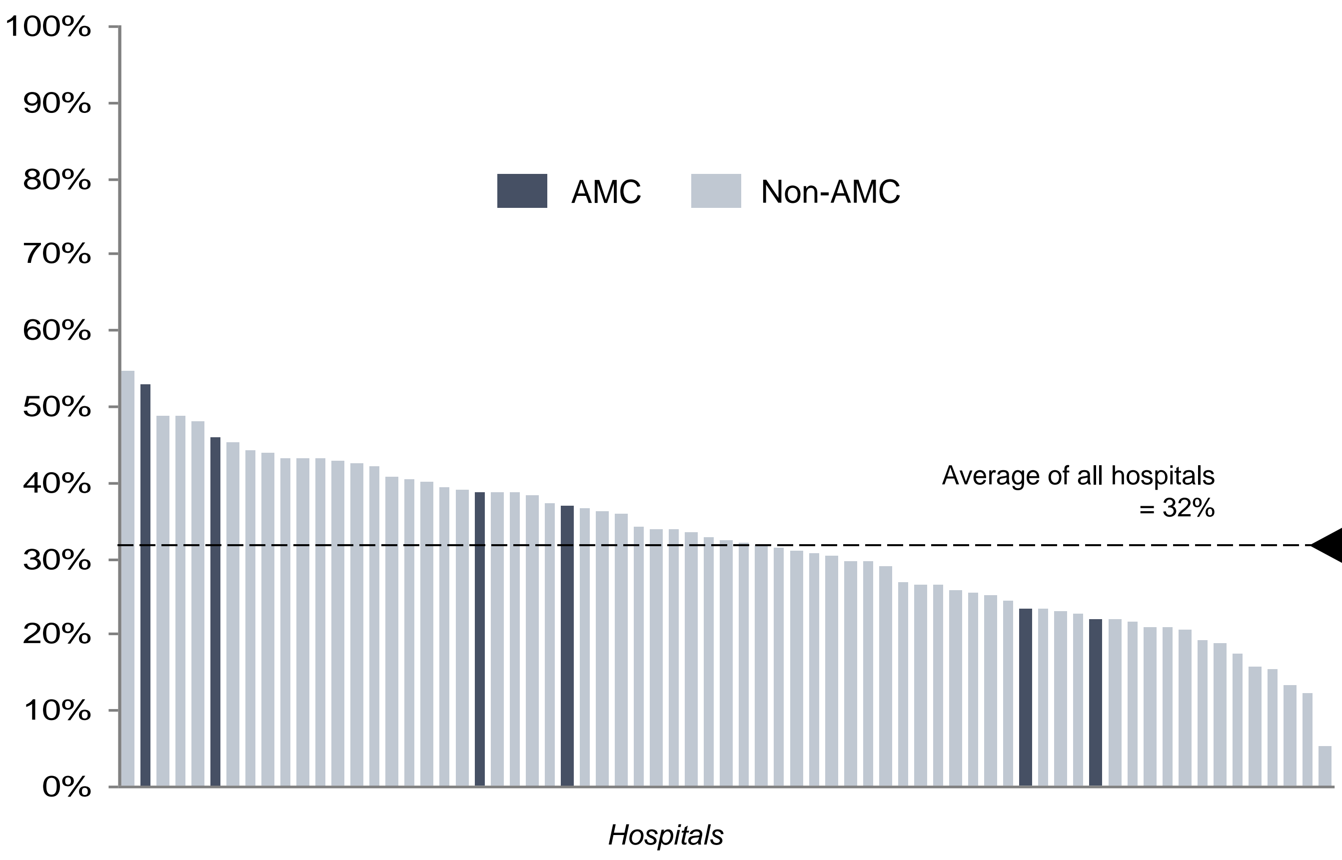



Note: Figures represent program spending only and do not include beneficiary co-payments.

Source: Dixon Hughes Goodman Healthcare analysis of Centers for Medicare & Medicaid Services Office of the Actuary data, 2012

# Figure 4.2: Probability of discharge to any PAC, by hospital, all DRGs

*Adjusted share of discharges to any post-acute care setting, 2012*

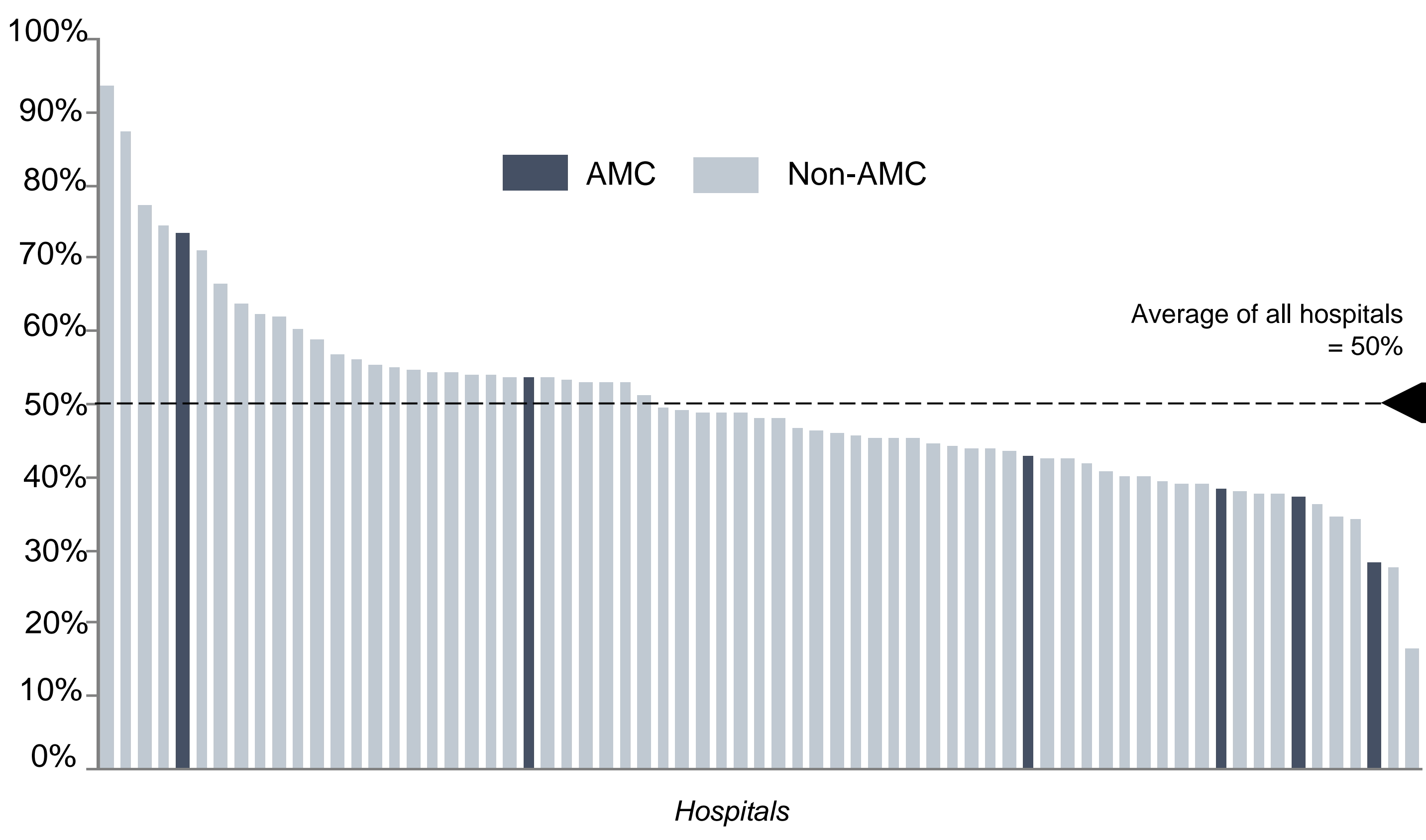



Note: Probabilities for each hospital were calculated after adjusting for the following: age, sex, payer group, income, admit source of the patient, length of stay, and Diagnostic Related Group. Our sample included patients who had a routine discharge, a discharge to a long-term care hospital, inpatient rehabilitation facility, skilled nursing facility, or to a home healthcare provider. Specialty hospitals were excluded from the display table and in calculating the Adjusted State Rate. AMC = Academic Medical Center (see Appendix A)

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

# Figure 4.3: Probability of discharge to any institutional PAC, by hospital, all DRGs

*Adjusted share of discharges to an institutional setting among discharges to any post-acute care setting, 2012*

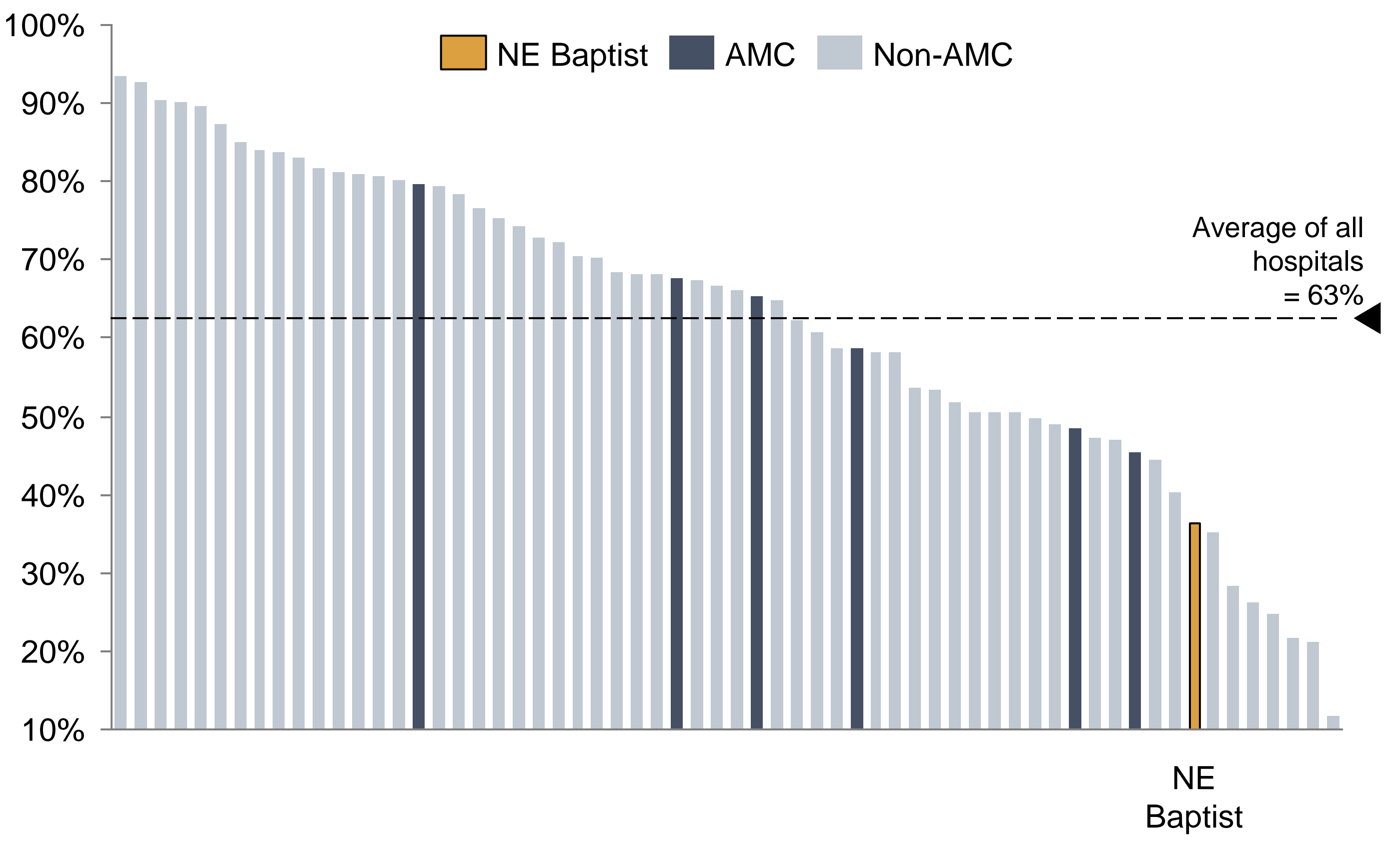



Note: Discharge to an institutional facility (long-term care hospital, inpatient rehabilitation facility, or skilled nursing facility) as a proportion of discharges to either an institutional facility or home health. Probabilities for each hospital were calculated after adjusting for the following: age, sex, payer group, income, admit source of the patient, length of stay, and Diagnostic Related Group. Our sample included patients who had a routine discharge, a discharge to a long-term care hospital, inpatient rehabilitation facility, skilled nursing facility, or to a home healthcare provider. Specialty hospitals were excluded from the display table and in calculating the Adjusted State Rate. AMC = Academic Medical Center (see Appendix A)

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

# Figure 4.4: Probability of discharge to institutional PAC, by hospital, after joint replacement surgery

*Adjusted share of all discharges to post-acute care sent to an institutional setting for DRG 470 (joint replacement), 2012*

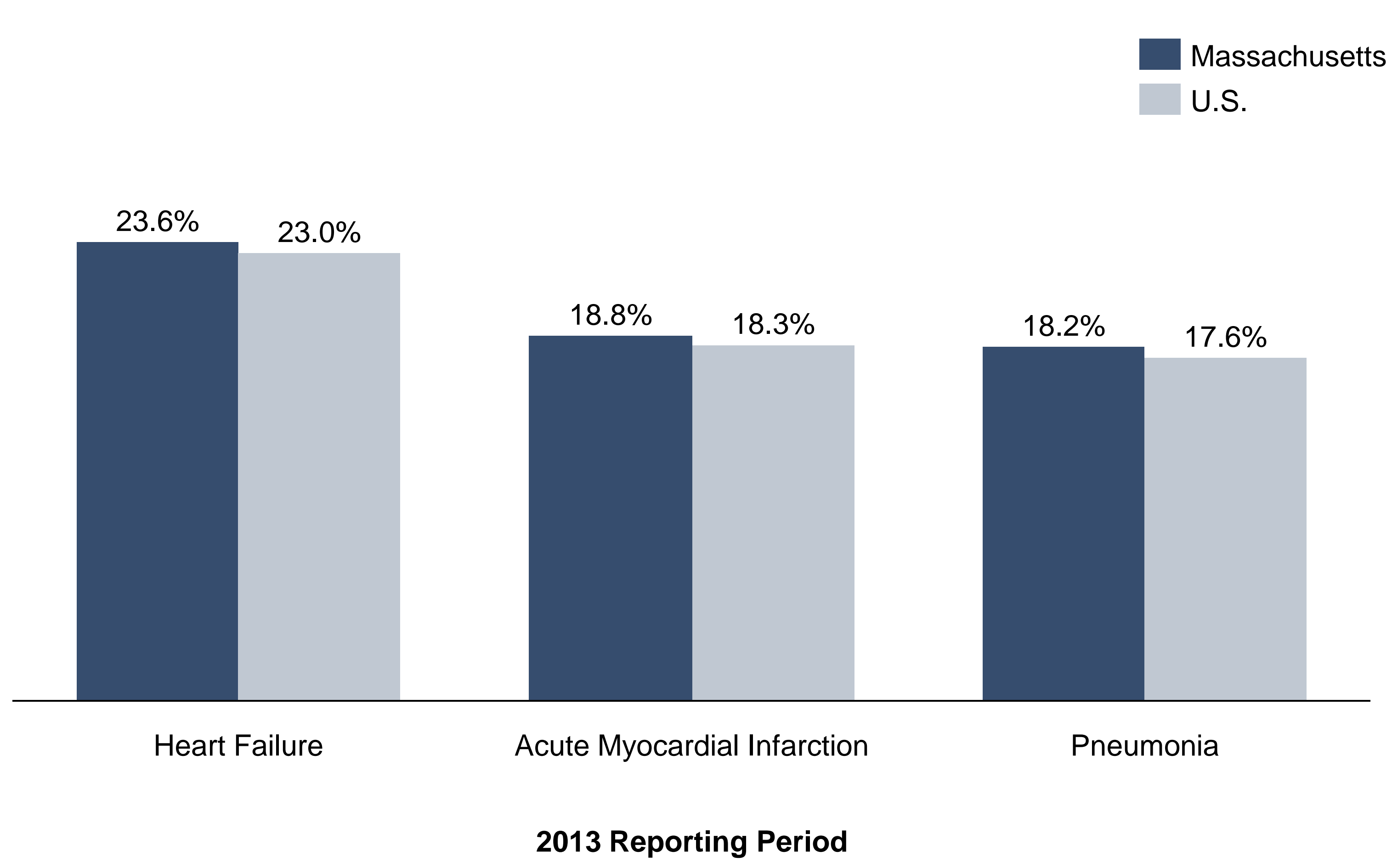



Note: NE Baptist = New England Baptist. AMC = academic medical center (see Appendix A). Probabilities for each hospital were calculated after adjusting for the following: age, sex, payer group, income, admit source of the patient, and length of stay. Our sample included all discharged patients that were at least 18 years of age, and had either a discharge to a long-term care hospital, inpatient rehabilitation facility, skilled nursing facility, or a discharge to a home healthcare provider. Specialty hospitals, except for New England Baptist, were excluded from the display table and the Adjusted State Rate.

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

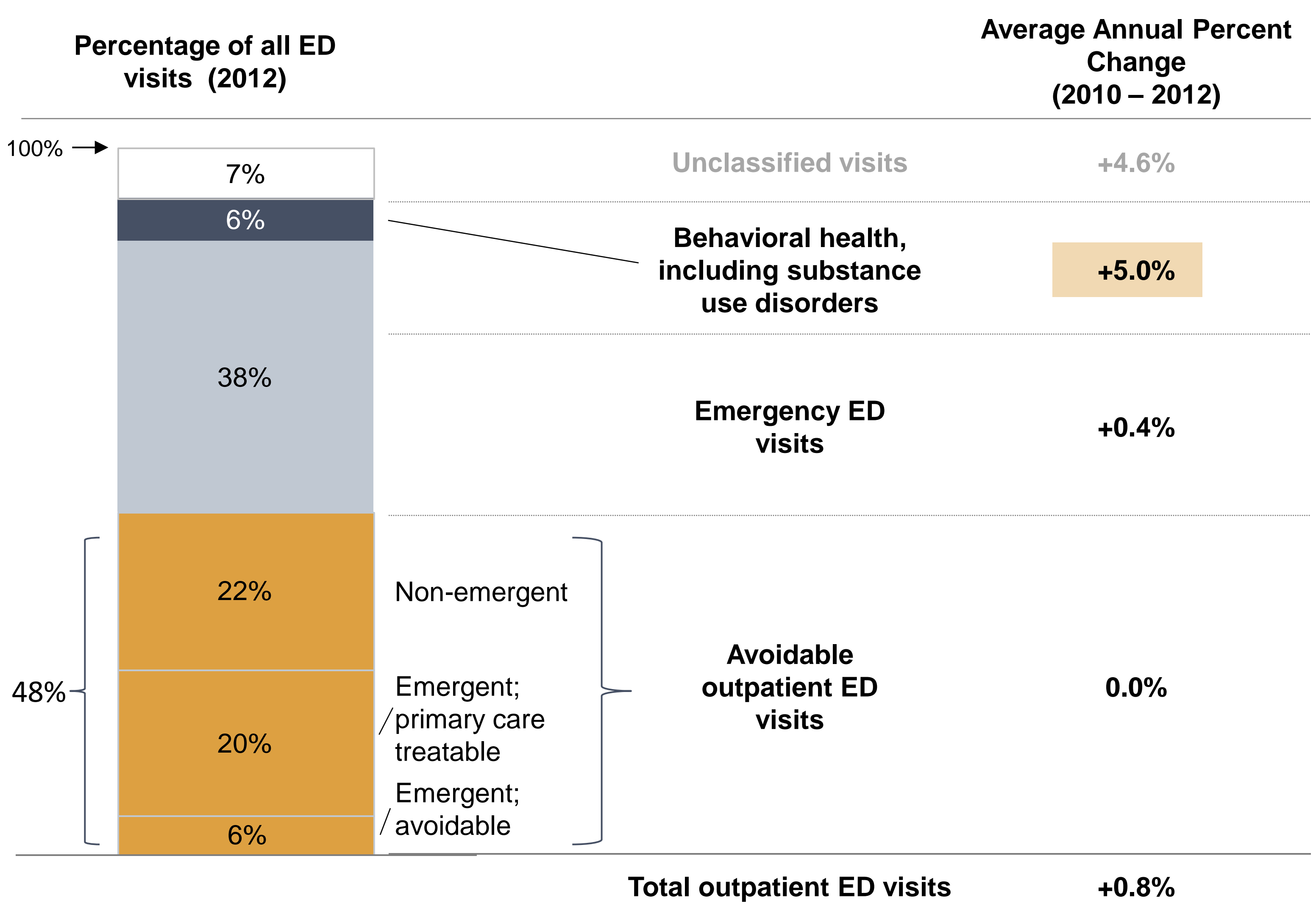
# Figure 5.1. Medicare condition-specific readmission rates, MA and U.S.

*Risk-adjusted readmission rates, 2013 CMS reporting period (average of 2009 – 2012)*




Note: 30-day unplanned readmission measures adjust for patient characteristics, including the patient's age, past medical history, and comorbidities.
Source: Centers for Medicare & Medicaid Services, Hospital Compare 2013

# Figure 5.2: ED visits by type

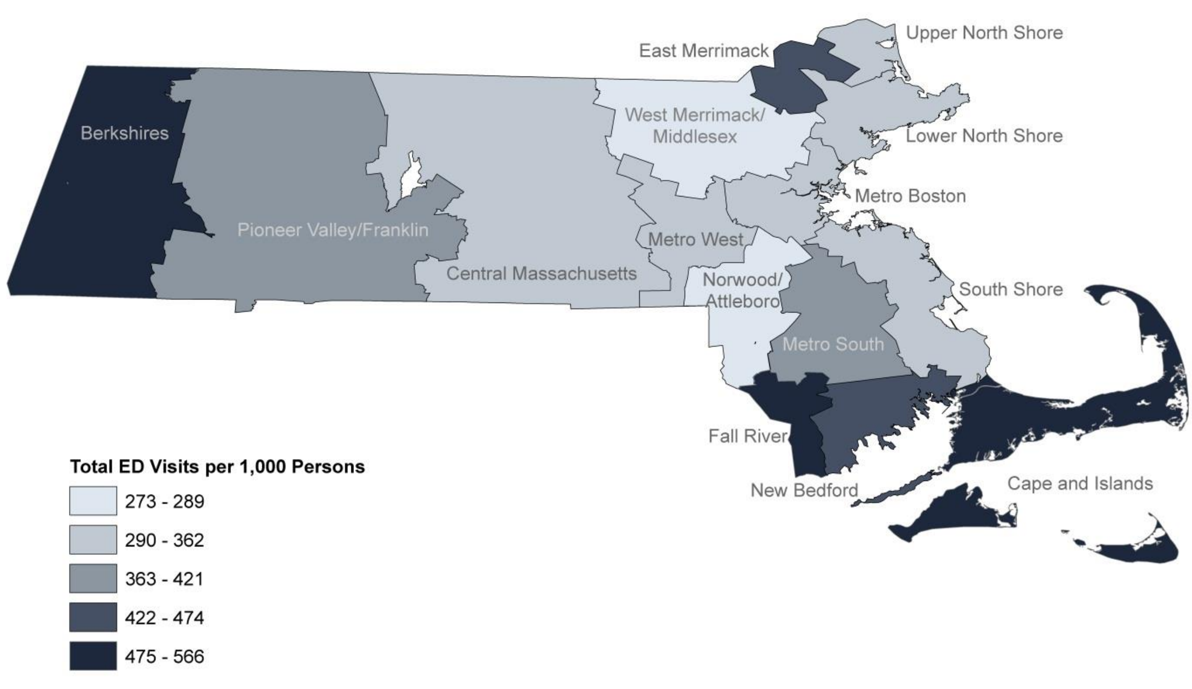



Note: Definition for avoidable ED visits based on NYU Billings Algorithm

Source: NYU Center for Health and Public Service Research; HPC analysis of Centers for Health Information and Analysis outpatient ED database, FY2010-FY2012

# Figure 5.3. Outpatient ED visits per capita, by region

*Total ED visits per 1,000 persons, 2012*

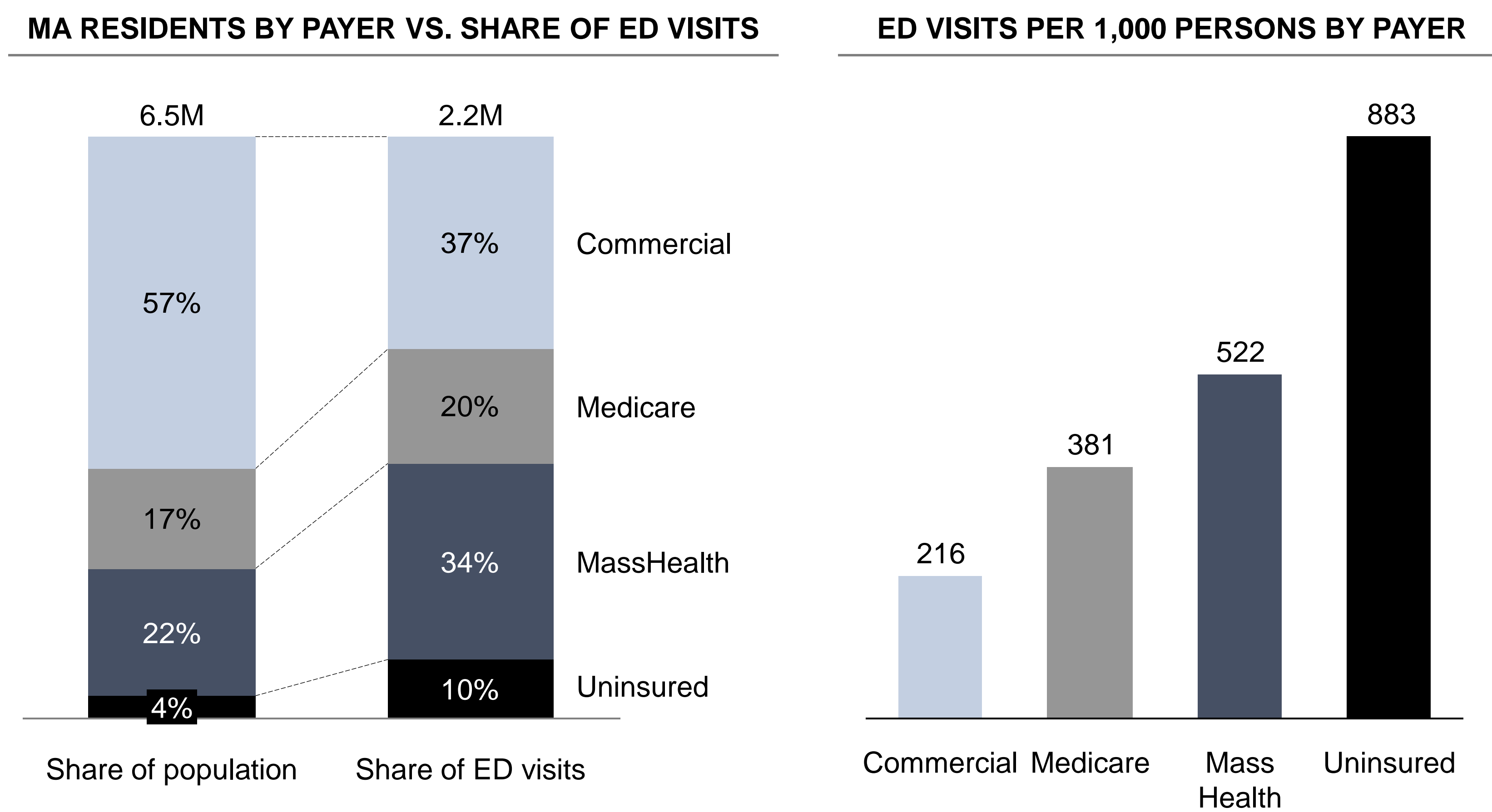



Note: All rates are adjusted for age and sex.

Source: NYU Center for Health and Public Service Research; HPC analysis of Centers for Health Information and Analysis outpatient ED database, 2012

# Figure 5.4: ED visits by payer

*Percentage of Massachusetts population, percentage of ED visits, and ED visits per 1,000 persons, by payer, 2012*

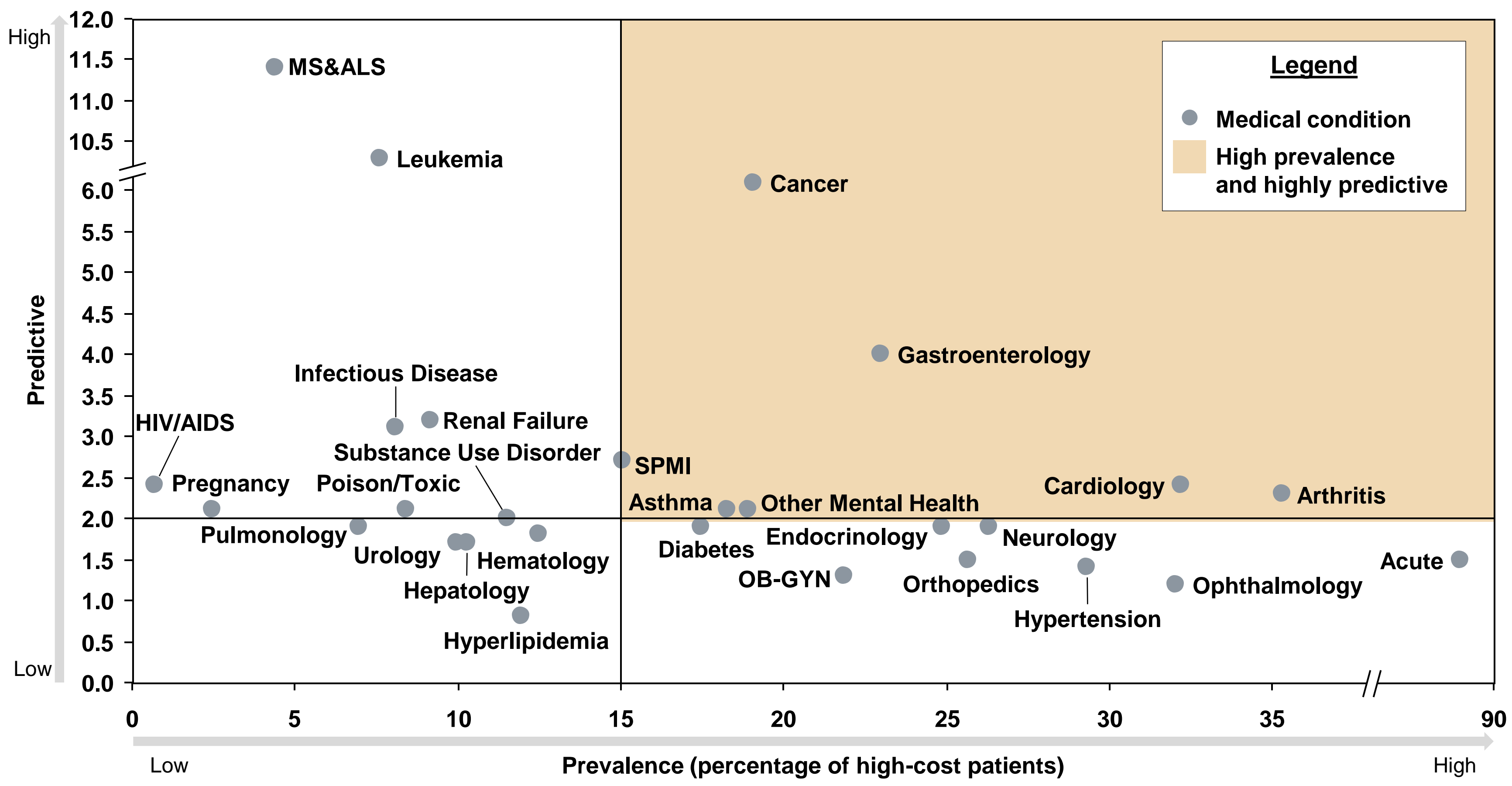



Note: Approximately 100,000 Massachusetts residents and 200,000 ED visits not attributable to the coverage categories shown are excluded from the data.

Source: U.S. Census Bureau, ACS 2012; Kaiser Family Foundation; HPC analysis of Centers for Health Information and Analysis Outpatient ED database, FY2012

# Figure 6.1: Key clinical conditions, commercial* patients with persistently high total costs

*Prevalence (%) of high cost patients with a given medical condition versus predictive ability of the medical condition (Odds Ratio), base year 2010*



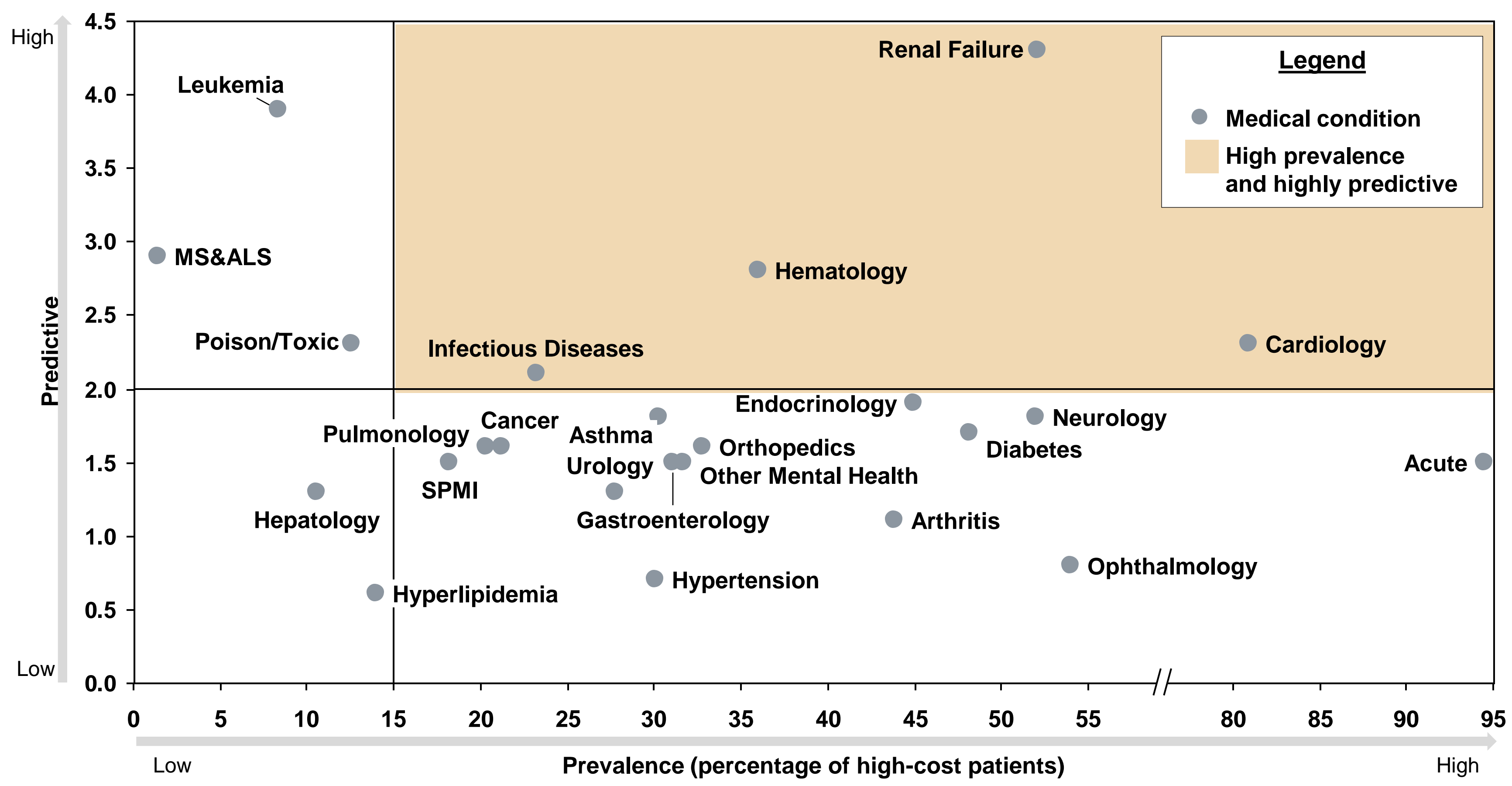

*Commercial adult population is limited to ages 19-64 in 2010 base year.

Note: Persistent high-cost patients (HCP) are defined as patients whose medical expenditures were in the highest 5% of all patients for three consecutive years (2010-2012). The sample was limited to patients who had full years of enrollment for 2010-2012 and costs greater than or equal to $0 in each year. Figures do not capture pharmacy costs, payments outside the claims system, Medicare cost-sharing, or end-of-life care for patients who died during the study period. All medical conditions presented are statistically significant; SPMI=Severe and Persistent Mental Illness.

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2010-2012

# Figure 6.2: Key clinical conditions, Medicare† patients with persistently high total costs

*Prevalence (%) of high cost patients with a given medical condition versus predictive ability of the medical condition (Odds Ratio), base year 2010*



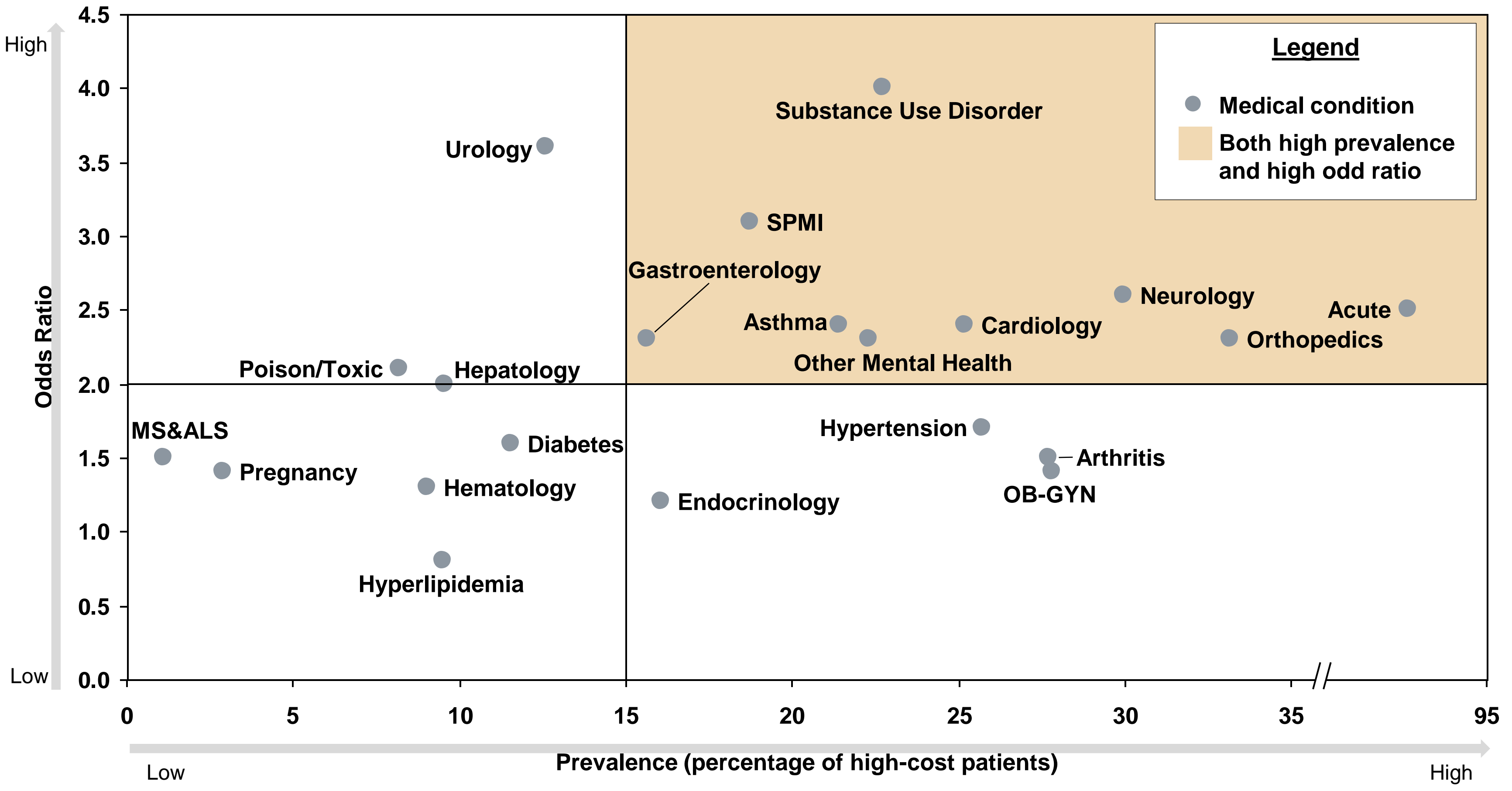

†Medicare population is limited to ages >=65 in 2010 base year

Note: Persistent high-cost patients (HCP) are defined as patients whose medical expenditures were in the highest 5% of all patients for three consecutive years (2010-2012). The sample was limited to patients who had full years of enrollment for 2010-2012 and costs greater than or equal to $0 in each year. Figures do not capture pharmacy costs, payments outside the claims system, Medicare cost-sharing, or end-of-life care for patients who died during the study period. All medical conditions presented are statistically significant; SPMI=Severe and Persistent Mental Illness.

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2010-2012

# Figure 6.3: Key clinical conditions, commercial* patients with persistently high total ED costs

*Prevalence (%) of high cost patients with a given medical condition versus predictive ability of the medical condition (Odds Ratio), base year 2010*



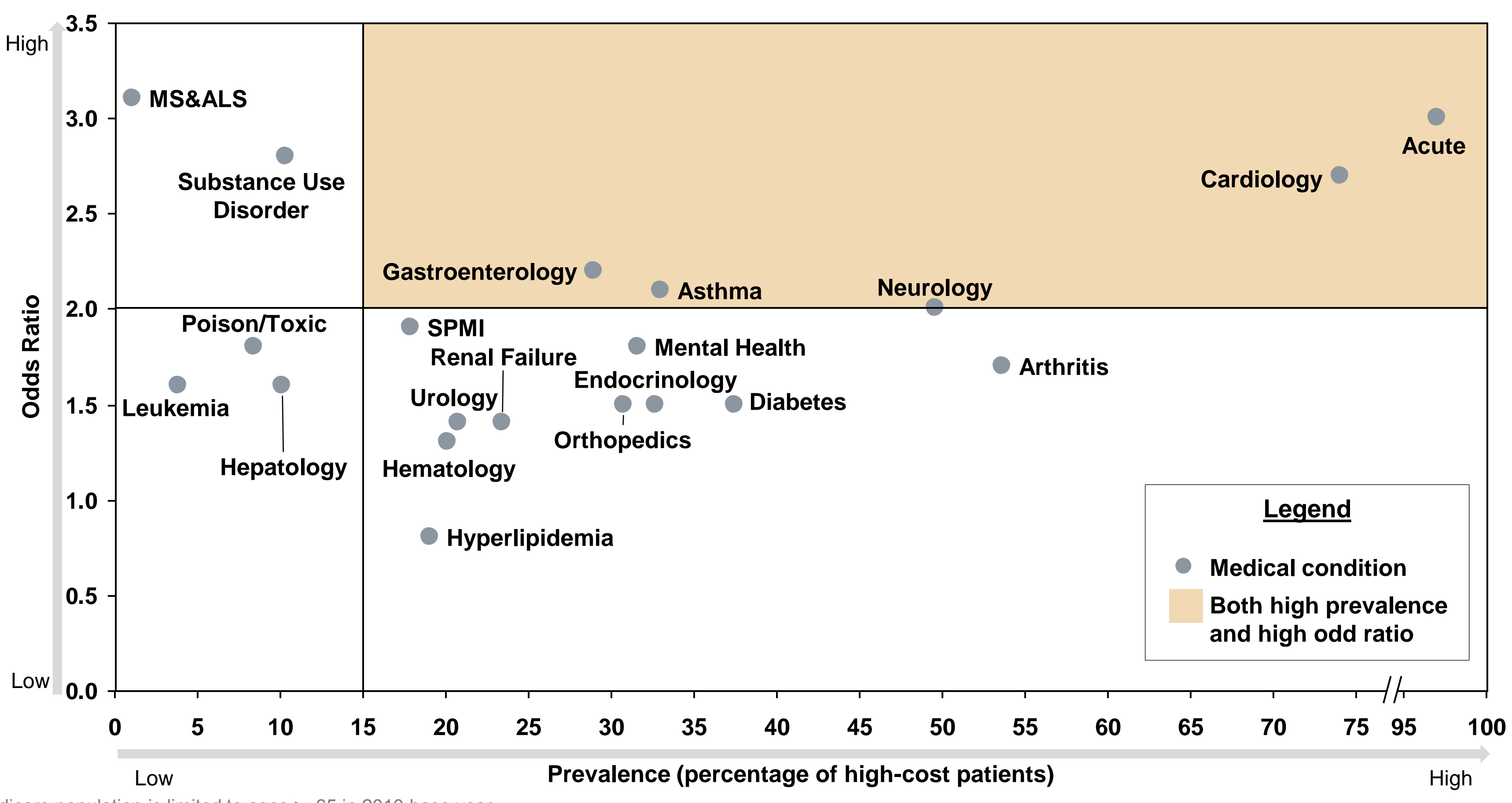

*Commercial adult population is limited to ages 19-64 in 2010 base year.

Note: Persistent high-cost patients (HCP) are defined as patients whose medical expenditures were in the highest 5% of all patients for three consecutive years (2010-2012). The sample was limited to patients who had full years of enrollment for 2010-2012 and costs greater than or equal to $0 in each year. Figures do not capture pharmacy costs, payments outside the claims system, Medicare cost-sharing, or end-of-life care for patients who died during the study period. All medical conditions presented are statistically significant; SPMI=Severe and Persistent Mental Illness.

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2010-2012

# Figure 6.4: Key clinical conditions, Medicare† patients with persistently high total ED costs

*Prevalence (%) of high cost patients with a given medical condition versus predictive ability of the medical condition (Odds Ratio), base year 2010*



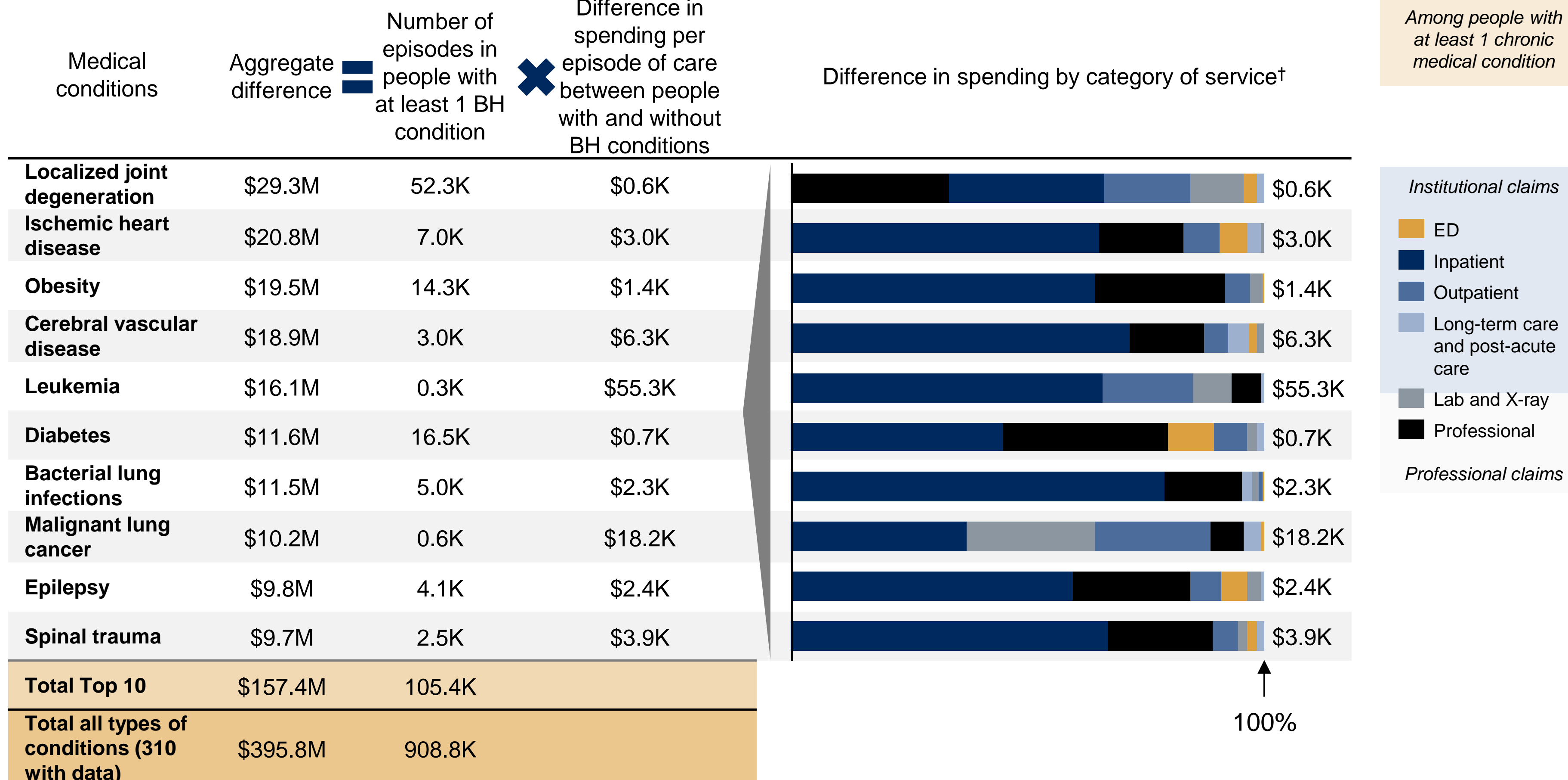

†Medicare population is limited to ages >=65 in 2010 base year

Note: Persistent high-cost patients (HCP) are defined as patients whose medical expenditures were in the highest 5% of all patients for three consecutive years (2010-2012). The sample was limited to patients who had full years of enrollment for 2010-2012 and costs greater than or equal to $0 in each year. Figures do not capture pharmacy costs, payments outside the claims system, Medicare cost-sharing, or end-of-life care for patients who died during the study period. All medical conditions presented are statistically significant; SPMI=Severe and Persistent Mental Illness.

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2010-2012

# Figure 7.1.A Medical conditions with large spending difference between patients with and without BH conditions (commercial patients)

*Average claims-based spending per episode of care for select medical conditions with high aggregate difference (calculated as number of cases for people with at least 1 behavioral health condition* average difference in spending per episode of care) between people with and without behavioral health (BH) conditions, among patients with at least one chronic medical condition, for top three commercial payers, 2012*

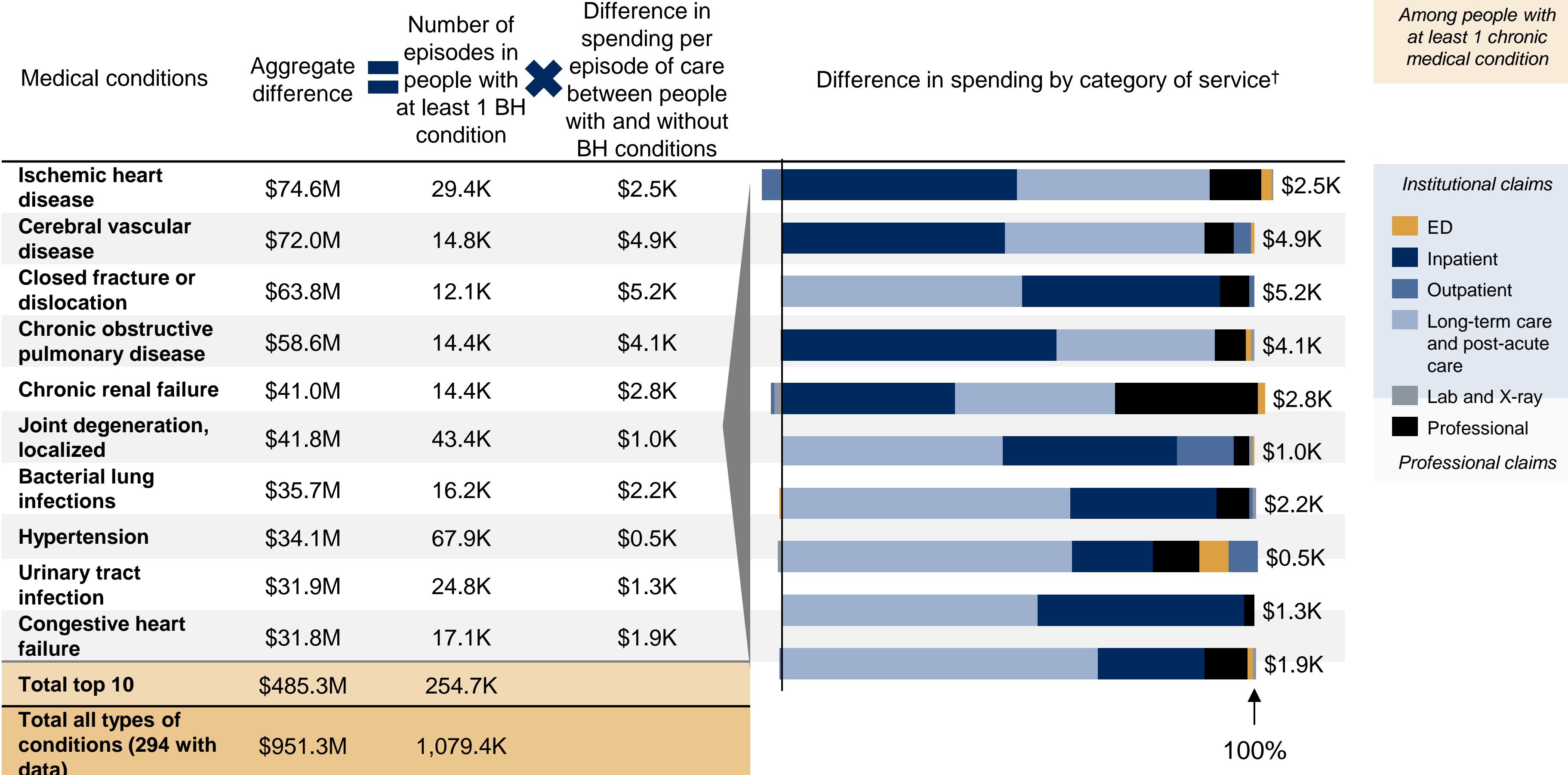



*Presence of behavioral health and chronic medical conditions determined by episode risk flags from Optum. Spending by condition is determined using Optum's ETG episode grouper. See technical appendices for more detail. †For detailed definitions of categories of service, see CHIA and HPC publication, "Massachusetts Commercial Medicare Spending: Findings from the All-Payer Claims Database." Lab/x-ray category includes professional services associated with laboratory and imaging. Note: ED = Emergency Department

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2012

# Figure 7.1.B: Medical conditions with large spending differences between patients with and without BH conditions (Medicare patients)

*Average claims based medical expenditure per episode of care for select medical conditions with high aggregate difference (calculated as number of cases for people with at least 1 behavioral health condition* average difference in spending per episode of care) between people with and without behavioral health (BH) conditions, among patients with at least one chronic medical condition, for Medicare fee-for-service, 2011*



| Medical conditions | Aggregate difference | = Number of episodes in people with at least 1 BH condition | × Difference in spending per episode of care between people with and without BH conditions |
|---|---|---|---|
| **Ischemic heart disease** | $74.6M | 29.4K | $2.5K |
| **Cerebral vascular disease** | $72.0M | 14.8K | $4.9K |
| **Closed fracture or dislocation** | $63.8M | 12.1K | $5.2K |
| **Chronic obstructive pulmonary disease** | $58.6M | 14.4K | $4.1K |
| **Chronic renal failure** | $41.0M | 14.4K | $2.8K |
| **Joint degeneration, localized** | $41.8M | 43.4K | $1.0K |
| **Bacterial lung infections** | $35.7M | 16.2K | $2.2K |
| **Hypertension** | $34.1M | 67.9K | $0.5K |
| **Urinary tract infection** | $31.9M | 24.8K | $1.3K |
| **Congestive heart failure** | $31.8M | 17.1K | $1.9K |
| **Total top 10** | $485.3M | 254.7K | |
| **Total all types of conditions (294 with data)** | $951.3M | 1,079.4K | |



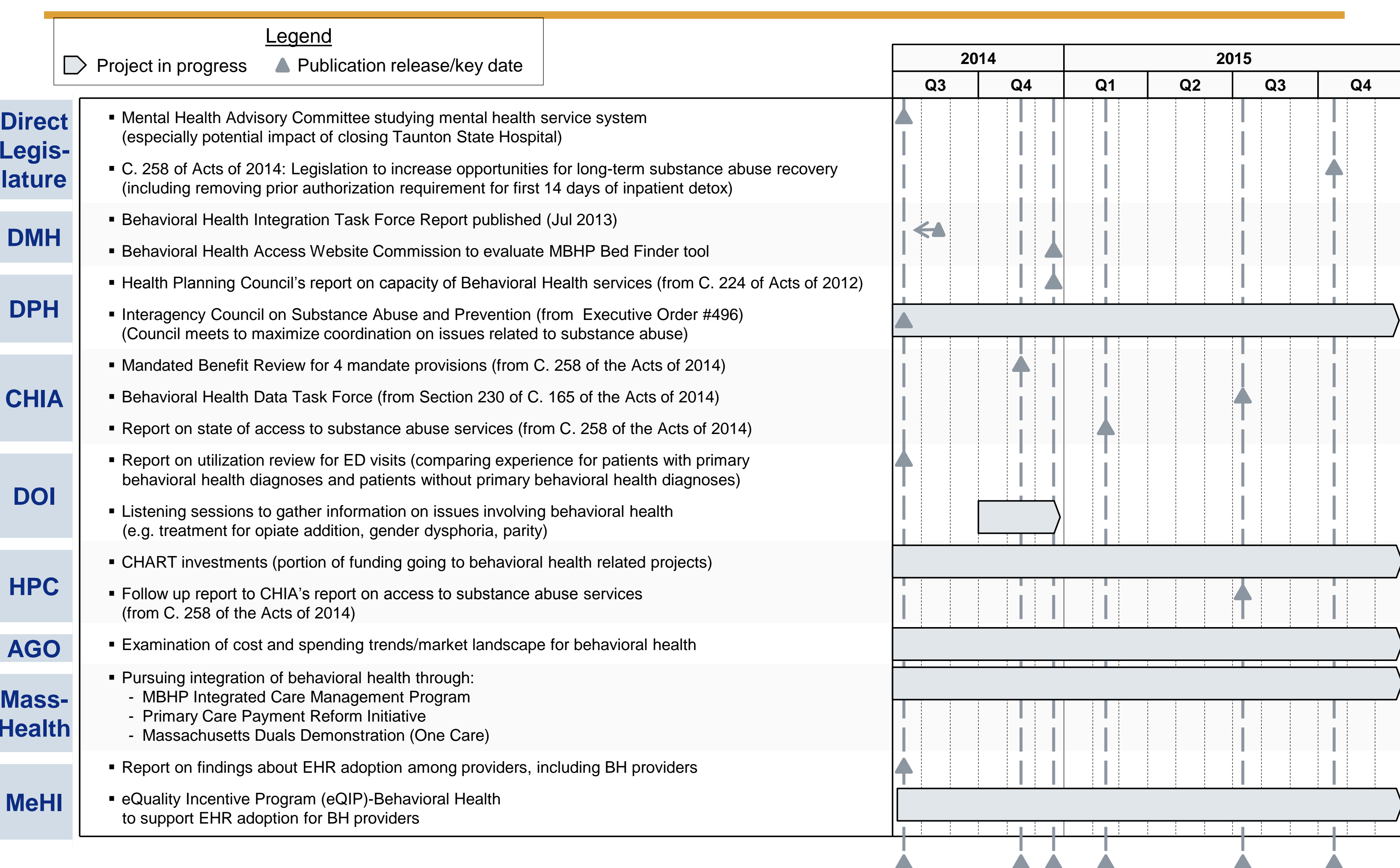
*Presence of behavioral health and chronic medical conditions determined by episode risk flags from Optum (see technical appendix for more information)

†For detailed definitions of categories of service, see CHIA and HPC publication, "Massachusetts Commercial Medicare Spending: Findings from the All-Payer Claims Database." Lab/x-ray category includes professional services associated with laboratory and imaging.

Note: ED = Emergency Department

Source: HPC analysis of Massachusetts All Payers Claims Database (Medicare fee-for-service), 2011

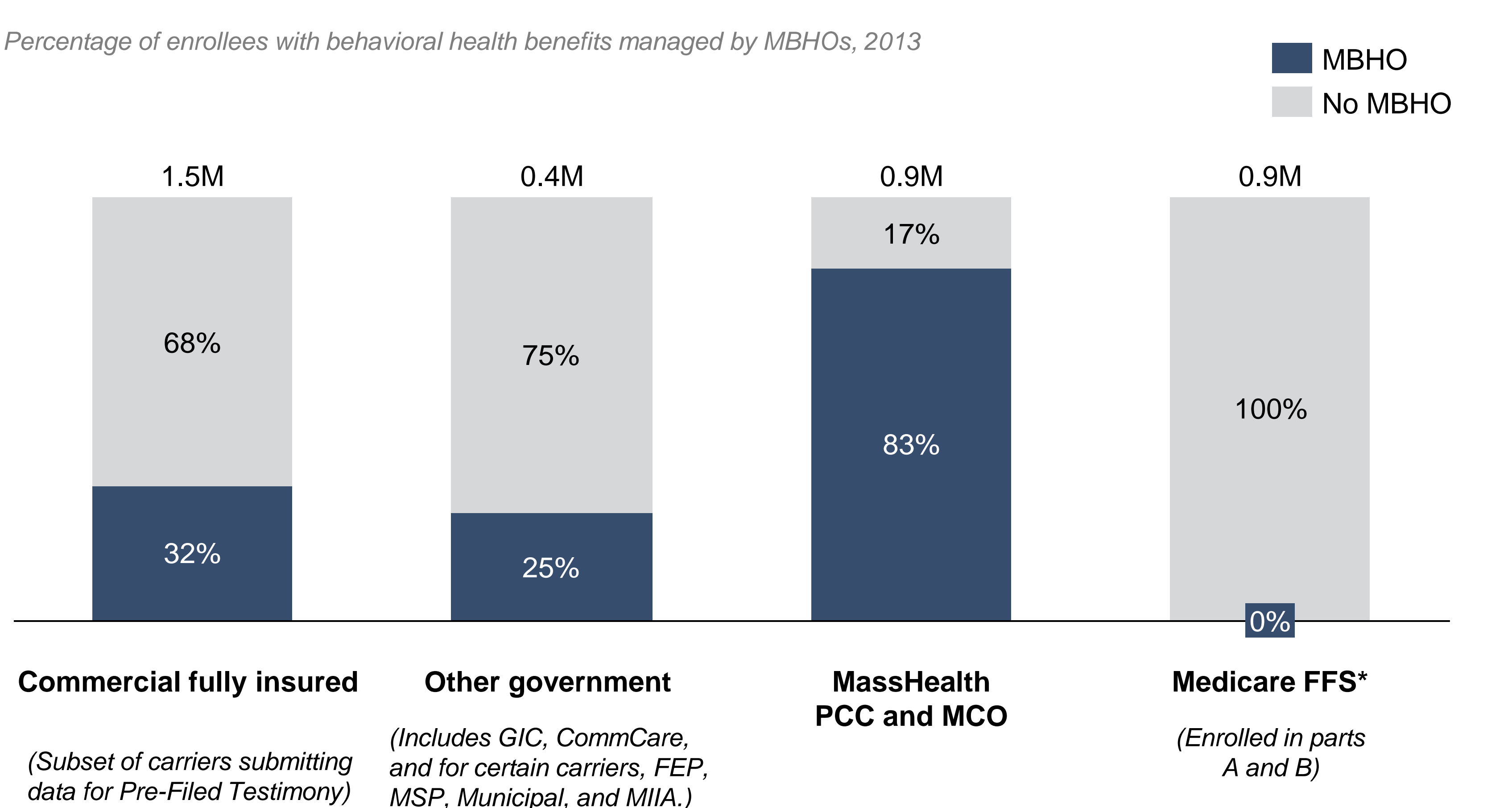
# Figure 7.2: Selected activities related to behavioral health, by MA state government agency




Note: DMH = Department of Mental Health; MBHP = Massachusetts Behavioral Health Partnership; DPH = Massachusetts Department of Public Health; CHIA = Center for Health Information and Analysis; DOI = Department of Insurance; HPC = Health Policy Commission; AGO = Office of the Attorney General; MeHI = Massachusetts eHealth Institute; EHR = Electronic Health Record

Figure may not include all ongoing projects related to behavioral health in state agencies

# Figure 7.3: Percentage of members covered by managed behavioral health organizations (MBHOs), by payer



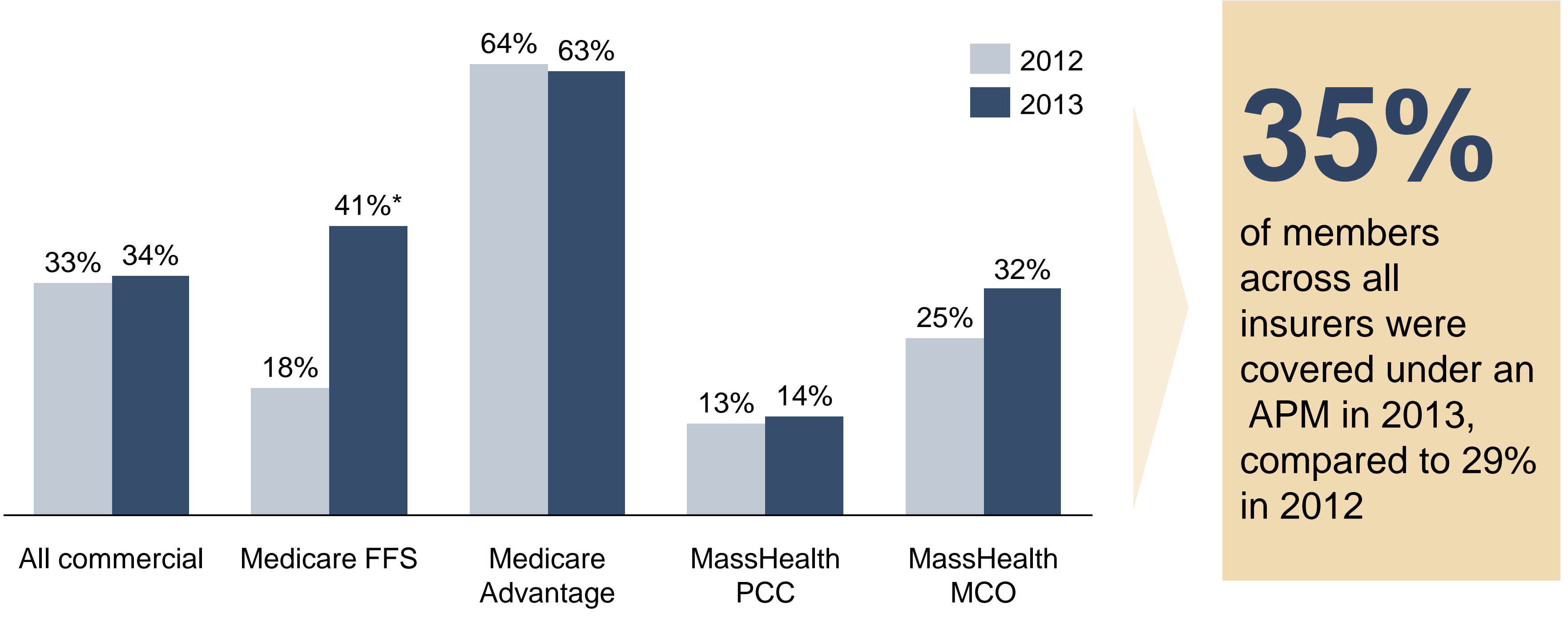

*Includes dual eligibles who are also enrolled in MassHealth fee-for-service

Note: Information presented by the Attorney General Office (AGO) at the 2014 Cost Trends Hearings was used to classify whether plans do or do not engage an MBHO for behavioral health benefits. Total enrollment in commercial fully-insured plans includes only commercial carriers that submitted enrollment information for pre-filed testimony. See technical appendices for details. GIC = Group Insurance Commission; FEP = Federal Employee Program; MSP = Medicare Supplemental Plan; Municipal = local government; MIIA = Massachusetts Interlocal Insurance Association, the insurance arm of the Massachusetts Municipal Association; FFS = Fee for service; MCO = Managed care organizations; PCC = Primary Care Clinician

Source: Pre-filed Testimony submitted to the HPC for the 2014 Cost Trends Hearings and AGO presentation at Oct 2014 Cost Trends Hearing

# Figure 8.1: Alternative payment method (APM) coverage, by payer type

*Percent of members covered under an APM, 2012 versus 2013*



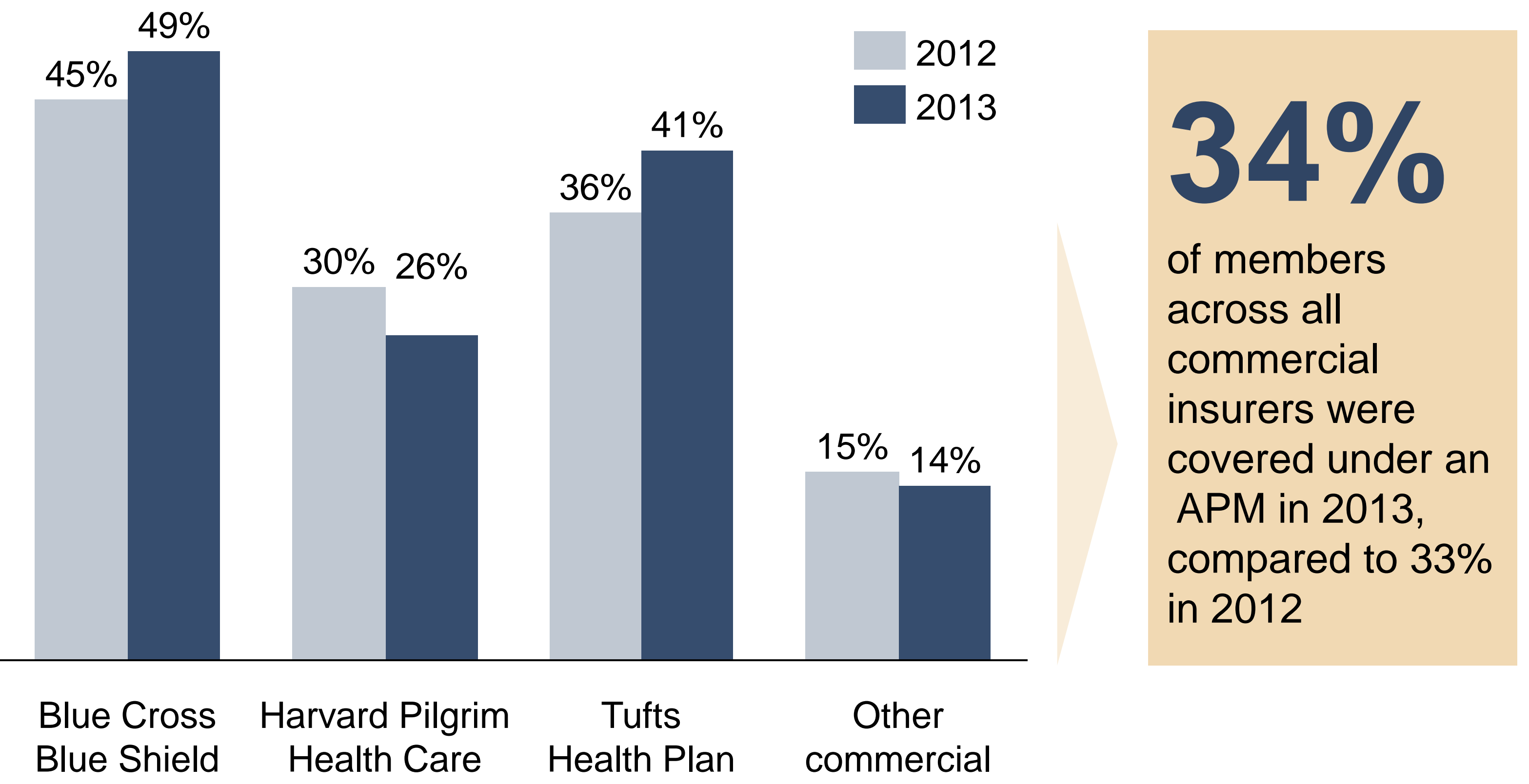

*In Medicare Fee-for-Service (FFS), enrollment figures are slightly overestimated because several of the Accountable Care Organizations (ACOs) include residents of neighboring states that we are unable to exclude from data calculations.

Notes: For MassHealth's PCC program, APM enrollment figures include members who were enrolled in the Patient-Centered Medical Home Initiative (PCMHI) only. MassHealth pays for inpatient stays and outpatient encounters via bundled rates, (the SPAD and APAD, formerly PAPE). The HPC does not include these payment methods in our estimates of APM coverage, although MassHealth may consider them APMs for certain reporting purposes.

Source: Center for Health Information and Analysis 2014 Annual Report Alternative Payment Methods Data Book, 2013; Center for Health Information and Analysis 2013 Alternative Payment Methods Baseline Report Data Appendix, 2012; Centers for Medicare & Medicaid Services Shared Savings Program Performance Year 1 Results; Other publicly-available Centers for Medicare & Medicaid Services data; MassHealth personal communication

# Figure 8.2: Alternative payment method (APM) coverage, by major commercial payer

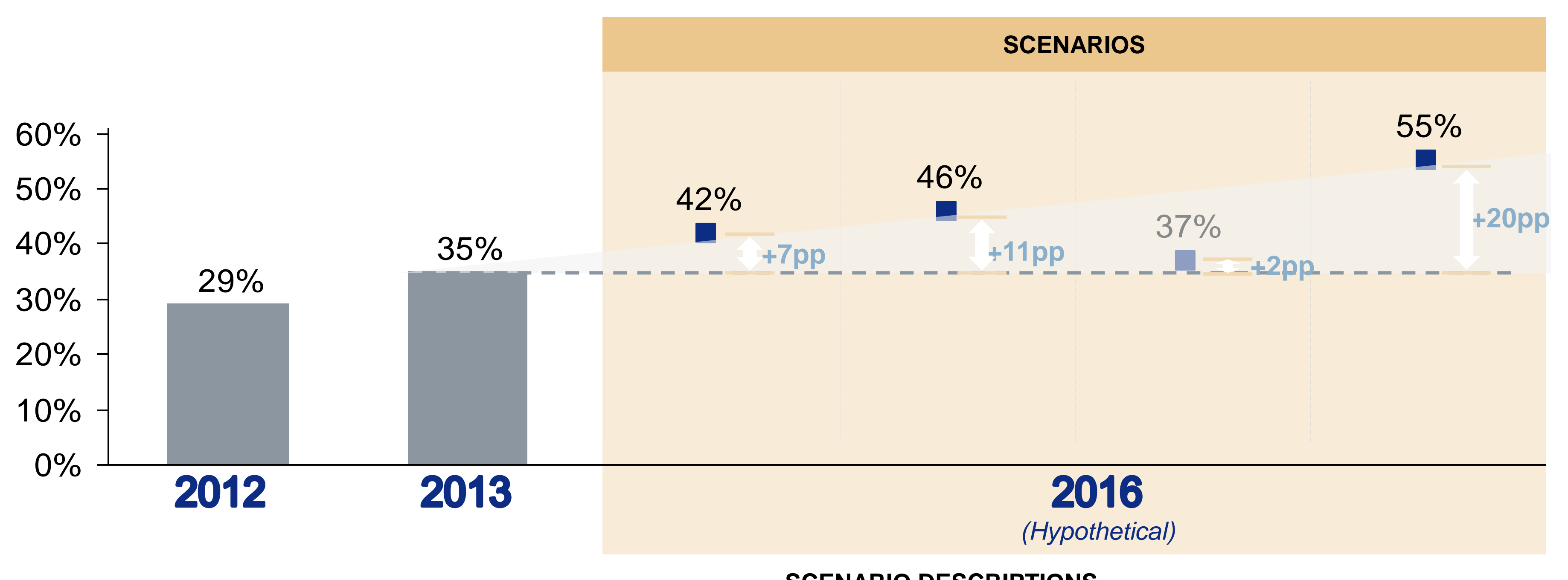
*Percent of commercially-enrolled member lives covered under an APM, 2012 versus 2013*




Source: Center for Health Information and Analysis 2014 Annual Report Alternative Payment Methods Data Book, 2013 and Center for Health Information and Analysis 2013 Alternative Payment Methods Baseline Report, 2012

# Figure 8.3: Statewide use of APMS and projected growth under four scenarios

*Percentage adoption of APMs across all payers, 2012 and 2013 (actual), 2016 (hypothetical)*



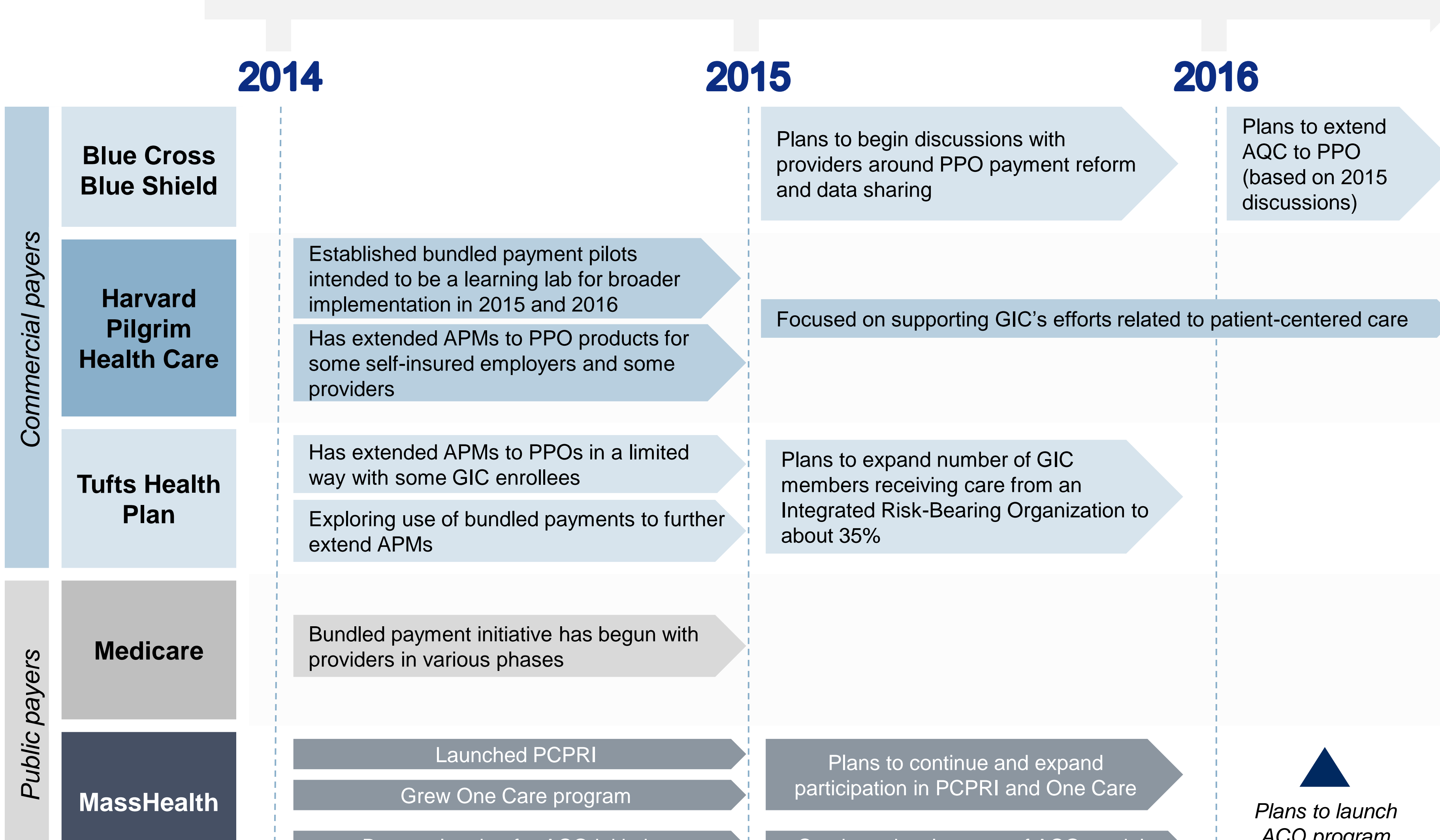

**SCENARIO DESCRIPTIONS**

| | HMO | PPO | ACO | Additive |
|---|---|---|---|---|
| **Assumptions** | All payers expand APMS in HMOs to close 2/3 of gap between 2013 coverage and 90% (BCBS rate) | All payers expand APMs in PPOs to half of their projected HMO rate | MassHealth expands APMs (via ACO) to close 1/3 of gap between 2014 coverage and 100% | HMO +PPO +ACO |
| **Projected impact** | +7pp | +11pp | +2pp | +20pp |

Note: See Technical Appendix B8.

Source: Center for Health Information and Analysis 2014 Annual Report Alternative Payment Methods Data Book, 2013; Center for Health Information and Analysis 2013 Alternative Payment Methods Baseline Report Data Appendix, 2012; Centers for Medicare & Medicaid Services Shared Savings Program Performance Year 1 Results; Other Centers for Medicare & Medicaid Services data; MassHealth personal communication

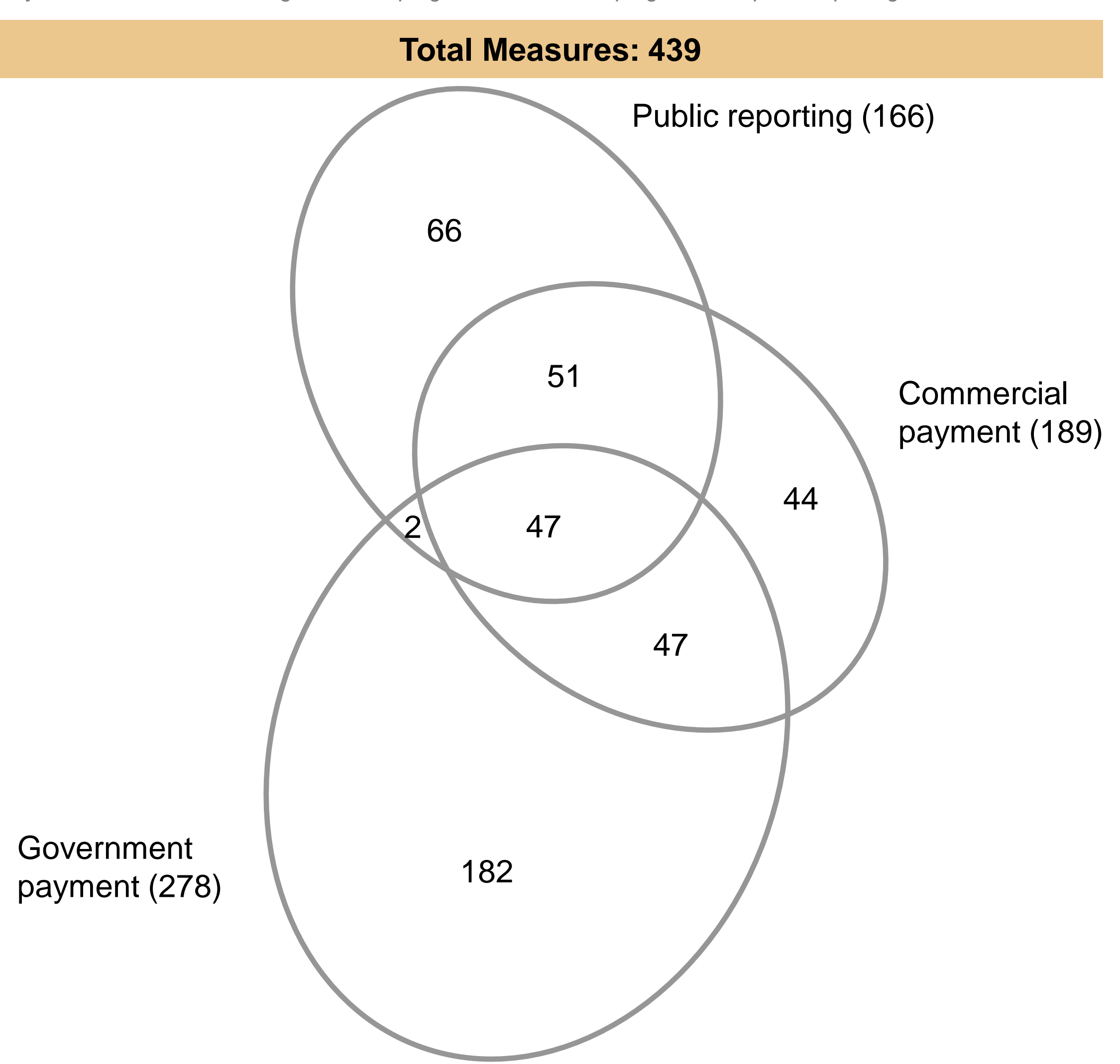
# Figure 8.4: Plans to extend APMs, by payer




Source: HPC communications with payers; Medicare website

# Figure 8.5: Number of quality measures used for payment and public reporting in Massachusetts

*Number of quality measures used by commercial insurers and government programs for incentive programs and public reporting activities, 2012*

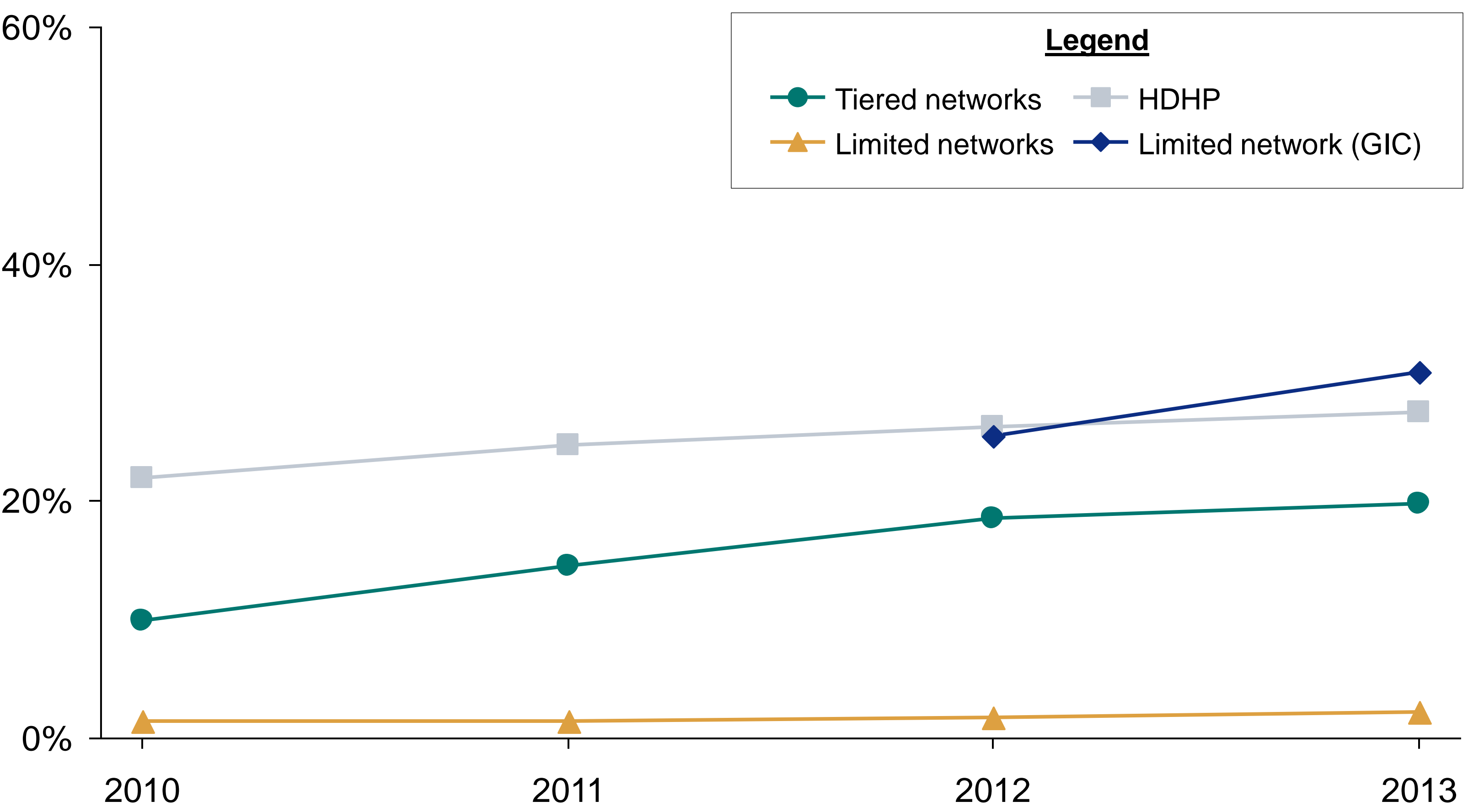



Note: Data is based on a survey of a selection of commercial insurers and state and federal programs and does not represent all possible measures in use at the time the survey was administered.

Source: Center for Health Information and Analysis, 2012 and 2013 AcademyHealth Poster Presentation "Misalignment in quality measurement: how are providers held accountable across health care sectors?"

# Figure 9.1: Enrollment in tiered and limited network and high deductible plans

*Percentage adoption by network type across all commercial payers and GIC, 2010 - 2013*



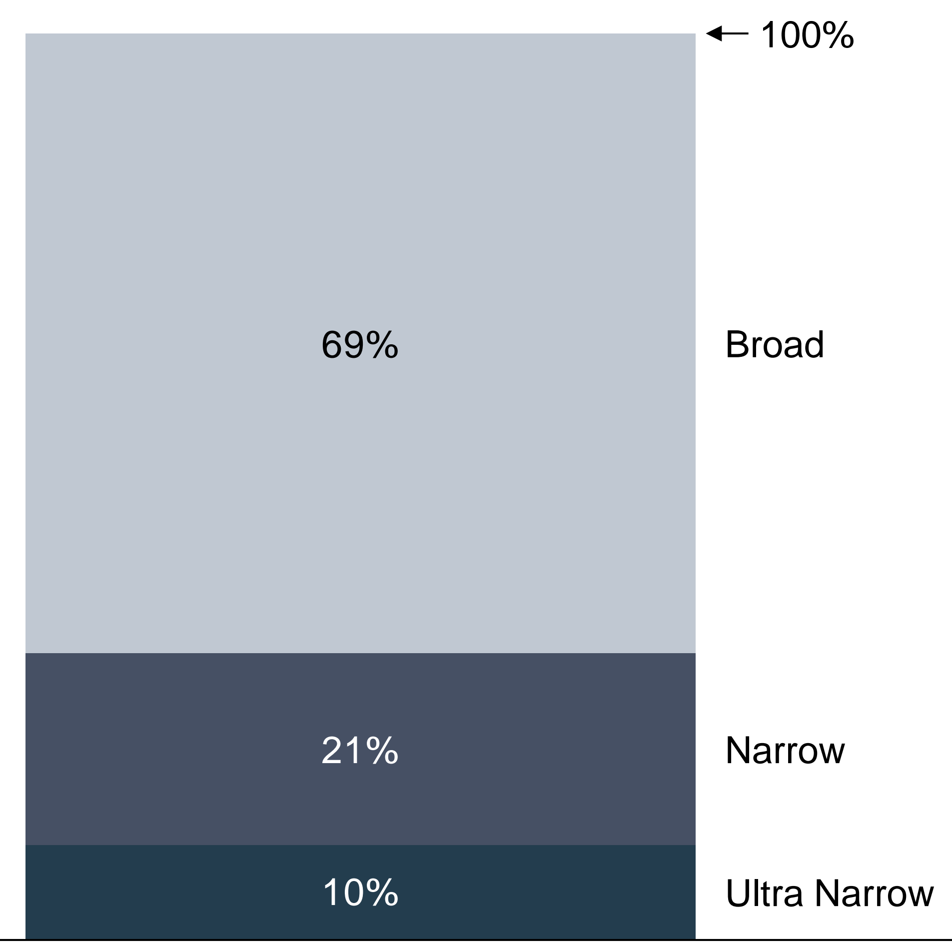

Notes: Tiered network product as defined by payer. Some variation may exist in included product lines, for instance, between products with hospital tiering versus Primary Care Physician (PCP)/specialist tiering only (included for Harvard Pilgrim Health Care (HPHC)). Blue Cross Blue Shield (BCBS) and Tufts Health Plan (THP) did not include Group Insurance Commission (GIC) members in commercial tiered product enrollment. Aetna includes Designated Provider Organization (DPO) in tiered network enrollment. Does not include self-insured plans, which may have higher update of these products.

A high-deductible health plan (HDHP) was defined in the AGO pre-filed testimony questions as any plan in which an individual deductible or copayment of $1,000 or more may apply to any in-network benefit at any tier level.

Source: Pre-filed Testimony submitted to the HPC for the 2014 Cost Trends Hearings

# Figure 9.2: Distribution of networks by breadth for plans available

*Percentage adoption by network type across all commercial payers participating in the MA Health Connector, 2010 - 2013*

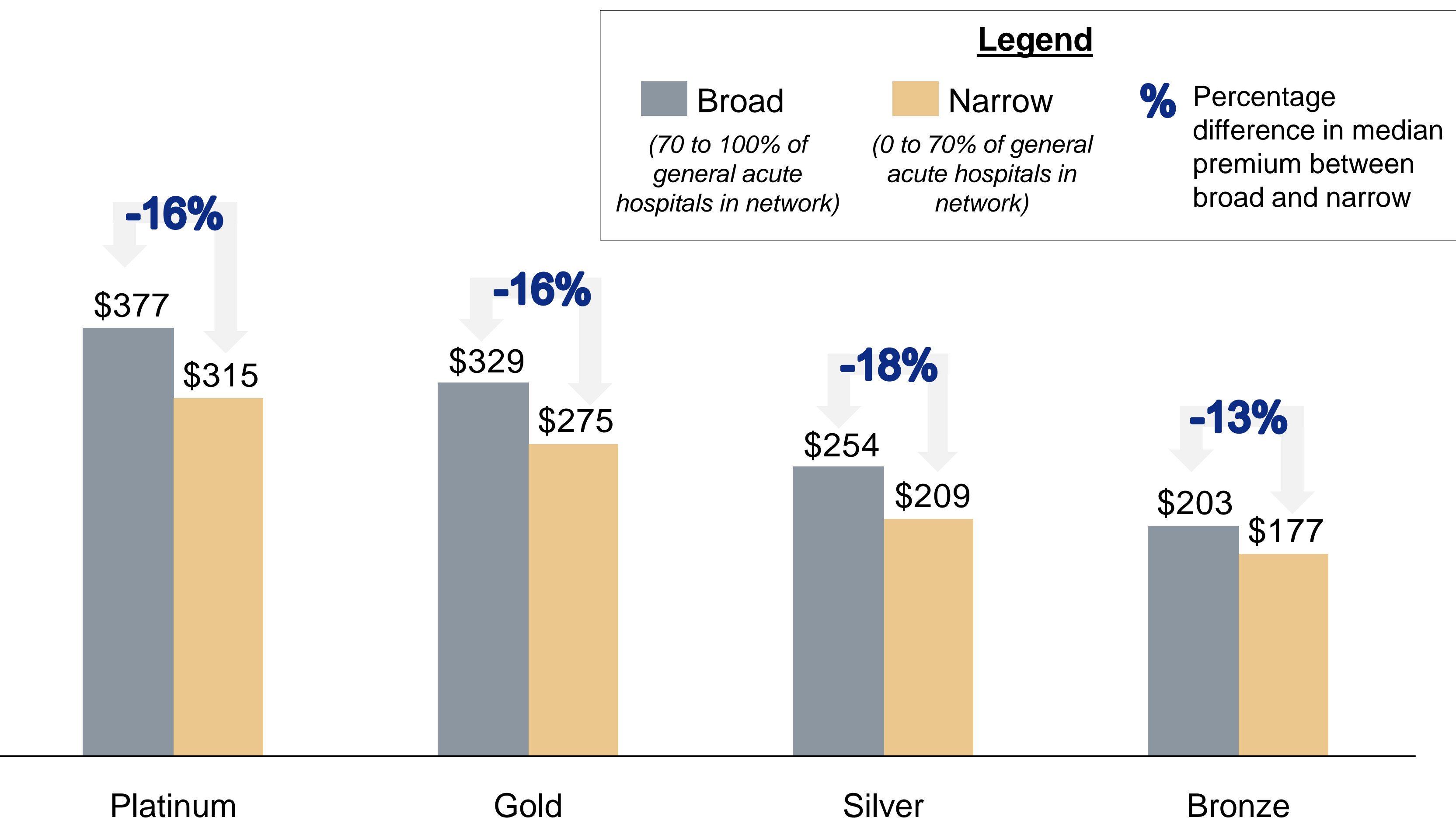



Note: Network types are defined based on inclusion of acute care hospitals (see Technical Appendix B9).

Source: Massachusetts Health Connector, 2014

# Figure 9.3: Premium differences between broad and narrow network products

*Median premium of Connector plans by metal tier by narrow and broad network, and percent difference, 2014*




Note: Narrow signifies either a narrow or an ultra-narrow network. Bars show median premium by network type within a metal tier. Network types are defined based on inclusion of acute care hospitals.

Source: Private communication with MA Health Connector