

2017 ANNUAL HEALTH CARE

COST TRENDS

REPORT

CHARTPACK

INTRODUCTION

The Health Policy Commission (HPC), established in 2012, is charged with monitoring health care spending growth in Massachusetts and providing data-driven policy recommendations regarding health care delivery and payment system reform. Consistent with this mandate, the HPC's annual Cost Trends Report presents an overview of trends in health care spending and delivery in Massachusetts, evaluates progress in key areas, and makes recommendations for strategies to increase quality and efficiency.

The 2017 Report includes material in two publications, a narrative **written report** and a graphical **Chartpack**. The written report examines the state's health care spending growth relative to the benchmark, with an additional focus on hospital outpatient spending and performance variation among Massachusetts provider groups. It also contains the HPC's recommendations for accelerating efficiency in health care spending in Massachusetts and improving quality of care.

This Chartpack, produced for the first time this year, presents updated results in priority areas of focus for health system improvement. The Chartpack is divided into four sections: Hospital Utilization, Post-Acute Care, Alternative Payment Methods, and Demand-Side Incentives.

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HOSPITAL UTILIZATION

INTRODUCTION

HOSPITAL UTILIZATION

In previous Cost Trends Reports, the Health Policy Commission (HPC) has shown that hospital use in Massachusetts is higher than the national average, and the HPC has identified several strategies to curb hospital-based spending growth, including reducing unnecessary hospital use and shifting appropriate inpatient care to community hospitals. The Commonwealth Fund's State Scorecard of State Health System Performance ranked Massachusetts 39th in the nation for avoidable hospital use and costs in 2016 (worsening from a ranking of 31st the previous year).

This section of the Chartpack reviews recent trends in hospital use and examines several avoidable hospital utilization measures, including avoidable emergency department (ED) use and readmissions, and also examines trends in directing appropriate inpatient care to community hospitals.

KEY FINDINGS

HOSPITAL UTILIZATION

Massachusetts continues to have higher hospital utilization than the U.S. across inpatient, outpatient, and ED services, although the gap has recently narrowed.

Between 2011 and 2016, behavioral health-related ED visits in Massachusetts increased by 22%. By diagnosis category, mental health-related visits increased by 9%, while visits for alcohol use disorders increased by 40%, and visits for other substance use disorders increased by 54%.

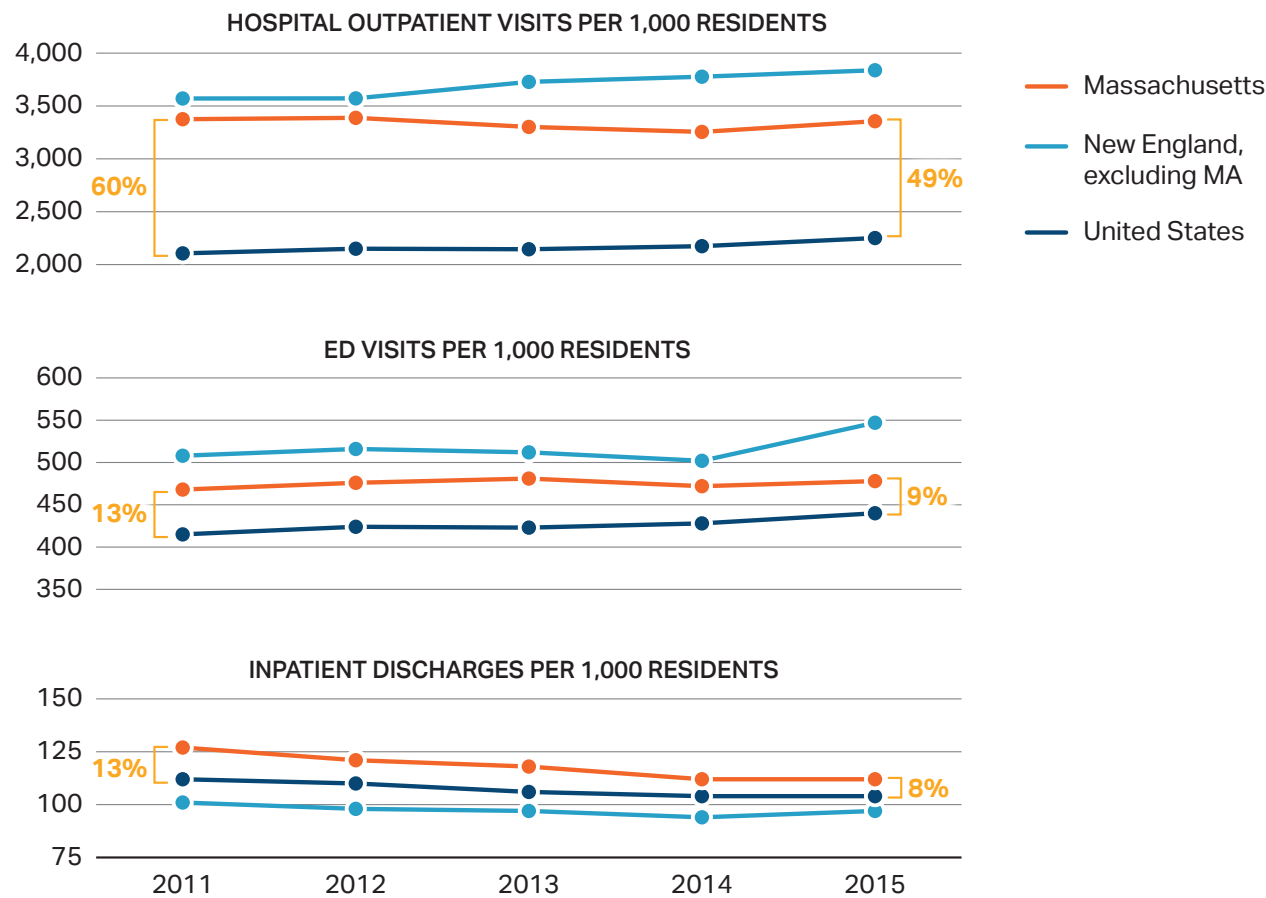
After a substantial decline from 2011 to 2014, hospital inpatient discharges have risen for the second straight year, driven by an increase in rates for those under the age of 65.

While the Commonwealth has a lower rate of preventable inpatient admissions than the nation, some regions of the state have rates much higher than the U.S. average.

The share of low-acuity, community-appropriate inpatient care occurring in teaching hospitals and academic medical centers, rather than community hospitals, continued to increase in 2016.

Massachusetts has higher Medicare readmission rates than the nation, and the gap continued to increase in 2015.

HOSPITAL USE IN MASSACHUSETTS, NEW ENGLAND, AND THE U.S., 2011 – 2015



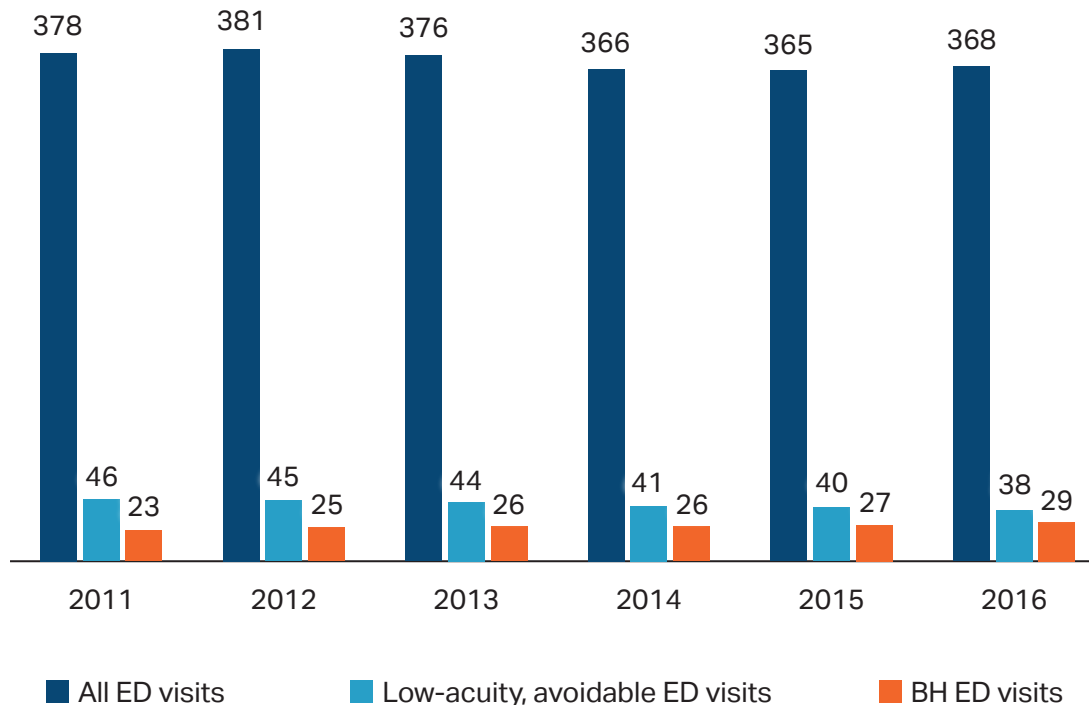
Massachusetts continues to have higher utilization of inpatient, outpatient, and emergency department (ED) services relative to the U.S. However, during the period from 2011 – 2015, the gap for each metric narrowed. Hospital outpatient services had the largest narrowing, with an 11 percentage-point reduction over the time period.

The light blue line shows the New England average, not including Massachusetts. In ED and hospital outpatient visits, the state has lower utilization than its regional neighbors.

NOTES: New England includes Connecticut, Maine, New Hampshire, Rhode Island, and Vermont.

SOURCES: Kaiser Family Foundation State Health Facts, accessed 2017

ALL ED VISITS, LOW-ACUITY, AVOIDABLE ED, AND BEHAVIORAL HEALTH ED VISITS PER 1,000 RESIDENTS, 2011 – 2016

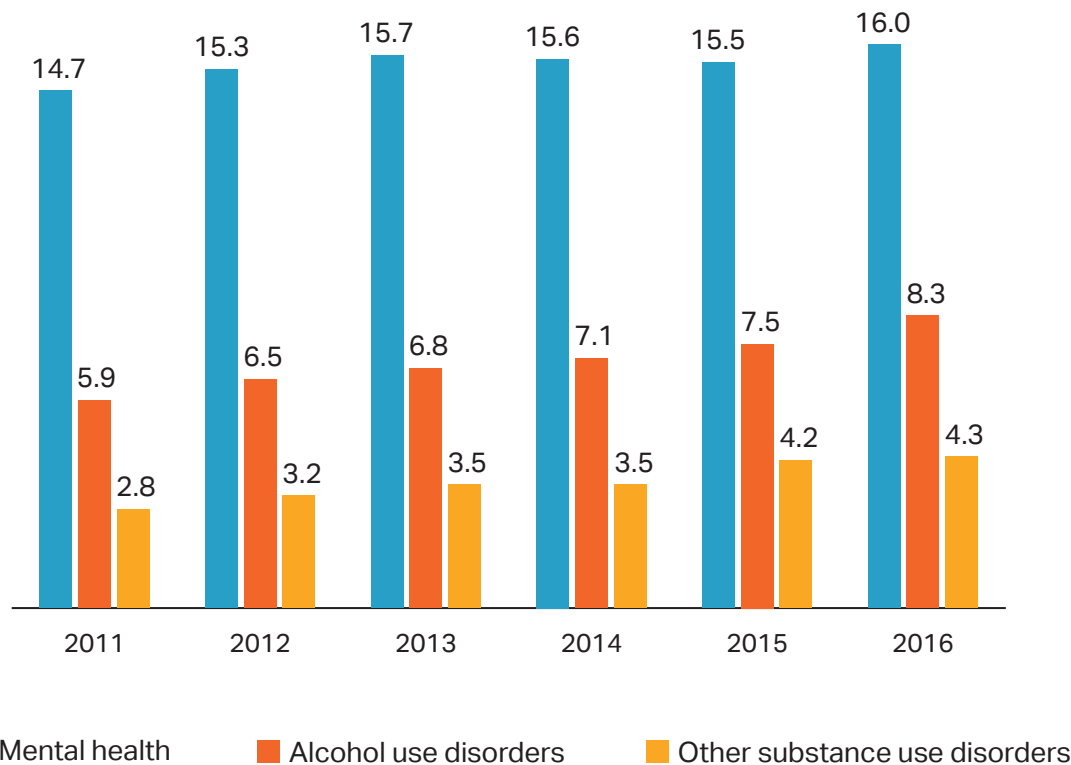


ED utilization and low-acuity, avoidable ED visits, in particular, may indicate inefficient hospital use and poor access to care, including inadequate health resources in a community.

Between 2011 and 2016, ED visits per 1,000 residents declined by 3%, though they increased between 2015 and 2016. Low-acuity, avoidable ED visits declined 17%, while behavioral health (BH)-related ED visits increased 22%.

NOTES: Low-acuity avoidable ED visits are based on the Medi-Cal avoidable ED visit definition, a conservative definition that may under-report avoidable ED utilization. Behavioral health ED visits were identified based on principal diagnosis using the Clinical Classifications Software (CCS) diagnostic classifications. 2016 BH ED visits were identified using Beta-CCS diagnostic classifications, based on ICD-10 codes. Some discontinuity in trends by diagnosis may be attributed to the change in diagnostic coding from ICD-9 to ICD-10 in October 2016. SOURCES: HPC analysis of Center for Health Information and Analysis (CHIA) Emergency Department Database (EDD), 2011 – 2016

BEHAVIORAL HEALTH ED VISITS PER 1,000 RESIDENTS, BY DIAGNOSIS CATEGORY, 2011 – 2016



Overall behavioral health ED visits increased by 22% between 2011 and 2016. By diagnosis category, mental health-related visits increased by 9%, while visits for alcohol use disorders increased by 40%, and visits for other substance use disorders increased by 54%.

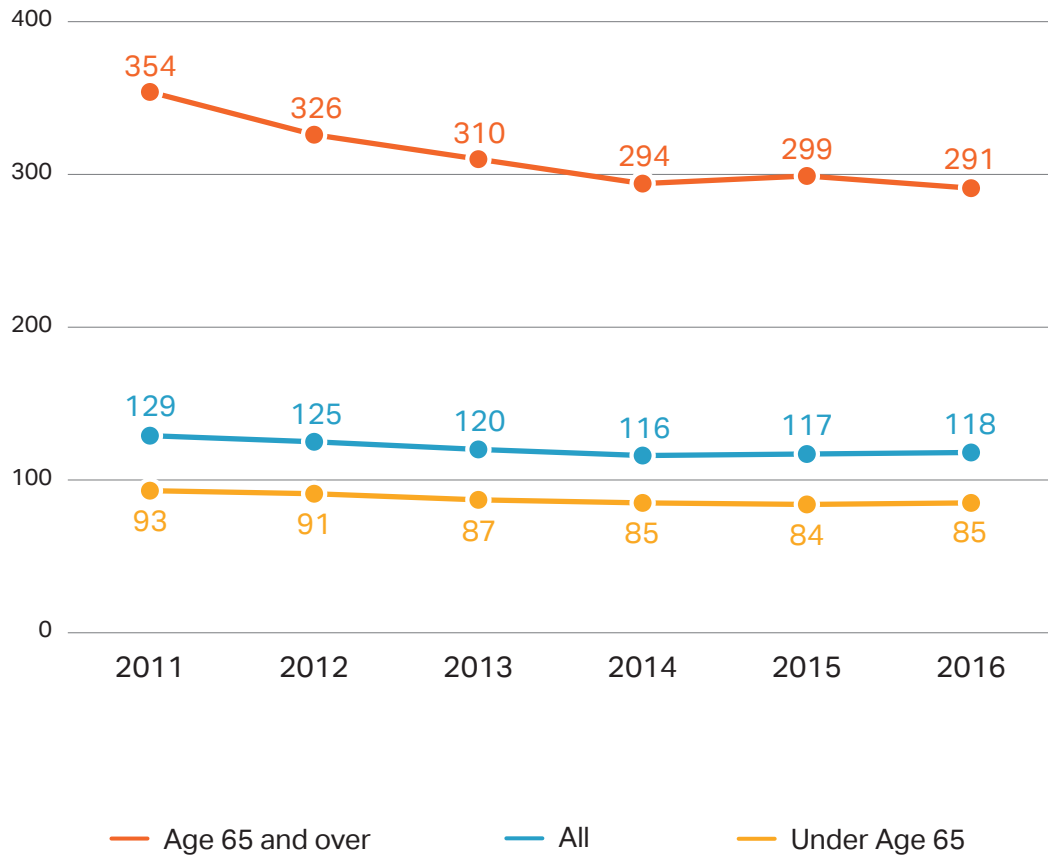
Alcohol and other substance use disorders combined accounted for 44% of behavioral health related ED visits in 2016.

NOTES: Behavioral health ED visits were identified based on principal diagnosis using the Clinical Classifications Software (CCS) diagnostic classifications.

2016 BH ED visits were identified using Beta-CCS diagnostic classifications, based on ICD-10 codes. Some discontinuity in trends by diagnosis may be attributed to the change in diagnostic coding from ICD-9 to ICD-10 in October 2016.

SOURCES: HPC analysis of Center for Health Information and Analysis (CHIA) Emergency Department Database (EDD), 2011 - 2016

INPATIENT DISCHARGES PER 1,000 RESIDENTS, BY AGE GROUP, 2011 – 2016



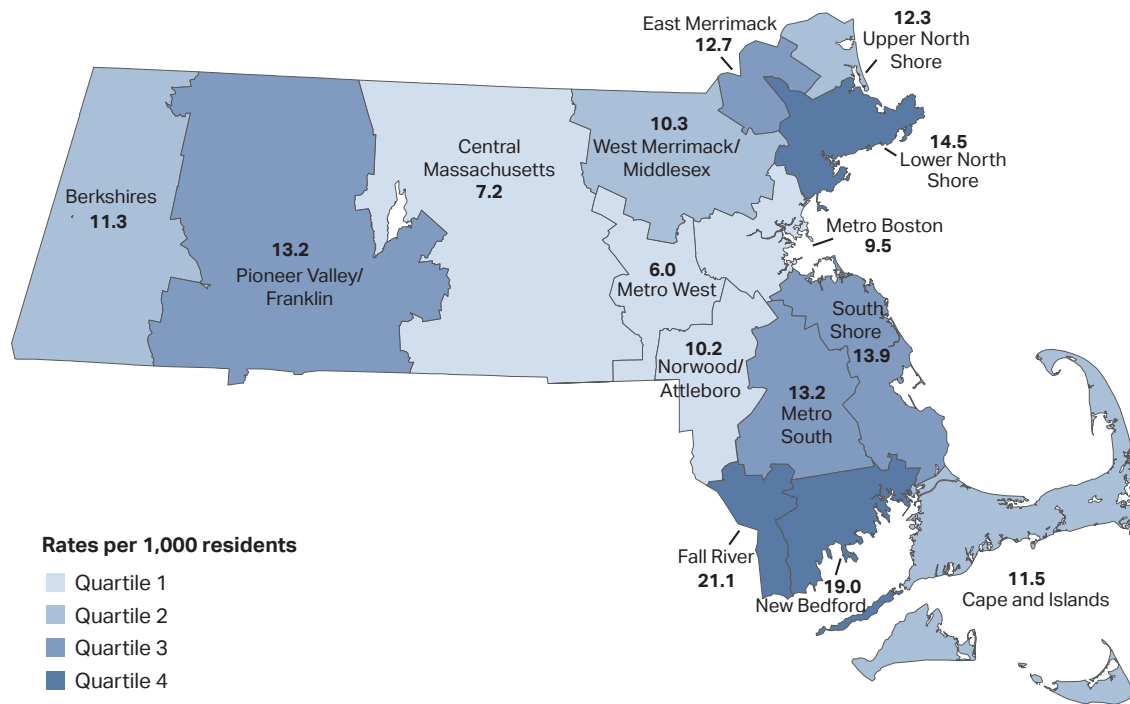
Acute care hospital inpatient discharges in Massachusetts have declined overall since 2011, mirroring a national trend.

In 2015 and 2016, however, discharges began to tick upward. In 2015, discharges for those age 65 and older drove the increase in inpatient visits, while in 2016, the increased rate of inpatient visits was driven by those under age of 65 (85 per 1,000 residents).

NOTES: Less than 5% of discharges are from out of state residents. Roughly 16% of the Massachusetts population is over age 65.

SOURCES: HPC's analysis of Center for Healthcare Information and Analysis Hospital Inpatient Discharge Database, 2011-2016

PREVENTABLE INPATIENT ADMISSION RATES BY HPC REGION, 2016



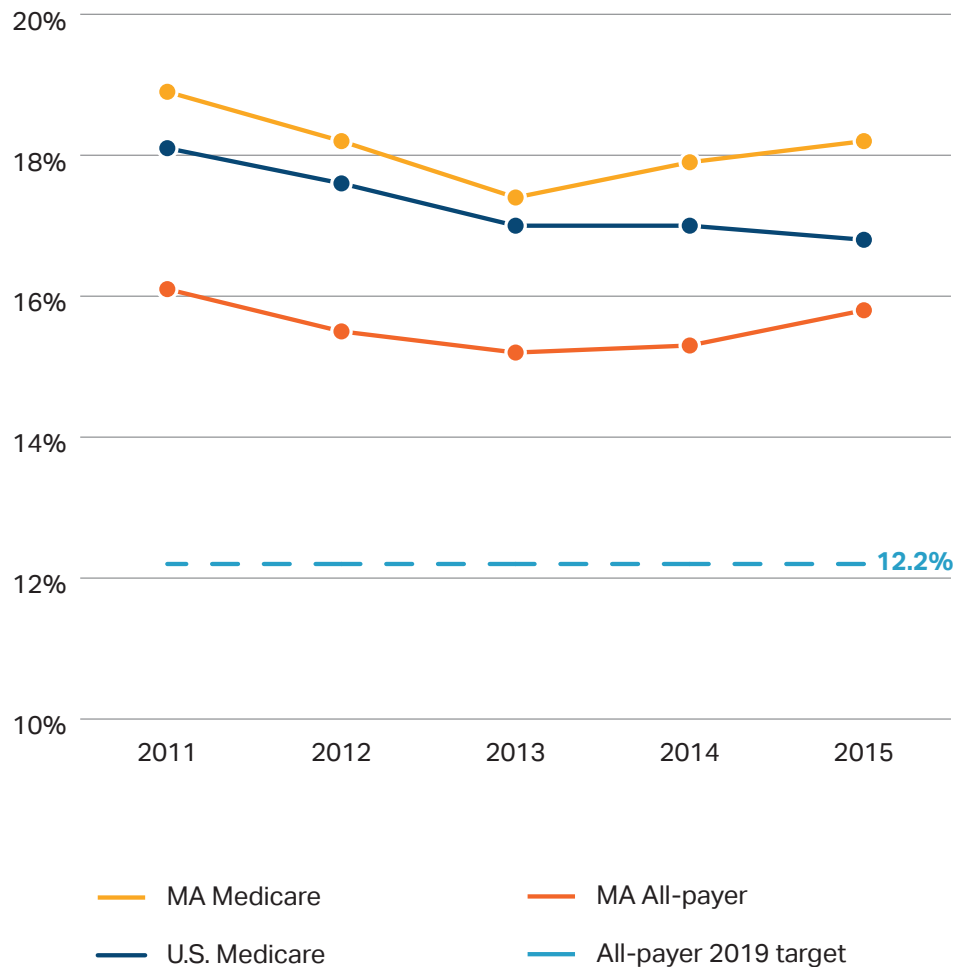
Much like avoidable ED use, the rate of potentially avoidable, or preventable, inpatient admissions is a key efficiency and quality metric. For all categories of preventable admissions combined, the Commonwealth is just below the national average, 14.0 and 14.1 per 1,000, respectively.

There was considerable variation in this measure across regions within Massachusetts. Three regions exceeded the national average, with Fall River having the highest rate (21.1 per 1,000 residents) of preventable inpatient admissions.

NOTES: Admissions included in the composite measure include those for short- or long-term complications of diabetes, chronic obstructive pulmonary disease, hypertension, heart failure, asthma, dehydration, bacterial pneumonia, urinary tract infection, uncontrolled diabetes, asthma in younger adults and lower-extremity amputation.

SOURCES: HPC analysis of Center for Health Information and Analysis Hospital Inpatient Discharge Database (MA, 2016); composite methodology and US data from Agency for Healthcare Research and Quality, Prevention Quality Indicators data, 2016.

THIRTY-DAY READMISSION RATES, MASSACHUSETTS AND THE U.S., 2011-2015

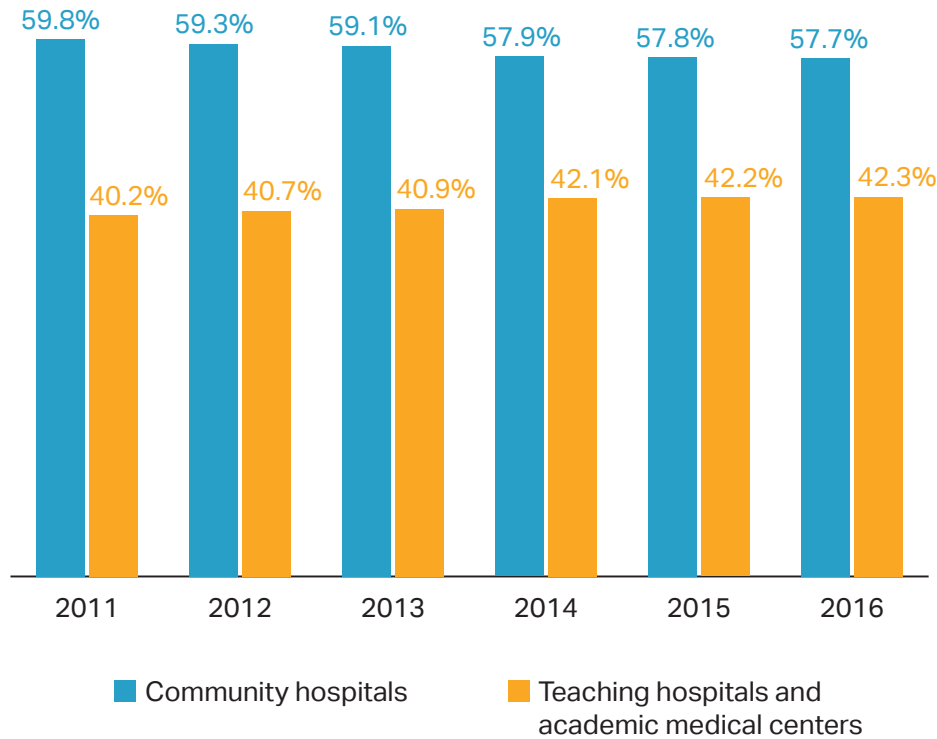


Hospital readmissions represent potentially avoidable hospital use resulting from inadequate treatment, lack of access to appropriate services or medications, or poor care coordination across treatment settings.

The HPC tracks thirty-day readmission rates for a defined set of diagnoses relative to a 12.2% target for 2019. Rates continue to be above the target for Medicare and on an all-payer basis. After near convergence with U.S. rates in 2013, Massachusetts' Medicare readmission rates are trending upward while national Medicare readmission rates continue to decline.

SOURCES: Centers for Medicare and Medicaid Services (U.S. and MA Medicare), 2011 – 2015; Center for Health Information and Analysis (all-payer MA), 2011 – 2015

SHARE OF COMMUNITY APPROPRIATE DISCHARGES, BY HOSPITAL TYPE, 2011 – 2016



One strategy to reduce health care spending is to shift inpatient care that can be appropriately performed in community hospitals away from higher-cost academic medical centers and teaching hospitals. The HPC has refined its definition of community-appropriate discharges to a peer-reviewed set of 94 DRGs which account for roughly 41% of all inpatient discharges.

Between 2011 and 2016, the share of community-appropriate discharges treated at community hospitals has fallen each year, from about 60% to 58%.

NOTES: Discharges that could be appropriately treated in community hospitals were determined based on expert clinician assessment of the acuity of care provided, as reflected by the cases' diagnosis-related groups (DRGs). The Center for Health Information and Analysis defines community hospitals as general acute care hospitals that do not support large teaching and research programs. Teaching hospitals are defined as hospitals that report at least 25 full-time equivalent medical school residents per one hundred inpatient beds in accordance with Medicare Payment Advisory Commission (MedPAC) guidelines. Academic medical centers are a subset of teaching hospitals characterized by (1) extensive research and teaching programs, (2) extensive resources for tertiary and quaternary care, (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.

SOURCES: HPC's analysis of Center for Healthcare Information and Analysis Hospital Inpatient Discharge Database, 2011 – 2016

POST-ACUTE CARE

INTRODUCTION

POST-ACUTE CARE

Post-acute care (PAC) services include short-term nursing or rehabilitative care following a hospital discharge. PAC recipients may receive nursing or rehabilitative services at home (home health) or in an institutional setting such as a skilled nursing facility (SNF), inpatient rehabilitation facility (IRF), or long-term care hospital (LTCH). On average, institutional PAC is considerably more expensive than home health.

The HPC has previously found that Massachusetts has higher rates of discharge to institutional PAC and home health than the U.S. average, across all payers, contributing to higher overall PAC spending. For example, in 2015 Massachusetts Original Medicare beneficiaries spent \$380 more per resident per year on PAC than those in other states—24% higher than the U.S. average.

Choosing the appropriate setting of PAC is important for ensuring optimal care and can have a substantial impact on the cost of an episode of care. The HPC found in prior research that for conditions associated with greater clinical discretion in discharge destination (e.g. joint replacements), Massachusetts providers discharge proportionally more people to institutional settings, suggesting that room for improvement remains.

This section of the Chartpack reviews recent trends in post-acute care utilization, both in the U.S. and in Massachusetts, and examines variation in the rate of discharges to institutional care across Massachusetts hospitals, including the change in these rates over time.

KEY FINDINGS

POST-ACUTE CARE

The percentage of Massachusetts hospital discharges to institutional PAC has steadily declined since 2010, while home health discharges have steadily increased, and routine discharges have remained roughly constant.

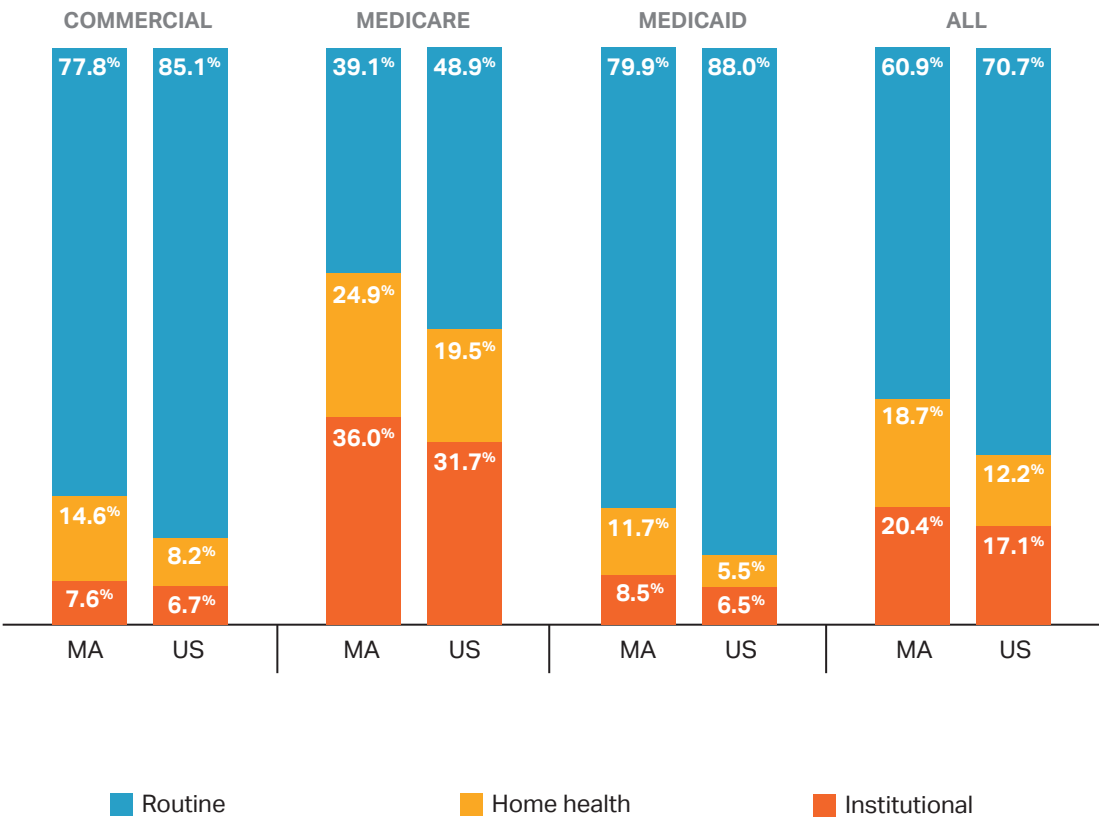
Variation in the rate of discharge to institutional PAC was more than two-fold (from 12.4% at Brigham and Women's Faulkner to 26.0% at Steward St. Elizabeth's) across high volume hospitals in Massachusetts, even after controlling for patient age, sex, admission source, payer, and diagnosis.

Among all payers, Massachusetts has a higher rate of discharge to institutional post-acute care (PAC) and to home health than the national average.

Among the same hospitals, Southcoast-Charlton Memorial had the greatest increase in the rate of discharge to institutional PAC since 2013 (2.9 percentage points), and North Shore Medical Center had the greatest reduction (3.0 percentage points).

The reduction in institutional PAC discharges is partially driven by changes in discharge patterns for musculoskeletal conditions. The rate of discharge to institutional PAC for these conditions declined by 6.1 percentage points between 2013 and 2016.

PAC DISCHARGES, ALL DRGS, ALL PAYERS, 2014



For all payers, Massachusetts has a higher rate of discharge to institutional PAC and home health than the U.S. average.

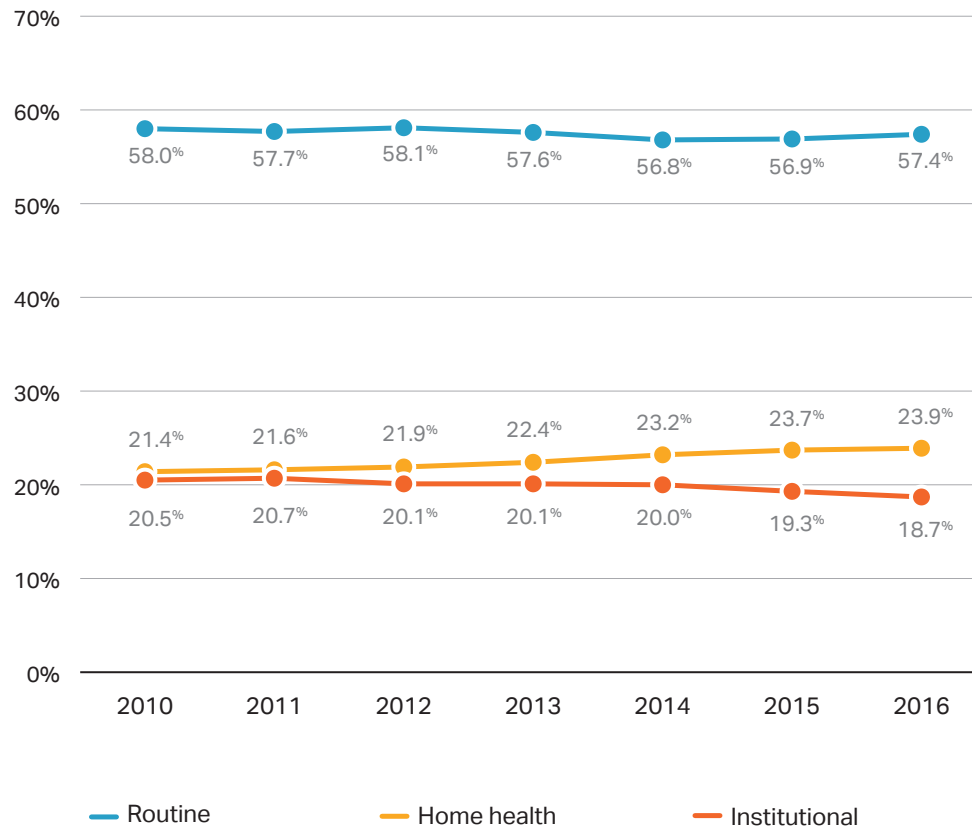
Across all payers in 2014, Massachusetts had an institutional discharge rate that was 3.3 percentage points higher than the U.S. average and a home health discharge rate that was 6.5 percentage points higher.

Among payers, Medicare had the largest differential in 2014, with the Massachusetts rate of discharge to institutional PAC exceeding the national average by 4.3 percentage points.

NOTE: Institutional settings include skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals.

SOURCES: HPC analysis of Healthcare Cost and Utilization Project (HCUP) Nationwide Inpatient Sample Survey, 2014

ADJUSTED PERCENTAGE OF DISCHARGES TO POST-ACUTE CARE, ALL DRGS, 2010 – 2016



Between 2010 and 2016, the percentage of patients discharged to institutional PAC following a hospitalization fell by 1.8 percentage points, adjusting for population changes over time. One third of the reduction occurred between 2015 and 2016.

The reduction in institutional PAC discharges is partially driven by changes in discharge patterns for musculoskeletal conditions. The rate of discharge to institutional PAC for these conditions declined by 6.1 percentage points between 2013 and 2016.

Routine discharges remained relatively consistent during this time period and home health discharges increased by 2.5 percentage points.

NOTES: Institutional post-acute care settings include skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals. Rates adjusted using ordinary least squares (OLS) regression to control for age, sex, and changes in the mix of mix of diagnosis-related groups (DRGs) over time. Discharges from hospitals that closed and specialty hospitals, except New England Baptist, were excluded. Several hospitals (UMass Memorial Medical Center, Clinton Hospital, Cape Cod Hospital, Falmouth Hospital, Marlborough Hospital) were excluded due to coding irregularities in the database.

SOURCES: HPC analysis of Center for Health Information and Analysis Hospital Inpatient Discharge Database, 2010 – 2016

ADJUSTED PERCENTAGE OF DISCHARGES TO INSTITUTIONAL PAC FOR 30 HIGHEST VOLUME HOSPITALS, 2016



Variation in the rate of discharge to institutional PAC was more than two-fold (from 12% to 26%) across high volume hospitals in Massachusetts, even after controlling for patient age, sex, admission source, payer, and diagnosis.

Of the top 30 hospitals by discharge volume, Partners HealthCare hospitals had among the lowest adjusted rates of institutional PAC discharge.

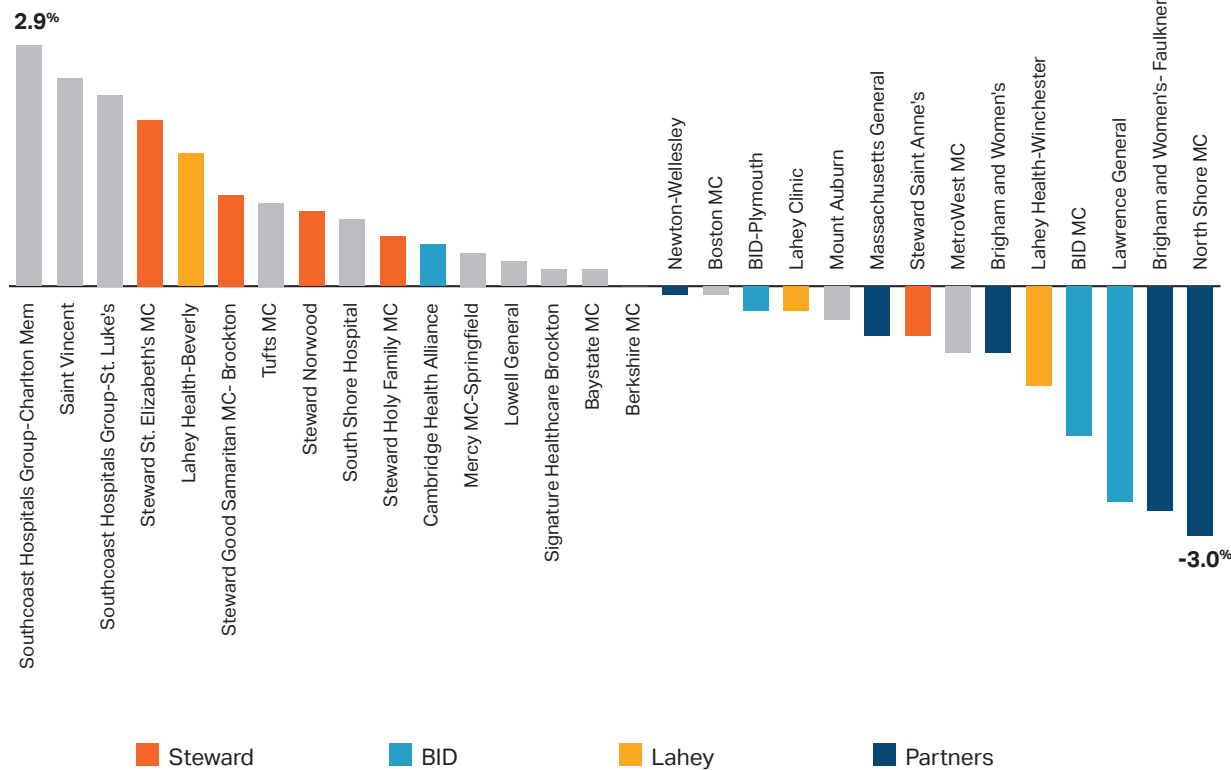
The three hospitals with the lowest adjusted rates of institutional discharge in 2016 were also the hospitals with the largest average reductions in institutional discharges between 2013 and 2016 (see next page).

NOTES: Hospital rates have been adjusted for major diagnostic category, age, sex, admission source and primary payer. Several acute care hospitals (UMass Memorial Medical Center, Clinton Hospital, Cape Cod Hospital, Falmouth Hospital, Marlborough Hospital) were excluded due to coding irregularities in the database.

SOURCES: HPC analysis of Center for Health Information and Analysis Hospital Inpatient Discharge Database, 2016

CHANGE IN ADJUSTED PERCENTAGE OF DISCHARGES TO INSTITUTIONAL PAC, BY HOSPITAL, 2013 – 2016

Each bar reflects the difference between the average rate of institutional discharge in 2015 – 2016 and the average rate of institutional discharge in 2013 – 2014



North Shore Medical Center had the greatest reduction in institutional post-acute care discharges of the top 30 hospitals by volume, with an adjusted institutional discharge rate that was three percentage points lower in 2015-2016 than in 2013-2014.

Southcoast Hospitals Group- Charlton Memorial had the greatest increase in institutional post-acute care discharges among these hospitals, with an adjusted institutional discharge rate that was almost three percentage points higher in 2015-2016 than in 2013-2014.

All five of the Partners HealthCare hospitals studied reduced their institutional discharge rate.

Four of the five Steward hospitals studied had a higher rate of institutional discharge in 2015-2016 than in 2013-2014.

NOTE: Hospital rates have been adjusted for major diagnostic category, age, sex, admission source and primary payer.

SOURCES: HPC analysis of Center for Health Information and Analysis Hospital Inpatient Discharge Database, 2013 – 2016

ALTERNATIVE PAYMENT METHODS

INTRODUCTION

ALTERNATIVE PAYMENT METHODS

Alternative payment methods (APMs) are a key strategy to promote high-quality, efficient care and reduce health care costs. Traditional fee-for-service (FFS) payment methods reward providers for volume of services, while APMs, such as global budget contracts and bundled payments, seek to promote value-based care and reduce unnecessary utilization. There has been some progress in transitioning to APMs in Massachusetts, but the recent growth in APM adoption has been slow.

Many providers note that operating in an environment where fewer than half of their patients are covered under an APM contract, with the rest paid under traditional FFS, creates conflicting incentives. Reducing unnecessary utilization can result in savings under an APM but reduces revenue in a FFS environment. Providers need a critical mass of patients covered under risk-based contracts for the financial benefits of reducing avoidable utilization under an APM to outweigh FFS losses.

This section of the Chartpack reviews recent trends in the uptake of APMs in Massachusetts, and examines the relationship between APM adoption by provider groups and their associated performance in lowering health care spending and reducing use of emergency departments (EDs).

KEY FINDINGS

ALTERNATIVE PAYMENT METHODS

In 2016, the rate of commercial APM adoption increased from 36% to 42%, largely due to increased APM adoption in commercial preferred provider organization (PPO) products.

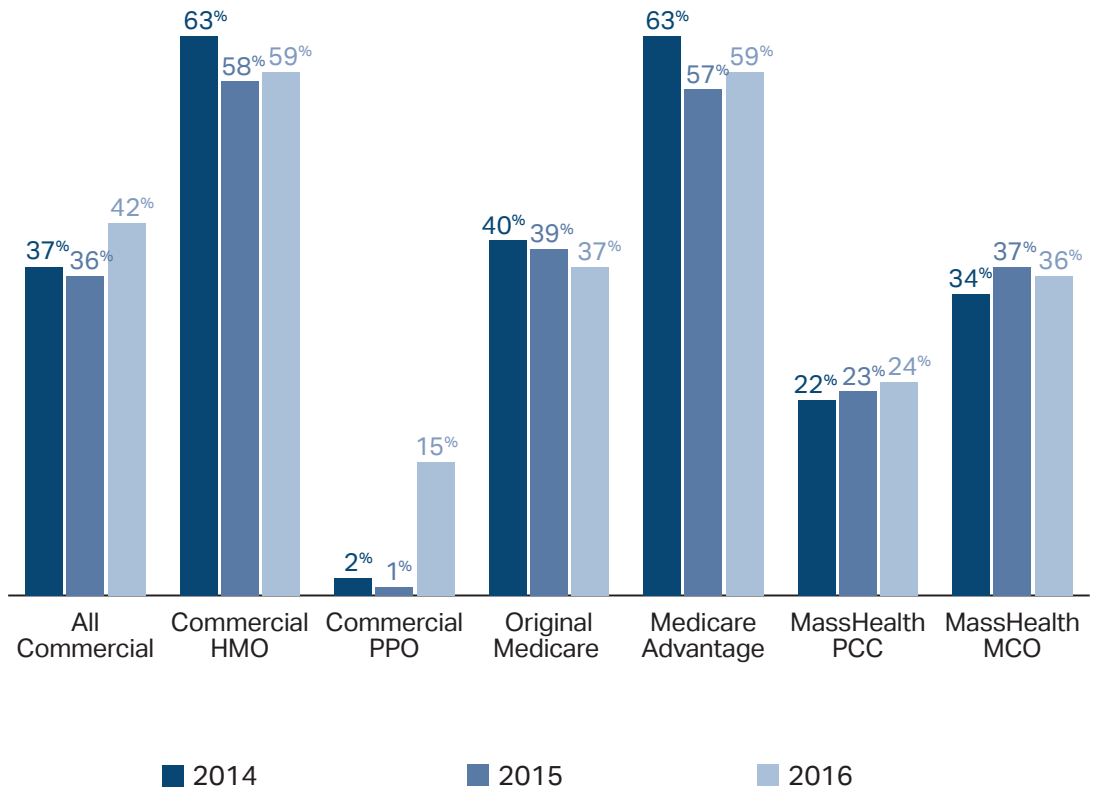
From 2014 to 2016, MassHealth slightly increased the use of APMs in its Primary Care Clinician Plan (PCC). It is expected that use of APMs in MassHealth will significantly expand in 2017 and 2018, as the MassHealth ACO program is implemented.

APM adoption has grown only among the three largest Massachusetts-based insurers, from 47% to 56% from 2014 to 2016, while smaller Massachusetts-based insurers' APM adoption rates dropped from 40% to 36%. APM adoption among national insurers remains very low in Massachusetts, at 2% of members in 2016.

The larger commercial insurers in Massachusetts have adopted APMs, especially in health maintenance organization (HMO) products, with 59% of commercial HMO membership covered under an APM.

Greater APM adoption among provider groups is correlated with lower health care spending and less use of emergency departments. A ten percentage point increase in APM adoption is associated with a \$165 decrease in total annual spending and 3.4 fewer ED visits per 100 members.

PROPORTION OF POPULATION UNDER APMS BY INSURANCE CATEGORY, 2014 – 2016



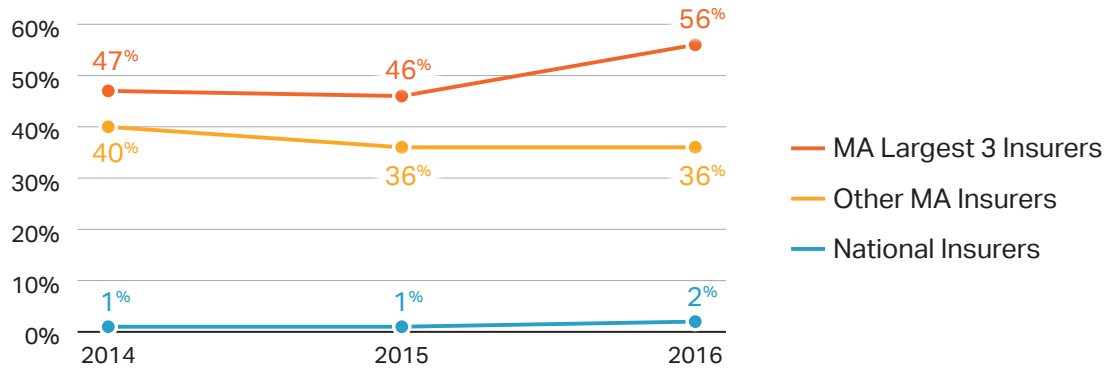
The percentage of commercial members covered by APMS increased from 36% in 2015 to 42% in 2016, driven by Blue Cross Blue Shield of Massachusetts implementing APMS in its commercial PPO product. The rate of commercial HMO members covered by APMS remained nearly the same, increasing from 58% to 59%.

MassHealth slightly increased the use of APMS in the PCC Plan in this time period. It is expected that use of APMS in MassHealth will significantly expand in 2017 and 2018, as the MassHealth ACO program is implemented.

The percentage of Original Medicare beneficiaries in ACOs remains relatively high compared to other parts of the U.S. (22% in 2016).

SOURCES: HPC analysis of Center for Health Information and Analysis Annual Report APM data book, 2017; Centers for Medicare and Medicaid Services, "Number of ACO Assigned Beneficiaries by County Public Use File" (2014 – 2016); "Medicare Pioneer Accountable Care Organization Model Performance Years 3- 5" (2014 - 2016); "Next Generation ACO Model Financial and Quality Results Performance Year 1" (2016)

PROPORTION OF MEMBER MONTHS UNDER APMS BY PAYER CATEGORY, 2014 – 2016



APM adoption has grown only among the three largest Massachusetts-based insurers, from 47% to 56% from 2014 to 2016, while smaller Massachusetts-based insurers' APM adoption rates dropped from 40% to 36%. APM adoption among national insurers remains very low in Massachusetts, at 2% of members in 2016.

The three largest health insurers in Massachusetts have lost market share, from 67% in 2014 to 63% in 2016, while other Massachusetts insurers gained market share, increasing from 12% to 17% of the commercial market. The national insurers' share has remained stable at 20% of the commercial market.

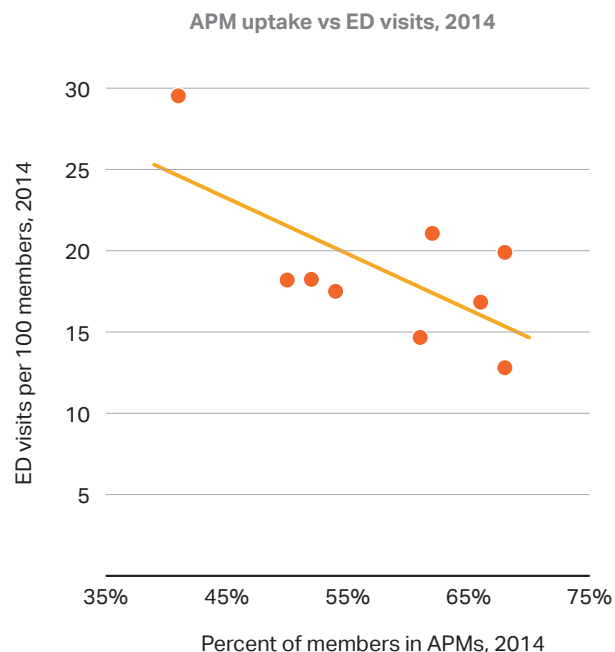
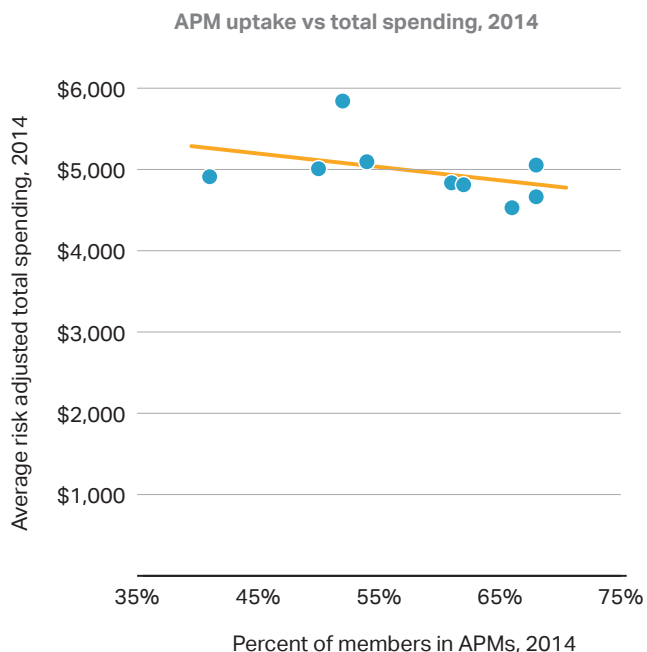
Share of Commercial Population

| Payer Type | 2014 | 2015 | 2016 |
|-----------------------|------|------|------|
| MA Largest 3 Insurers | 67% | 65% | 63% |
| Other MA Insurers | 12% | 15% | 17% |
| National Insurers | 20% | 20% | 20% |

NOTES: The three largest insurers in Massachusetts include Blue Cross Blue Shield of MA, Harvard Pilgrim Health Plan and Tufts Health Plan. Other Massachusetts plans include Network Health, BMC HealthNet Plan, Celticare Health Plan, Fallon Community Health Plan, Health New England, Health Plans Inc, Minuteman Health, Neighborhood Health Plan, and UniCare. National insurers include Aetna, CIGNA and United Health Plans.

SOURCES: HPC analysis of Center for Health Information and Analysis Annual Report APM data book, 2017; Centers for Medicare and Medicaid Services, 2014 – 2016

RELATIONSHIP BETWEEN APM ADOPTION AND TOTAL SPENDING AND ED UTILIZATION BY PROVIDER ORGANIZATION, 2014



APMs incentivize providers to focus on efficient use of care and may drive improvements in clinical practice that reduce unnecessary utilization.

Greater APM adoption among provider groups is correlated with lower rates of ED utilization and slightly lower overall spending.

A ten percentage point increase in APM adoption is associated with a \$165 decrease in total annual spending and 3.4 fewer ED visits per 100 members.

NOTES: Provider organizations included are Atrius, BIDCO, BMC, Baystate, Lahey, MACIPA, Partners, Steward, and UMass Memorial. APM uptake figures assumes zero uptake among PPO members. The chart on APM uptake and ED visits includes one outlier. The slope of the line with this outlier included is $y = -34.325x + 38.686$, when the outlier is removed, the slope is $y = -8.5309x + 22.542$, indicating a more moderate effect. Spending and ED data are calculated based on analysis of variation between provider organizations, described in the full report.

SOURCES: HPC analysis of Massachusetts All-Payer Claims Database, 2014 and the Center for Health Information and Analysis 2017 Annual Report APM data book; Registry of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

DEMAND-SIDE INCENTIVES

INTRODUCTION

DEMAND-SIDE INCENTIVES

The Health Policy Commission (HPC) continues to examine developments toward a value-based health care market with improved market competition, innovative insurance products, and supportive tools. Demand-side incentives reward consumers and purchasers of care for making high-value choices, which can lower premiums and spending, and, indirectly, motivate other market participants to pursue higher value care or risk losing patient volume.

To strengthen demand-side incentives and market functioning, the HPC has encouraged employers to offer plan choice and reward employees for choosing high-value plans, including tiered and limited products. The HPC has also monitored the availability and functioning of price transparency and quality websites, and encouraged purchasers of care to consider tools such as cash-back incentives and reference pricing to foster high-value provider choices.

This section of the Chartpack reviews recent enrollment trends in commercial health insurance, by employer size and product type, and further examines trends in the individual market and the role of the Massachusetts Health Connector (Connector) in establishing a pro-competitive marketplace.

KEY FINDINGS

DEMAND-SIDE INCENTIVES

From 2014 to 2016, enrollment in the commercial-insured market experienced notable changes, as membership among smaller employer groups declined by 8% and enrollment in the individual market experienced a significant 183% increase.

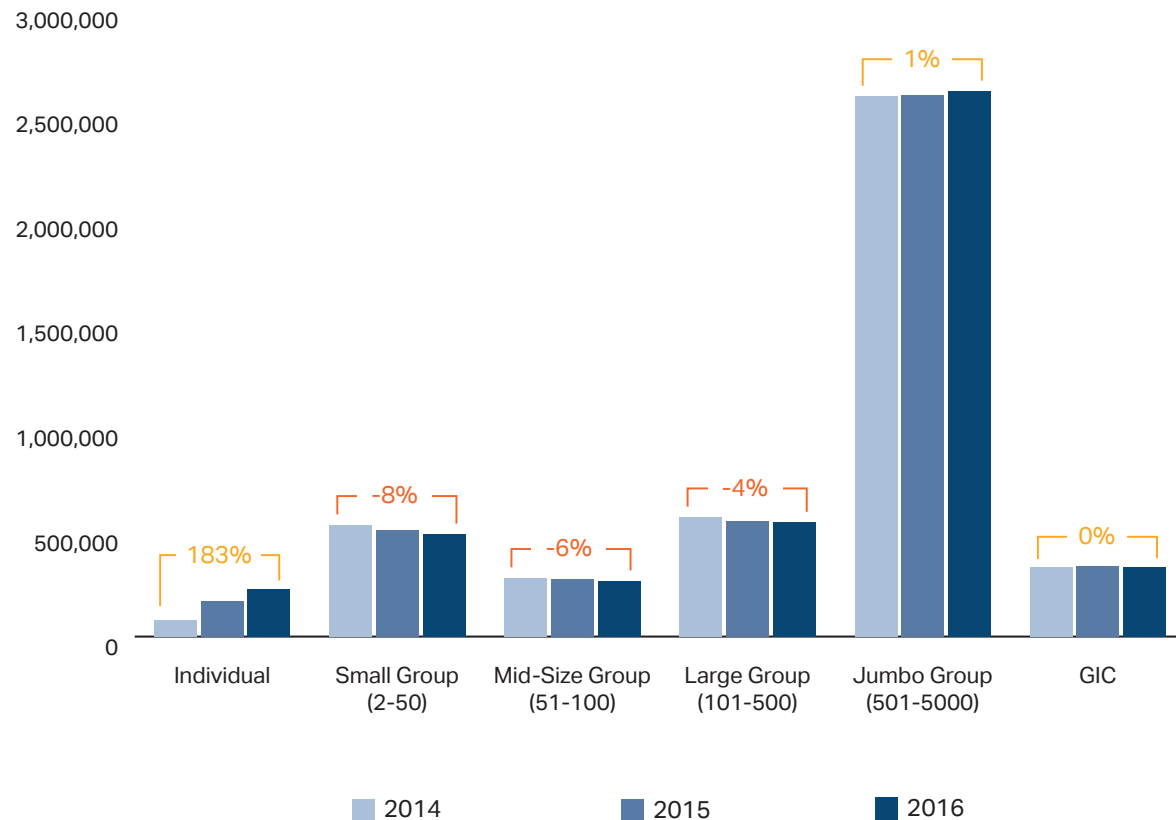
High-deductible plans increased their share of the commercial market from 19.0% in 2014 to 21.8% in 2016. The share was highest among smaller firms, reaching 50% for firms with between 2 and 50 employees in 2016.

Outside of the Group Insurance Commission (GIC), which covers state and municipal employees, commercial enrollment growth in tiered network and limited network insurance products was stalled.

Massachusetts premiums for single coverage in the employer market remained the 4th highest in the U.S. in 2016. In contrast, the average annual unsubsidized benchmark premium for a 40-year old individual through the Connector was the 2nd lowest in the U.S. in 2017, reflecting the Connector's pro-competitive market structure.

From 2016 to 2017, there was a strong relationship between premium increases in some Connector plans and enrollee plan switching into lower-cost plans, consistent with the Connector's efforts to encourage consumer shopping, choice, and plan competition.

COMMERCIAL MEMBERSHIP, IN MEMBER-YEARS, BY MARKET SEGMENT, 2014 – 2016



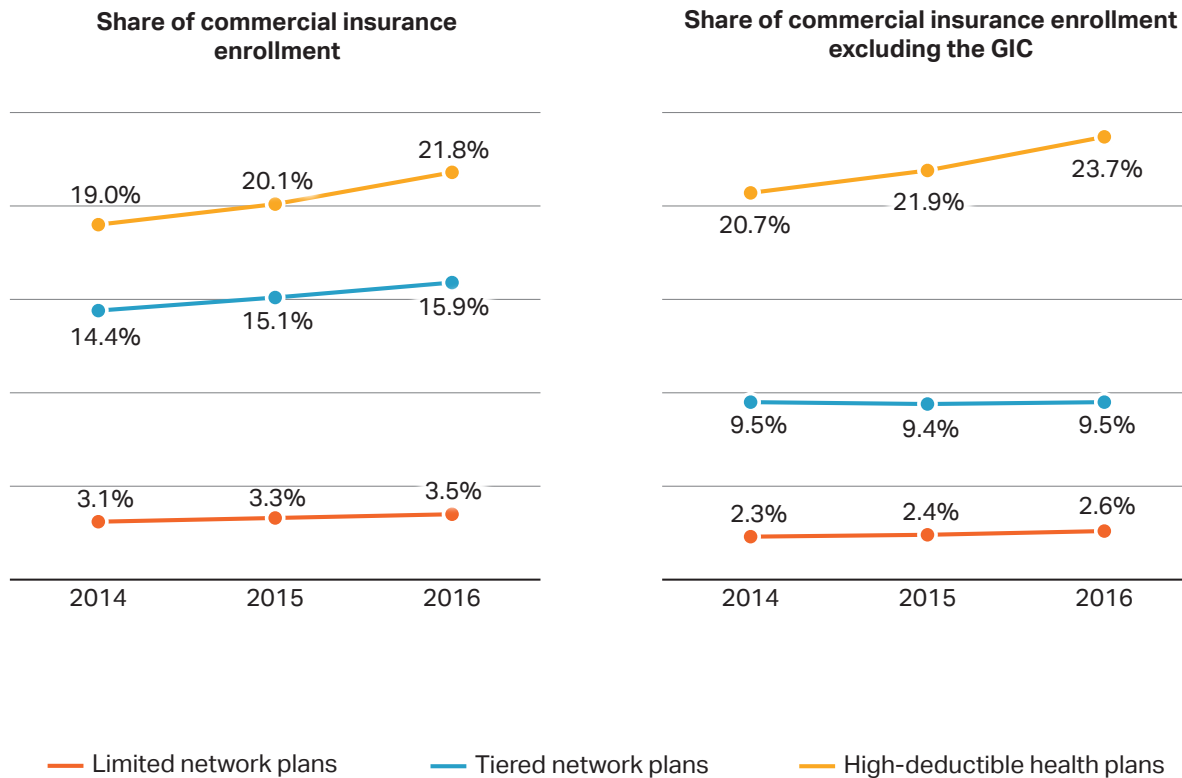
Enrollment in health insurance declined 4% among firms of size 101-500, 6% among firms of size 51-100, and 8% among firms of size 2-50. The latter is consistent with falling rates of small employers offering coverage.

Enrollment in the individual market (most of which is offered through the Connector) increased over this time period. A large portion of the increase occurred between 2014 and 2015 as subsidies became available through the Affordable Care Act for non-group coverage.

NOTES: The individual market includes plans offered on the Massachusetts Health Connector as well as plans offered outside the Connector that are sold directly to individuals. GIC is the Group Insurance Commission.

SOURCES: HPC analysis of Center for Health Information and Analysis Annual Report Cost and Coverage data book, 2017

SHARE OF COMMERCIAL MARKET ENROLLMENT IN TIERED NETWORK, LIMITED NETWORK, AND HIGH-DEDUCTIBLE PLANS, 2014 – 2016



Between 2014 and 2016, the percentage of Massachusetts commercial enrollment in plans that use limited and tiered networks grew modestly, from 3.1% to 3.5%, and 14.4% to 15.9% respectively.

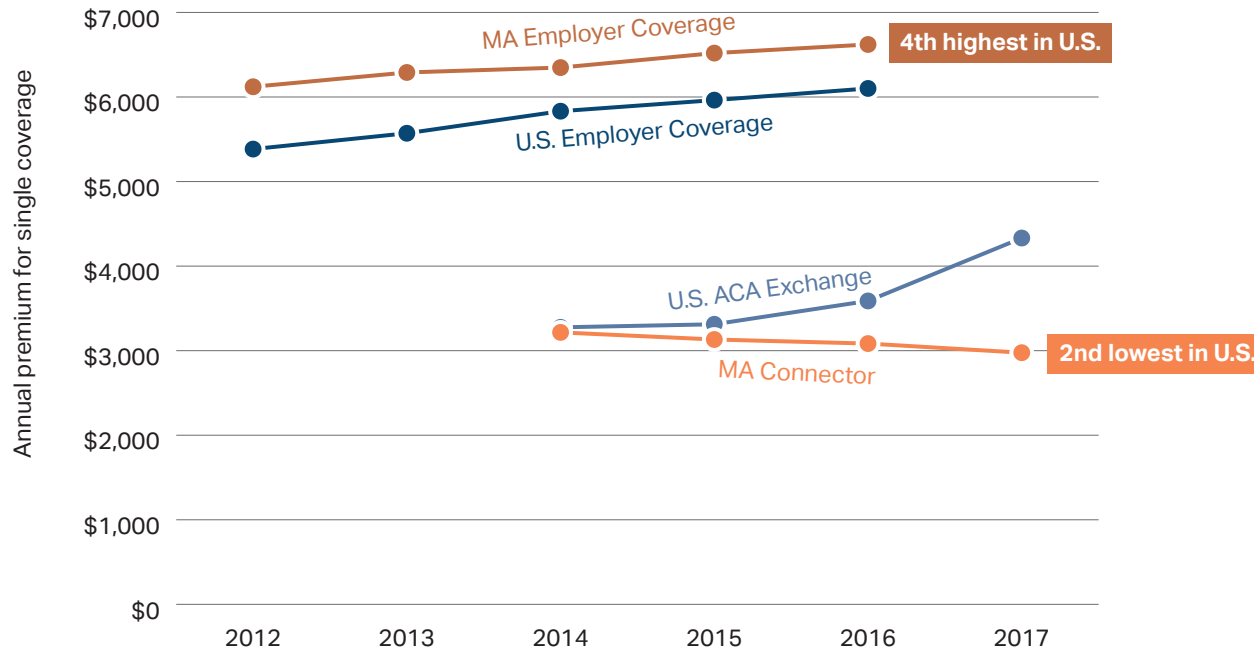
However, most of that growth among products using tiered providers was due to expansion of tiered networks among Group Insurance Commission (GIC) plans. Excluding the GIC, there was no change in market share of tiered network products, which remained at 9.5% in 2016.

High-deductible plans (which are not permitted in the GIC), increased their share of the commercial market from 19.0% in 2014 to 21.8% in 2016. The share was highest among smaller firms, reaching 50% for firms with between 2 and 50 employees in 2016.

NOTE: The three plan types shown are not mutually exclusive.

SOURCES: HPC analysis of Center for Health Information and Analysis Annual Report Cost and Coverage data book, 2017

ANNUAL PREMIUMS FOR SINGLE COVERAGE IN THE EMPLOYER MARKET AND IN THE BENCHMARK PLAN IN THE AFFORDABLE CARE ACT MARKETPLACES, MA AND THE U.S.



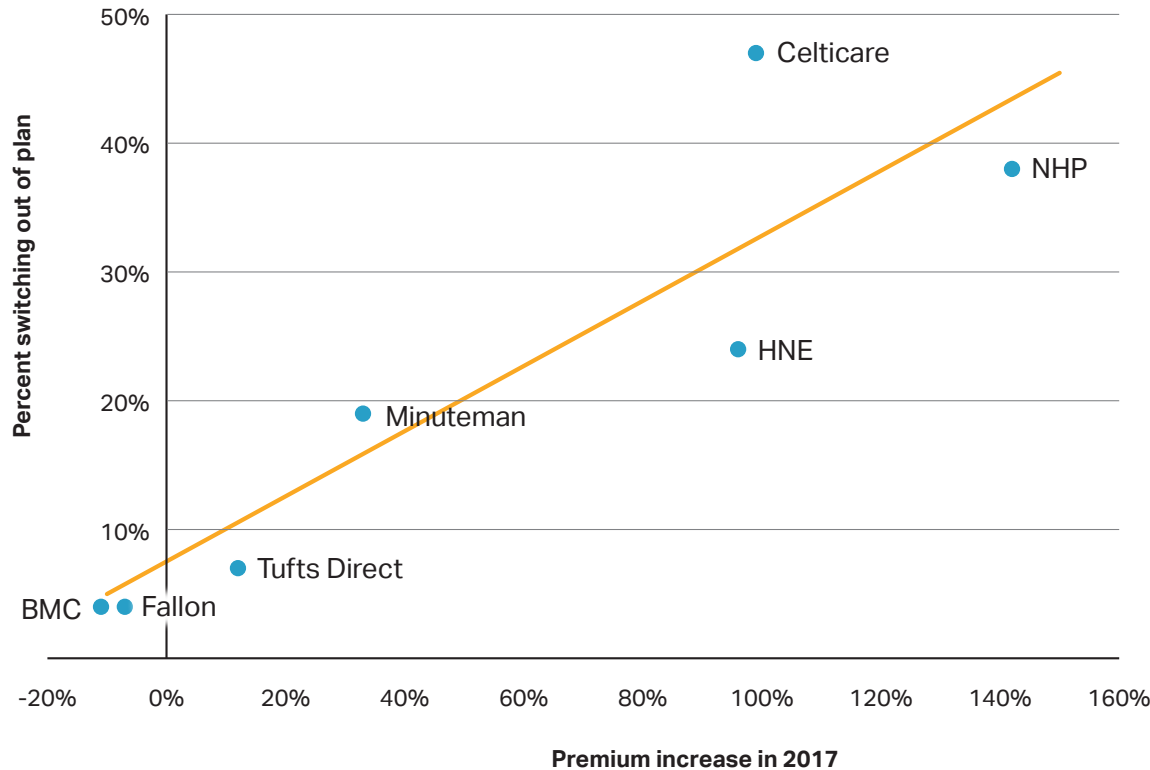
Annual premiums for single coverage in the employer market for health insurance grew 8%, from \$6,121 in 2012 to \$6,621 in 2016 in Massachusetts. While this growth rate was slower than the 13% growth in premiums nationwide, Massachusetts premiums remained the fourth highest in the U.S. in 2016.

However, average silver benchmark premiums for a 40-year old non-smoking enrollee in the ACA marketplaces were roughly \$3,200 annually in both Massachusetts and the nation in 2014. These premiums fell by 7% in Massachusetts and grew by 32% in the rest of the nation between 2014 and 2017, resulting in Massachusetts' marketplace premiums being the second lowest in the country in 2017.

NOTES: ACA exchange premiums are for a 40-year old non-smoking enrollee in the second-lowest cost silver benchmark plan in the exchange in the largest metro area within each state. Premiums do not include any subsidies. Employer premiums are based on average premiums according to a large sample of employers within each state.

SOURCES: Kaiser Family Foundation analysis of ACA exchange premium data from healthcare.gov, 2014-2017; Agency for Healthcare Quality, Medical Expenditure Panel Survey, 2012-2016

RELATIONSHIP BETWEEN PREMIUM INCREASES IN MASSACHUSETTS HEALTH CONNECTOR "CONNECTORCARE" PLANS AND ENROLLEE PLAN SWITCHING, 2016 TO 2017



Prior to 2017, Massachusetts sought to shield enrollees from major cost implications of plan choices in the ConnectorCare program within the Massachusetts Health Connector by providing greater subsidies to higher-cost plans, thus narrowing the difference in cost to enrollees. The Connector effectively ceased this practice in 2017, which resulted in large changes in enrollee premium contributions for some plans. Neighborhood Health Plan's (NHP) average post-subsidy premium rose 142% while BMC's premium fell by 11%.

The premium swings led to roughly proportional responses among enrollees in switching out of their current plans. 38% of NHP enrollees switched out of their plans in early 2017 compared to 4% of BMC enrollees.

SOURCE: Massachusetts Health Connector, 2016 - 2017

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