Re-examining the Health Care Cost Drivers and Trends in the Commonwealth

A REVIEW OF STATE REPORTS
(2008–2015)

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Executive Summary

Over the past several years, Massachusetts has implemented legislative reforms and statewide initiatives to contain high health care costs and increase transparency in the health care market. State agencies such as the Attorney General's Office (AGO), the Center for Health Information and Analysis (CHIA), and the Health Policy Commission (HPC) regularly evaluate the progress of these state efforts and publish periodic reports on key trends observed in the Massachusetts health care market. These reports provide valuable information that sheds light on persisting issues as well as emerging themes related to heath care cost, quality, and utilization.

In 2014, the Massachusetts Association of Health Plans (MAHP) engaged Freedman HealthCare (FHC) to review 16 state reports published between 2008 and 2013 and identify common themes among the reports. The subsequent report, titled *Understanding the Health Care Cost Drivers and Trends in the Commonwealth: A Review of State Reports (2008-2013)*, summarized 10 key findings identified through this analysis.

The purpose of this year's paper is to re-examine cost drivers and trends in the Massachusetts marketplace in light of nine new reports that Massachusetts state agencies released from 2014-2015. MAHP, along with Associated Industries of Massachusetts (AIM), the National Federation of Independent Business (NFIB), and the Retailers Association of Massachusetts (RAM), engaged FHC to conduct the analysis and prepare the report. In its review of the nine new reports, FHC assessed the status of the original 10 findings highlighted in the 2014 review of state reports, and identified four new findings.

This year's paper aims to concisely and objectively highlight common findings among state agency reports published from 2014-2015. When reviewed together, these reports provide a comprehensive and validated picture of the Massachusetts health care market that can help policymakers and other stakeholders better understand health care cost drivers and trends.

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Key Findings

Findings from this year's analysis are consistent with those discussed in the 2014 paper:

- Provider price, not utilization of health care services, continues to be the biggest cost driver in the Massachusetts market.
- Provider price variation has seen no improvements, and there is evidence that the price gap between the highest and lowest paid providers is growing wider.
- Health care is most often delivered in higher priced settings.
- There remains no significant association between provider quality and cost.
- Providers with the highest public payer case mix have the lowest commercial reimbursement.
- Academic medical centers (AMCs) continued to be associated with higher health care costs.
- Consumer cost-sharing is increasing in the commercial market.
- Market share continues to impact health care costs by influencing price, utilization, and available resources.

- Policymakers remain concerned that provider consolidation may lead more to higher prices than to savings from integration of care or improved efficiency.
- Despite its increasing promotion, the widespread adoption of global payments faces significant challenges, and there continues to be limited evidence to suggest that global payments produce cost savings.

KEY FINDINGS

1. Provider price, not utilization of health care services, is the biggest cost driver in the Massachusetts market.
2. There is a significant gap between the highest and lowest paid providers.
3. Health care is most often delivered in higher priced settings.
4. High prices do not directly correlate with high quality of care – in other words, the highest paid providers do not necessarily provide the highest quality of care.
5. Providers with the highest public payer case mix have the lowest commercial reimbursement.
6. Academic medical centers are associated with higher health care costs.
7. In response to increasing provider prices, the commercial market is seeing increased consumer cost sharing.
8. Market share impacts health care costs by influencing price, utilization, and available resources.
9. There is growing policy concern that provider consolidation may lead to higher prices, rather than savings from integration of care or improved efficiency.
10. Despite its increasing promotion, the widespread adoption of global payments faces significant challenges, and there is limited evidence to suggest that global payments produce cost savings.
11. Performance against the cost growth benchmark is mixed.
12. Pharmaceutical costs have been increasing and are expected to increase in the future.
13. The state is increasingly focused on behavioral health – specifically, the high cost associated with behavioral health conditions, the challenges of clinical and administrative integration of care, and the need for better data.
14. Due to persistent and increasing disparities in provider prices over the past several years, the state is recommending policy action be taken to reduce excessive price variation.

In addition, this year's report identified four new findings:

- Performance against the cost growth benchmark has been mixed since it was first measured in 2013.
- Pharmaceutical costs have been increasing and are expected to increase in the future.
- The state is increasingly focused on behavioral health – specifically, the high cost associated with behavioral health conditions, the challenges of clinical and administrative integration of care, and the need for better data.
- Due to persistent and increasing disparities in provider prices over the past several years, the state is recommending policy action be taken to reduce excessive price variation.

Introduction

Historically, Massachusetts has seen significant growth in health care costs and spending. From 2000-2009, Massachusetts had the highest per capita state health expenditures in the nation,[1,2] with growth that continually outpaced that of the state's economy.[2,3,4,5] Historically, high health care spending has been attributed to high prices rather than high utilization.[5]

From 2000-2009, Massachusetts had the highest per capita state health expenditures in the nation, with growth that continually outpaced that of the state's economy. Historically, high health care spending has been attributed to high prices rather than high utilization.

Over the past several years, Massachusetts has implemented legislative reforms, such as Chapter 224 of the Acts of 2012 and other statewide efforts, to contain these high health care costs and increase transparency in the health care market. Chapter 224 established an annual statewide benchmark for health care cost growth, set at +3.6% growth for 2013 through 2015.[6] To support and evaluate cost containment efforts, state agencies such as the AGO, CHIA, and the HPC regularly monitor and report health care cost and utilization trends across the state. For example, the HPC has performed Cost and Market Impact Reviews (CMIRs) on proposed provider consolidations and acquisitions to determine their impacts on the state's health care market.[7] In addition, CHIA leverages its statewide data collection efforts to publish annual reviews of provider price variation, total health care expenditures, and other market trends.[8,9]

In 2014, MAHP released *Understanding the Health Care Cost Drivers and Trends in the Commonwealth: A Review of State Reports (2008-2013)*,[10] which identified and summarized common findings observed in the Massachusetts health care market from 2008-2013. The analysis, which was performed by FHC, drew from 16 cost and quality reports published by various state agencies, and identified 10 key findings that recurred throughout these reports (see Table 2).

Two years later, efforts to curb health care spending have had mixed results. In 2013, the state succeeded in limiting cost growth to +2.4%, below the +3.6% benchmark. However, by 2014 health spending had exceeded the benchmark and was higher than the state's inflation rate and economic growth rate, as well as higher than per capita health spending nationally.[8]

TABLE 2: KEY FINDINGS IDENTIFIED IN THE 2014 REVIEW OF STATE REPORTS

1.	Provider price, not utilization of health care services, is the biggest cost driver in the Massachusetts market.
2.	There is a significant gap between the highest and lowest paid providers.
3.	Health care is most often delivered in higher priced settings.
4.	High prices do not directly correlate with high quality of care – in other words, the highest paid providers do not necessarily provide the highest quality of care.
5.	Providers with the highest public payer case mix have the lowest commercial reimbursement.
6.	Academic medical centers are associated with higher health care costs.
7.	In response to increasing provider prices, the commercial market is seeing higher health care premiums and increased consumer cost sharing.
8.	Market share impacts health care costs by influencing provider reimbursement rates, total medical expenses (TME), and patient volume.
9.	There is growing policy concern that provider consolidation may lead to higher prices, rather than savings from integration of care or improved efficiency.
10.	Despite its increasing promotion, the widespread adoption of global payments faces significant challenges, and there is limited evidence to suggest that global payments produce cost savings.

MAHP, along with AIM, NFIB, and RAM, engaged FHC to update the 2014 analysis in light of nine recent reports that the HPC, the AGO, and CHIA released from 2014–2015. While the 2014 review of state reports highlighted the range of complex issues that face the Massachusetts health care system, this year's paper examines the progress that the state is making to address these issues. This paper is designed as a concise resource for health care providers, payers, consumers, and policymakers to understand the current status of existing cost and quality trends as well as emerging themes.

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Methodology

Reviewers identified nine reports published in 2014 and 2015[i] by three state agencies actively involved in measuring and addressing health care cost and quality in Massachusetts: the HPC, the AGO, and CHIA. Each report was analyzed against the 10 key findings identified in the 2014 analysis. Each of the 10 findings was discussed at least twice in the nine new reports. In addition, this year's analysis identified four new findings that recurred in the nine new reports and that had not been previously discussed in the 2014 paper. Reviewers defined a new finding as one that was mentioned in two or more of the nine reports and by two or more agencies. It is important to note that this list of key findings is not exhaustive but attempts to include the predominant findings that appeared in multiple reports from 2014-2015.

[i] This list includes the Health Policy Commission's *2015 Cost Trends Report* and *2015 Cost Trends Report: Provider Price Variation*, which were both published in January 2016.

Summary of Reports Analyzed

Table 3 lists the nine reports that were reviewed for this year's analysis, in order of publication date.

TABLE 3: STATE REPORTS INCLUDED IN THE 2016 ANALYSIS (BY PUBLICATION DATE)

AGENCY	REPORT	DATE PUBLISHED	DATE(S) ANALYZED	DATA SOURCES	REFERENCE
HPC	2013 Cost Trends Report – July 2014 Supplement	7/2014	2010-2012	AGO and CHIA reports; qualitative findings from the HPC Annual Cost Trends Hearing; Massachusetts All Payer Claims Database (APCD) data on the three largest commercial payers	HPC 2014a
CHIA	Annual Report on the Performance of the Massachusetts Health Care System	9/2014	2013	Commercial payers and MassHealth	CHIA 2014
HPC	2014 Cost Trends Report	2014	2005, 2009-2014	CHIA; HPC; MA Health Data Consortium; national data sources	HPC 2014b
CHIA	Provider Price Variation in the Massachusetts Health Care Market (CY 2013 Data)	2/2015	2012, 2013	Commercial payers	CHIA 2015a
AGO	Examination of Health Care Cost Trends and Cost Drivers, Pursuant to G.L. c. 6D, § 8	6/2015	2013	Health plans, managed behavioral health organizations, and providers	AGO 2015a
AGO	Examination of Health Care Cost Trends and Cost Drivers, Pursuant to G.L. c. 12, § 11N: Report for the Annual Public Hearing under G.L. c. 6D, § 8	9/2015	2013	Commercial payers and providers	AGO 2015b
CHIA	Performance of the Massachusetts Health Care System: Annual Report	9/2015	2012-2014	Commercial and public payers; national data sources	CHIA 2015b
HPC	2015 Cost Trends Report	1/2016	2011-2014	AGO and CHIA; testimony from the 2015 Cost Trends Hearing; other state and national data sources such as the Massachusetts APCD	HPC 2015a
HPC	2015 Cost Trends Report: Provider Price Variation	1/2016	2009-2014	HPC, AGO, CHIA	HPC 2015b

These reports cover a range of topics that include trends in total health care expenditures (THCE); total medical expenses in the commercial and public market sectors; and commercial market enrollment, premiums, and cost-sharing. Several reports highlighted price variation among health care providers, and assessed this variation in terms of market share, quality of care, provider volume, and other hospital attributes. Multiple reports discussed the promotion and adoption of alternative payment methods (APMs) and other cost-containment initiatives aimed at providers; similarly, reports discussed consumer-focused initiatives to incentivize and educate individual consumers to make informed and value-based health care decisions. Finally, several reports discussed the current state of behavioral health care in Massachusetts, in terms of health care spending, care coordination, and available data.

Key Findings

Status of Findings from the 2014 Review of State Reports

This year's analysis re-examined the 10 key findings first identified in the 2014 review of state reports. This section outlines the status of those findings in light of the nine new reports that the AGO, the HPC, and CHIA published over the past two years. Overall, the reports published from 2014-2015 showed findings that were largely consistent with those previously identified.

FINDING 1

Provider price, not utilization of health care services, is the biggest cost driver in the Massachusetts market.

The 2014 paper discussed how provider prices consistently drove increases in Massachusetts' health care spending, with an observed trend from 2001-2011 that was most pronounced in the commercial market. This trend has continued in recent years.[7,11,12,14] The HPC attributed growth in total health care expenditures (THCE) from 2012-2013 to provider price increases rather than to service utilization.[7] Commercial payers that testified for the HPC's 2014 Cost Trends Hearing confirmed that this persisted in 2014.[14]

FINDING 2

There is a significant gap between the highest and lowest paid providers.

Provider price variation has been a recurring trend since 2010, and higher prices continue to be associated with the same providers year after year.[13] In 2015, CHIA reported that 2013 prices varied among providers within individual payer networks – particularly those payers with smaller market shares, suggesting the impact that market share has on reimbursement arrangements. Both CHIA and the HPC observed significant price variation among both hospitals and physician groups.[9,12] Figure 1 below, drawn from the HPC's *2015 Cost Trends Report*, shows a 50% variation in spending for a low-risk pregnancy episode between the highest and lowest priced hospitals – a variation that was primarily due to price. Moreover, the HPC's *2015 Cost Trends Report: Provider Price Variation* found that, among the three major commercial payers, the highest-priced hospitals

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received payments that were 2.71 to 3.36 times higher than those received by the lowest-priced hospitals in 2014. Similarly, the highest-priced physician groups received 2.62 to 3.32 times higher payments than the lowest-priced groups in 2013, a slight increase from 2009.[12]

The HPC also found cost variation both across and within different hospital types (e.g. academic medical centers, teaching hospitals, and community hospitals).[12,14]

Over the past two years, provider price variation has seen no improvement,[12,14] and there is evidence that the price gap is growing wider.[12] Current cost containment measures show little evidence of improving provider price variation, and may in fact contribute to the problem.

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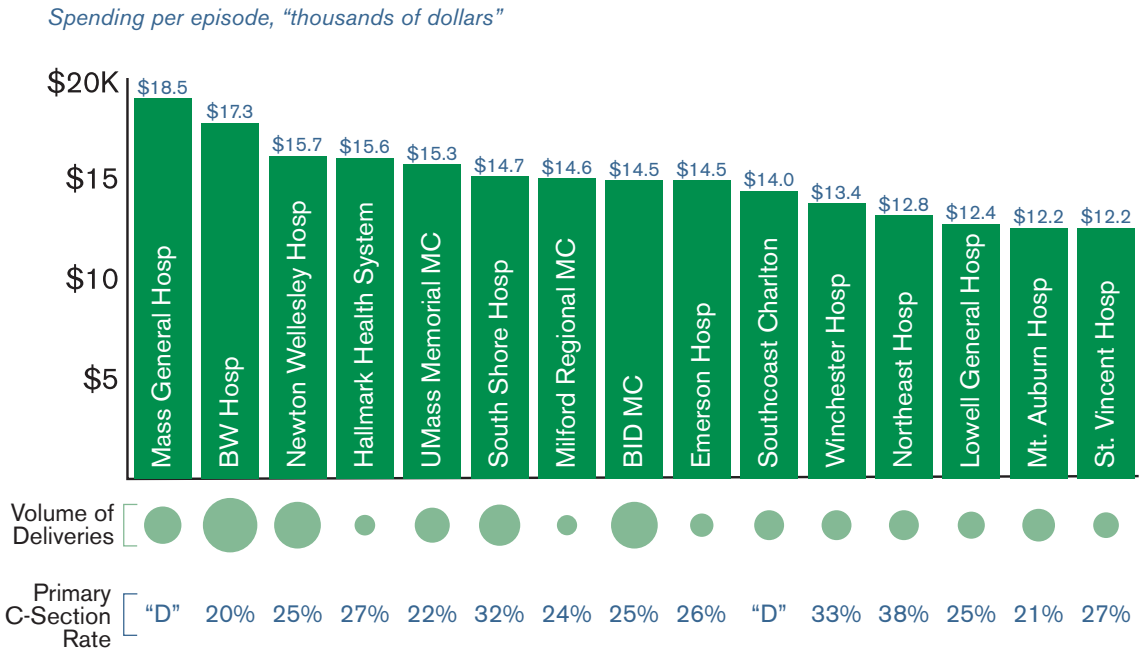
The AGO's September 2015 report highlighted the price variation that is seen in global payments, which suggests that alternative payment methods will not necessarily help address provider price disparity, and may instead perpetuate historic inequalities in new payment models. In addition, the AGO posited that the state's cost growth benchmark may inadvertently widen the provider price gap: in order to maintain their fixed contracts with higher priced providers and still meet the benchmark, commercial payers may be pressured to reduce their reimbursement rates to already low-priced providers. The AGO's September 2015 report recommended potential regulation of provider price variation,[13] similar to its 2010 conclusions.[15] In both its 2015 reports, the HPC argued that provider price variation will not improve without policy intervention, and recommended that the state take action to address the issue.[12,14]

Figure 1: Variation in hospital episode spending for normal deliveries, selected hospitals, 2011-2012[14]



Reference: *2015 Cost Trends Report* (January 2016), Health Policy Commission. Page 50.
Data sources: HPC Analysis of All-Payer Claims Database, 2011-2012, HPC analysis of CHIA Hospital Inpatient Discharge Database, 2014; Leapfrog Group.
Note: "D" indicates the hospital did not provide data on its primary C-section rate.

FINDING 3

Health care is most often delivered in higher priced settings.

Since 2001, Massachusetts has observed a shift in health care utilization towards higher priced settings.[7] As discussed in the 2014 review of state reports, 80% of spending for acute hospitals and physicians went to higher priced providers in 2011 and 2012.[11,16]

Several new state agency reports highlight this continued trend. The HPC's *2015 Cost Trends Report: Provider Price Variation* found that hospitals with the highest relative prices had a significantly larger share of inpatient stays, outpatient visits, and inpatient and outpatient revenue.[12] Similar to this, CHIA's 2015 report on provider price variation showed that in 2013, among all commercial payers, 86% of payments for inpatient services went to more expensive acute hospitals, as did 73% of payments for outpatient services; this is consistent with data from 2010-2012.[9]

CHIA's 2015 report on provider price variation showed that in 2013, among all commercial payers, 86% of payments for inpatient services went to more expensive acute hospitals, as did 73% of payments for outpatient services.

The AGO found that more expensive hospitals also increased their market share: for commercial discharges from 2009-2014, the market share of more expensive hospitals increased by 2.3 percentage points, with a corresponding loss in market share among less expensive hospitals.[13] The AGO observed this trend statewide, as well as regionally within Massachusetts.[13] In addition, the HPC's 2015 analysis of spending variation on low-risk pregnancy episodes showed that the higher cost hospitals tended to have higher service volume (see Figure 1, above).[14] Furthermore, the HPC noted a shift in service volume from non-hospital settings to hospital outpatient departments, where services tend to be more expensive. This change has increased hospital outpatient spending, and the HPC largely attributed it to physician practices' increased affiliation with hospitals (as discussed more in Finding 9).[14]

FINDING 4

High prices do not directly correlate with higher quality of care; in other words, the highest paid providers do not necessarily provide the highest quality of care.

Continuing the trend described in the 2014 analysis, there remains no significant association between provider quality and cost. Both CHIA and the AGO found some variation in provider quality against certain measures;[8,13] however, the AGO's analysis determined that no hospitals stood out as significantly higher or lower quality across *all* quality measures.[13]

The AGO studied tiered network products offered through the three largest commercial carriers in the state. All three carriers included several high priced providers in their "better value" tier (with value defined in terms of cost and quality), even though these higher priced providers were not actually associated with better quality of care than their lower-priced peers in the same tier.[13]

In addition, the HPC studied variation in spending, utilization, and quality of low-risk pregnancy episodes across a range of hospitals. When quality was compared using the hospital's rate of cesarean sections as the quality measure, higher-priced hospitals showed no consistently higher quality than lower-priced hospitals (see Figure 1, above); the HPC concluded that the cost variation it observed across selected hospitals was not significantly due to variation in cesarean section rates.[14] In a separate analysis, the HPC studied select medical procedures, including joint replacements and percutaneous coronary intervention (PCI), among several Massachusetts hospitals to determine price and quality differences. They found significant variation in price across these hospitals, despite no statistically significant variation in quality outcomes. Higher priced hospitals received higher reimbursement for these procedures but did not produce better outcomes than their peers.[7] Additionally, analyses done by the HPC using national quality composite measures found no significant association between a hospital's price and its quality of performance or rate of complications.[12] These findings show that the demonstrated trend of provider price variation is not linked to significant differences in provider quality.

FINDING 5

Providers with the highest public payer case mix have the lowest commercial reimbursement.

Several reports included in the 2014 analysis demonstrated that hospitals that receive high volumes of publicly insured patients – such as those federally designated as Disproportionate Share Hospitals (DSHs) – receive lower reimbursement rates from commercial carriers.[2,15,16,17] Two of the nine reports analyzed for this year's paper also highlighted this finding. CHIA reported that DSHs typically had lower relative prices across all payers in 2013. Furthermore, DSHs continued to receive one of the lowest shares of total acute hospital payments at 14% along with teaching hospitals, compared to the 40% of total acute hospital payments that go to AMCs and 19% that go to community hospitals.[9] This is consistent with CHIA's findings in 2011.[17] The HPC's *2015 Cost Trends Report: Provider Price Variation* echoed this finding, reaffirming that a greater share of public-payer patients was associated with lower commercial prices. This was found to be true for hospitals with a higher share of Medicare patients as well as those with more MassHealth patients.[12]

FINDING 6

Academic medical centers are associated with higher health care costs.

The 2014 review shared evidence from several state reports that AMCs are associated with higher prices, higher payments, and higher patient volume than hospitals designated as DSH or community hospitals.[2,17,18] New reports from CHIA and the HPC indicate that this trend has continued in recent years. These reports cited that AMCs represent a high volume of hospital discharges, are more expensive than other types of hospitals on multiple procedures,[7,14] and have a higher relative price than the network average across all payers.[9,12]

In its *2014 Cost Trends Report*, the HPC studied price variation for select services among several hospitals using 2012 payer data. Average commercial payments for hip and knee replacements were reviewed for AMCs, hospitals affiliated with an AMC, hospitals unaffiliated with an AMC, and

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a specialty hospital that acted as the control. The HPC found that AMCs were more expensive than all the other hospital types, and received 23% and 15% more in average payments than the control hospital for hip and knee replacements, respectively. Hospitals that were affiliated with AMCs were the second most expensive group for both hip and knee replacements. Similarly, the HPC studied price variation for PCI among AMCs, teaching hospitals, and community hospitals. AMCs were found to be more expensive than the other two hospital types. As noted in Finding 4, this analysis did not find better quality outcomes to be associated with these higher prices.[7]

FINDING 7

In response to increasing provider prices, the commercial market is seeing increased consumer cost sharing.

The 2014 review of state reports discussed the increases in commercial premiums, benefit buy down, and consumer cost sharing due to cost increases in the commercial market. New reports from the AGO, the HPC, and CHIA commented on this trend. Out-of-pocket spending among consumers increased from 2010-2012,[11] but leveled out from 2012-2013.[7,19] CHIA found that from 2013-2014, premiums and member cost sharing increased, but at the same rate as inflation.[8] Meanwhile, benefit levels stayed the same from 2012-2014.[13,19]

The HPC reported that in recent years, historically high Massachusetts premiums have become increasingly similar to the national average. In 2011, annual family premium levels in Massachusetts were about $2,000 more than the national average; in 2014, this difference shrunk to around $1,000, due to faster premium growth nationally and slower growth in Massachusetts. However, while the state's premium increases are slowing down, cost sharing is increasing. The HPC reported that out-of-pocket spending among the commercially insured increased 4.9% in 2014, and Massachusetts premiums remain among the highest in the country.[14]

CHIA also reported significant variation in cost sharing among different market segments. From 2013-2014, the largest cost sharing increases were observed in the Mid-Size Group (51-100 employees) and Jumbo Group (500+), but the highest levels of cost sharing were seen in the Individual and Small Group (1-50) segments.[8] Reports suggest that these high levels of consumer cost sharing in the Individual and Small Group markets may be partially attributable to a higher enrollment in high deductible health plans (HDHPs) in these segments.[8,19]

Overall, HDHPs represented 19% of the commercial products in 2014 (an increase from 14% in 2012).[8,14] In addition, consumer cost sharing increased at a faster rate among self-insured plans than fully-insured plans from 2013-2014.[8]

As highlighted in several reports, consumer-directed efforts to reduce health care costs and consumer cost sharing include enrollment in limited network plans, tiered network plans, and other value-based insurance products, as well as efforts to increase consumer awareness and education.[7,13,14]

FINDING 8

Market share impacts health care costs by influencing price, utilization, and available resources.

New reports continue to acknowledge the effects that market share has on prices, utilization, and available resources for both providers and payers in Massachusetts. CHIA's analysis of provider price variation found that hospitals with higher market shares tended to have high relative price within a payer's network, while those with lower market shares had lower relative price. This analysis identified AMCs among the providers with higher market shares and relative prices, and listed most DSHs among those with lower market shares and relative prices (consistent with Finding 5).[9]

Additionally, market share impacts payers' abilities to negotiate prices. CHIA found that payers that had smaller market shares saw more variation in the inpatient prices that they negotiated with providers in their networks, while the three largest payers tended to negotiate prices closer to their network averages.[9] These 2013 findings are consistent with those that CHIA found in 2010 and 2011.[2,17] The HPC also noted that providers' market share can leverage higher prices,[14] with those higher prices stemming from decreases in competition and increases in system size.[12]

Market share also affects patient volume. The HPC noted that the five hospital systems with the biggest market shares in Massachusetts represented 48% of commercial inpatient discharges in 2009, 51% in 2012, and 56% in 2014; it attributed this growth in discharges to market share increases.

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The AGO noted a perpetual cycle of resource disparities between high-priced and low-priced providers, and the impact that these disparities have on a provider's ability to maintain competitive leverage in the marketplace. High-priced providers are more financially stable and can invest in more resources to expand their business and strengthen their position in the market – which, in turn, puts them in a position to negotiate higher prices. Meanwhile, low-priced providers often do not have sufficient resources to increase their market shares, making it difficult for them to demand higher prices.[13]

FINDING 9

There is growing policy concern that provider consolidation may lead to higher prices, rather than savings from integration of care or improved efficiency.

State reports reviewed for this analysis, as well as those discussed in the 2014 paper, highlighted the state's increased awareness of the potential impacts that market changes such as provider mergers and acquisitions may have on costs, access, and quality in the health care market. For example, the HPC has cited national evidence that market consolidations may be linked to decreased quality of care, rather than to quality improvements.[14] Moreover, when the HPC studied hospital system affiliation using staffed beds as its metric for system size, it observed that an increase in staffed beds was linked to lower prices among smaller-sized systems but was associated with higher prices in larger systems – indicating that the potential for increased efficiency and savings from hospital growth may diminish as systems grow larger.[12]

The HPC has cited national evidence that market consolidations may be linked to decreased quality of care, rather than quality improvements.

Part of the HPC's role under Chapter 224 is to monitor these provider consolidations, assess their potential impacts in a Cost and Market Impact Review, and publicly report those findings.[20] The agency documented 53 notices of material changes from providers in Massachusetts from 2013-2015, conducted four CMIRs, and authorized two additional CMIRs for 2016.[14] The Cost and Market Impact Reviews completed to date have found evidence of the potential for both cost savings and cost increases due to provider consolidation,[11] but the HPC acknowledges indications that increases in spending typically surpass any benefits of these consolidations.[7]

For example, the HPC notes the impact that hospital system consolidations may have on patient volume: as mentioned in Finding 8, the share of total commercial inpatient discharges for the state's five major hospital systems increased by five percentage points from 2012-2014, and the HPC's *2015 Cost Trends Report* linked this to the expansion of one of these hospital systems during that time.[14] In its 2014 report, the HPC had projected that future consolidations to expand these systems may further increase their share of total commercial discharges.[7] In its review of four proposed provider mergers, the HPC raised concern of price increases even in cases where cost savings were possible, due either to lack of confidence that such savings would materialize, or that any savings would be passed through to payers and consumers.

Furthermore, the HPC noted the cost impacts of physician group acquisitions and affiliations with hospital systems. The agency's *2015 Cost Trends Report* highlighted that primary care physician (PCP) affiliations with hospital systems in Massachusetts have increased by nearly 14 percentage points from 2008-2014, and PCPs affiliated with hospital systems had a higher share of patient volume and revenue than non-affiliated PCPs.[14]

The HPC cited national evidence that physician group acquisitions produce price increases among both hospitals and physicians; additionally, it attributed the recent shift in service volume from non-hospital settings to hospital outpatient departments – and subsequent increase in hospital outpatient spending – to providers' alignments with hospitals.[14]

The HPC's reports reflect that provider consolidations involving both hospitals and physician groups continue to be a concern, and the state has continued its efforts to monitor provider consolidation and prevent negative impacts on the health care market.

FINDING 10

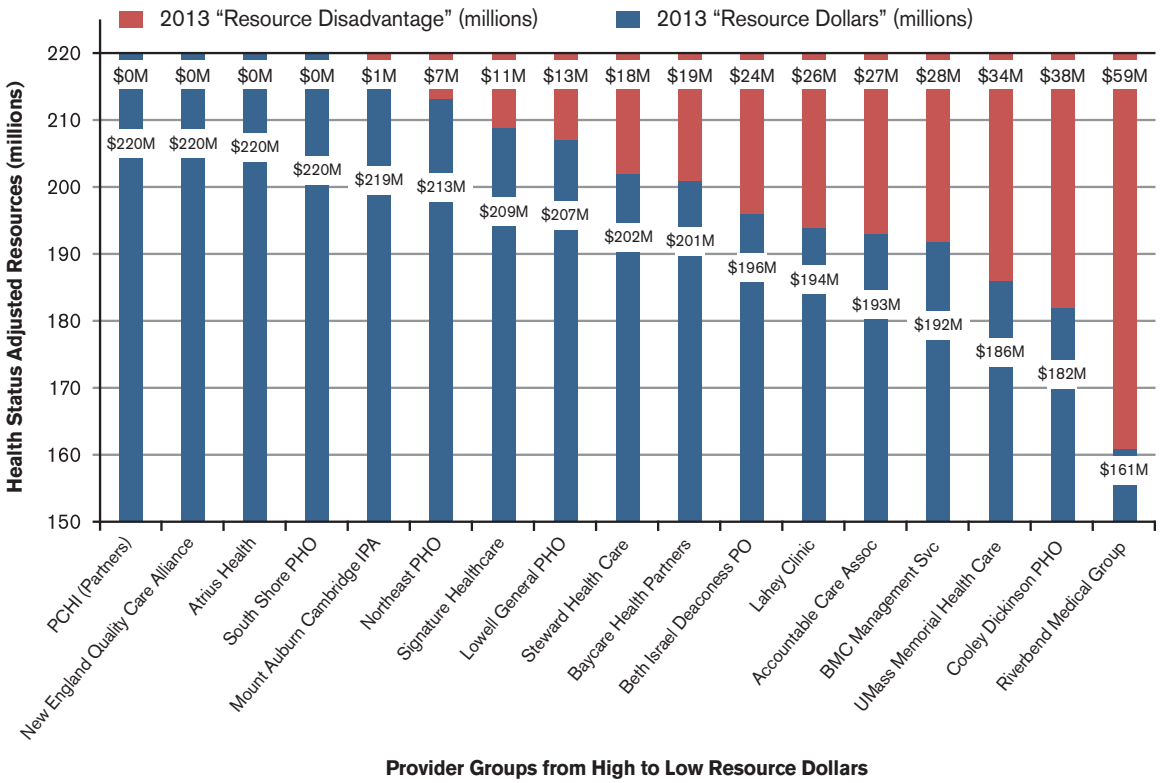
Despite its increasing promotion, the widespread adoption of global payments faces significant challenges, and there is limited evidence to suggest that global payments produce cost savings.

The state continues to promote alternative payment methods as a cost containment measure, of which global budgets are the most prevalent model in Massachusetts.[8,11] State agencies are also encouraging revised APM models to address ongoing challenges, which include strategies to incorporate behavioral health services, specialty services, and commercial PPO plans.[7,14,21]

Overall, adoption of APMs, particularly global budgets, has increased in Massachusetts.[13,14] The percentage of individuals enrolled in APMs did not increase in the commercial market from 2012-2013,[7] but did increase from 34% to 38% of the commercial market in 2014.[8,14] However, while adoption of APMs has increased, challenges to further expanding APM adoption persist.[7,11] In the AGO's study of current global payment arrangements, it observed provider price variation in global payments that did not correspond to differences in quality of care or patient health status (see Figure 2) and suggested that current APM models may actually contribute to continued market dysfunction.[13] The HPC's 2015 reports also mentioned that budgets for most APMs incorporate historic spending variation patterns that continue price disparity,[12,14] and recommended that this be addressed.[14]

In addition, despite the continued promotion of APMs, there continues to be limited evidence of associated cost savings. The state reports included in this year's analysis focused primarily on APM adoption and enrollment trends, rather than on trends in APM cost growth or APM cost savings. However, some reports cited outcomes that have been reported from APMs in Massachusetts and elsewhere. In its 2014 report, the HPC referenced a Medicaid coordinated care program with a global payment model in Oregon that is showing decreases in emergency department (ED) costs and utilization with corresponding increases in primary care visits. The HPC also reported findings from a bundled payment pilot program in Massachusetts yielding cost savings.[7,14]

Figure 2: Variation in Provider Group Health Status Adjusted Resources Available to Care for HMO/POS Risk Patients under Risk Contracts for a Major Commercial Insurer (2013)[13]



Reference: *Examination of Health Care Cost Trends and Cost Drivers Pursuant to G.L. c. 12, § 11N: Report for the Annual Public Hearing under G.L. c. 6D, § 8* (September 2015), Attorney General's Office. Page 18.

New Findings

In addition to the 10 initial findings, this year's analysis identified four new findings not previously discussed in the 2014 review of state reports.

FINDING 11

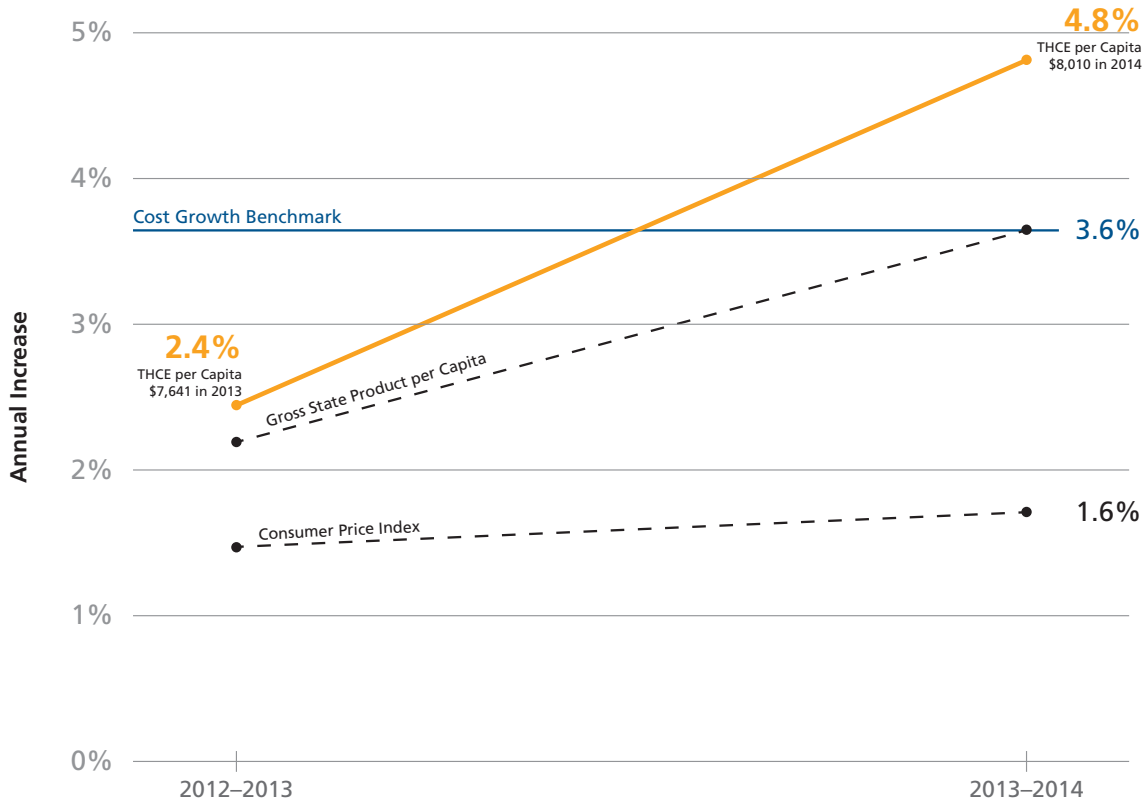
Performance against the cost growth benchmark is mixed.

Chapter 224 of the Acts of 2012 authorizes the HPC to determine an annual benchmark for the state's health care cost growth; for 2013 and 2014, the HPC set this benchmark at +3.6% cost growth. CHIA annually assesses the state's progress against this benchmark by analyzing the state's total health care expenditures (THCE).[19] In 2013, CHIA measured a +2.4% growth in THCE, which was below the cost growth benchmark and just below the state's economic growth rate.[7,8,19]

Massachusetts exceeded the benchmark in 2014, however, with a +4.8% growth in THCE. Figure 3, adapted from CHIA's 2015 report, shows how this increase exceeded state economic growth and inflation.[8] In its *2015 Cost Trends Report*, the HPC attributed 3.2 percentage points of this cost growth to increased MassHealth spending, and 1.6 percentage points to prescription drug spending.[14] Similarly, CHIA's analysis attributed the +4.8% cost growth primarily to a 23% increase in MassHealth enrollment and an associated 19% increase in MassHealth spending.

Increases in Medicare and commercial total medical expenses remained below the benchmark at 2.0% and 2.9%, respectively.[8] However, the HPC noted that, while two thirds of the spending growth came from MassHealth, per capita spending growth for MassHealth, Medicare, and the commercial market all remained well below the +3.6% benchmark.[14]

Figure 3: 2014 Spending Growth in Context of the Cost Growth Benchmark, Economic Growth, and Inflation[8]



Reference: Adapted from *Performance of the Massachusetts Health Care System: Annual Report, September 2015*, Center for Health Information and Analysis. Figure 1, page 10.
Data sources: CHIA and other public sources. Inflation data from the Bureau of Labor Statistics: Consumer Price Index 12-Month Percent Change. Gross State Product data from the U.S. Bureau of Economic Analysis: GDP by State in Current Dollars.

In its September 2015 report, the AGO suggested that the cost growth benchmark will be exceeded in 2015 if current price trends persist, due to anticipated increases in utilization and pharmacy expenses as well as fixed price increases that are already established in payers' contracts with certain high priced providers. The AGO projects that these increases will leave too small a margin for unit price increases in the rest of the market, which will in turn drive total medical expenses over the cost growth benchmark.

In its September 2015 report, the AGO suggested that the cost growth benchmark will be exceeded in 2015 if current price trends persist.

In anticipation of these changes, the AGO recommended potential regulation of provider price variations,[13] which echoes similar recommendations included in its 2010 report.[15] Similarly, the HPC's 2015 reports recommended policy action to address persistent provider price variation in the state.[12,14]

FINDING **12**

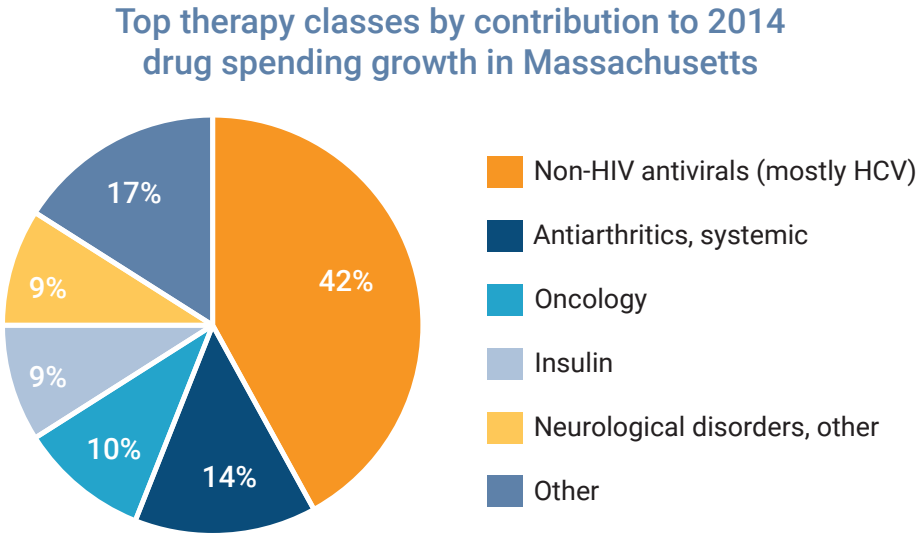
Pharmaceutical costs have been increasing and are expected to increase in the future.

As previously noted, while commercial spending in 2014 was below the cost growth benchmark, it did increase 2.9% largely due to a 12.5% spike in pharmacy spending that was comparable to national trends. This commercial pharmacy spending showed faster growth than that for other service types from 2013-2014;[8] in fact, physician and professional spending remained flat during this time, while hospital spending growth decreased.[14] Furthermore, according to the Division of Insurance and as cited in the AGO's September 2015 report, commercial carriers largely attribute 2016 premium rate increases to a significant upswing in both cost and utilization of name-brand drugs.[22] The HPC reported that, among all payers (commercial and public), per capita drug spending in Massachusetts grew by 13.4%, made up 13.5% of THCE, and contributed +1.6 percentage points to the +4.8% cost growth increase in 2014. As demonstrated in Figure 4 below, the primary driver of the state's increased prescription drug spending was price increases in antivirals such as Hepatitis C drugs, as well as other types of drugs. Spending on drugs used to treat the Hepatitis C virus increased by more than 350% from 2013-2014 in the state, and Massachusetts payers indicated that the presence of these drugs on the market negatively impacted their companies' finances in 2014.[14]

Based on information from CHIA and commercial payers, the AGO and the HPC anticipate that pharmacy spending will increase in the future and will contribute to the state's projected inability to stay below the cost growth benchmark in 2015.

Based on information from CHIA and commercial payers, the AGO and the HPC anticipate that pharmacy spending will increase in the future and will contribute to the state's projected inability to stay below the cost growth benchmark in 2015.[13,14] In its *2015 Cost Trends Report*, the HPC called for increased transparency on this issue, to provide more information on pharmacy prices and spending and to encourage value-based decision making.[14]

Figure 4: Drivers of Increased Prescription Drug Spending in Massachusetts, 2014[14]



Reference: *2015 Cost Trends Report* (January 2016), Health Policy Commission. Exhibit 4.4, page 34. Data source: IMS Health Incorporated

FINDING 13

The state is increasingly focused on behavioral health – specifically, the high cost associated with behavioral health conditions, the challenges of clinical and administrative integration of care, and the need for better data.

Four reports from the HPC and the AGO called attention to the state of behavioral health care in Massachusetts. The HPC found that behavioral health (BH) conditions are associated with high comorbidity with chronic conditions, frequent hospitalizations and ED visits,[11] and higher out-of-pocket spending.[7,14] Health care spending among patients with BH conditions was higher for both BH and non-BH services.[11] Among commercial and Medicare patients with the top 5% of total medical spending over a three-year period – whom the HPC classifies as "persistently high cost patients" – behavioral health conditions were among the most common conditions.[7] Furthermore, while the rate of ED visits decreased overall from 2010-2014, ED visits with a primary BH diagnosis increased across the state by nearly 24% from 2010-2014.[14] Due to these high spending levels, the HPC noted that further integration of behavioral health and medical care may result in increased cost savings.[11]

To address the issue of high health care spending and needs among BH patients, the HPC recommended several strategies. First, cost containment and quality improvement efforts should expand to include a stronger emphasis on behavioral health.[7] While various state agencies have ongoing behavioral health initiatives, the HPC called for a centralized approach that would align these efforts to strengthen the state's impact on behavioral health improvement. In addition, the HPC highlighted the need for more thorough and consolidated data to measure and evaluate behavioral health care utilization, spending, and quality.[7,11] Finally, the HPC discussed the need to examine the impact of current BH reimbursement arrangements on BH coverage, as well as the importance of risk adjusting APMs to ensure that patients have sufficient access to BH services.[7]

Similarly, the AGO's June 2015 report summarized how BH services are provided, administered, and reimbursed in Massachusetts. The report highlighted several key challenges to the system, including limited clinical and administrative coordination of medical and behavioral health services, insufficient and inconsistent data collection and access, and low BH reimbursement rates. The AGO called for increased attention to this issue when developing APMs, mirroring the HPC's recommendation. It also emphasized the critical importance of cohesive BH data systems statewide to allow stakeholders to measure BH access, utilization, quality, and costs in order to identify necessary reforms and interventions.[21]

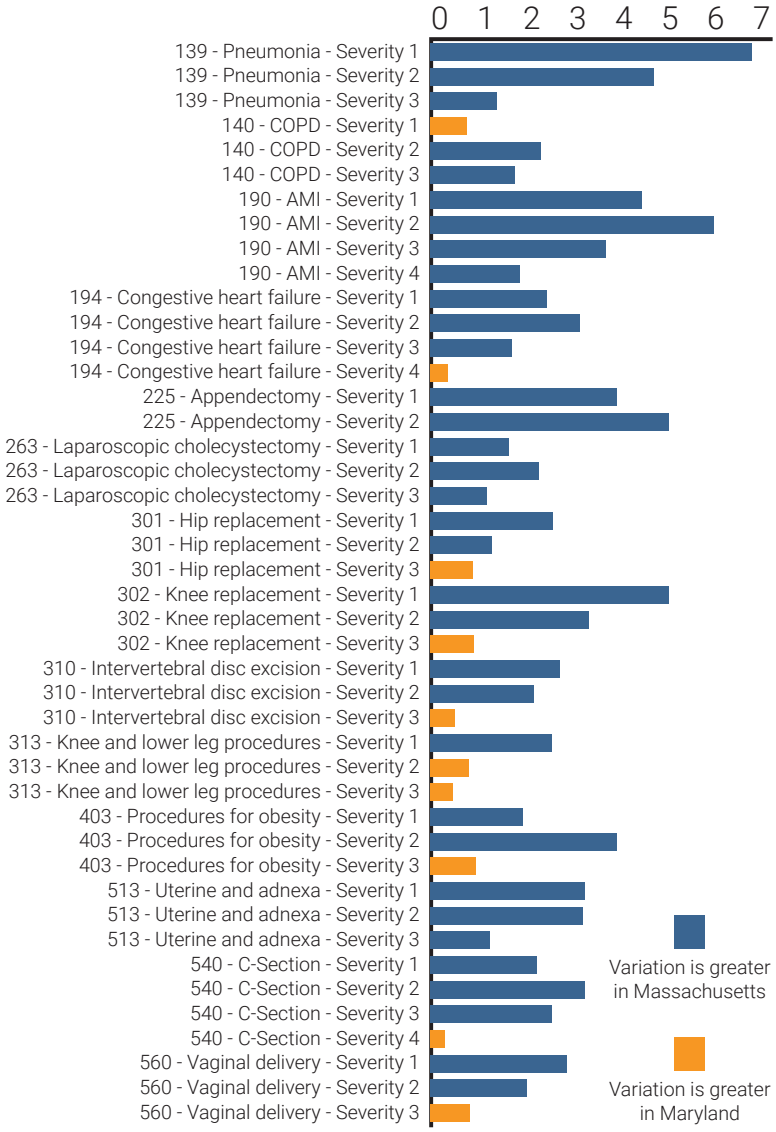
The four AGO and HPC reports highlight that behavioral health is a major driver of medical complications,[11] is associated with high costs and utilization,[7,11,14] and is subject to more complex delivery and administration than other medical conditions.[7] These reports call for increased attention to behavioral health – including better clinical and administrative integration with medical care;[11,14] better data for improved measurement and reporting of BH cost, spending, and quality;[7,11,14,21] and improved reimbursement arrangements.[7,14,21]

FINDING **14**

Due to persistent and increasing disparities in provider prices over the past several years, the state is recommending policy action be taken to reduce excessive price variation.

Among the publications reviewed for this year's analysis, three reports from the HPC and the AGO called for policymakers to identify strategies for reducing provider price variation in the Massachusetts market. As previously noted in Finding 2, provider price variation has been an ongoing challenge, with the highest-priced hospitals receiving a consistent 2.5 to 3.4 times more than the lowest-priced hospitals from 2010 to 2014, and the price gap increasing among physician groups from 2009 to 2013.[12] Figure 5 below provides a clearer image of the price disparity issue by demonstrating the severity of provider price variation in Massachusetts as compared to Maryland. The AGO and the HPC both noted that this variation will most likely continue in the future if current conditions remain as they are.[12,13,14]

Figure 5: Provider Price Variation in Massachusetts and Maryland[12]



Reference: *2015 Cost Trends Report: Provider Price Variation* (January 2016), Health Policy Commission. Exhibit 12, page 15.
Data sources: Department of Health Care Finance and Policy 2011 Report; Maryland Health Services Cost Review Commission.

In its *2015 Cost Trends Report: Provider Price Variation*, the HPC noted that there have been no health care reform endeavors so far that specifically aim to reduce excessive price disparities, although broader initiatives, such as Chapter 224 of the Acts of 2012 have attempted to prevent any increases in price variation.[12] While the AGO first proposed actions to address undue price variation in its 2010 report,[15] three of the newly analyzed reports published by the AGO and the HPC now explicitly call for regulatory and policy measures to be undertaken to remediate these disparities.[13,12,14] More specifically, the AGO's September 2015 report recommends directly regulating provider price variation and/or medical spending variation to diminish undue disparities,[13] while both of the HPC's 2015 reports call on legislators, policy makers, and other stakeholders to discuss and identify reforms to reduce excessive price variation and improve the state's health care system.[12,14]

Conclusion

New reports published by Massachusetts state agencies from 2014-2015 show that market conditions previously observed in Massachusetts health care remain largely unchanged. Provider prices continue to drive cost growth due to wide price variation and utilization of higher-priced providers. Characteristics such as market share, payer mix, and hospital designation continue to influence provider prices, while quality of care does not. State agencies continue to focus attention on studying consumer cost sharing, provider consolidation, and alternative payment methods in efforts to improve the health care system. New findings among the reports show the progress that the state has made to limit cost growth to date, and highlight state agencies' common recommendation for policy intervention to address provider price variation. They also include key considerations that will impact cost containment efforts in the future, namely behavioral health and pharmacy costs.

Each of these state agency reports provides invaluable insights into the current state of the Massachusetts health care system. Analyzing them side-by-side can further highlight the enduring and emerging trends in the Massachusetts marketplace. While there has been limited progress made in addressing the high costs of the state's health care system over the past two years, the nine recent reports reflect state agencies' increased emphasis on policy recommendations for the future. This year's analysis of those reports is intended to help inform policymakers' discussions of ongoing and future efforts to improve the cost and quality of the Massachusetts health care system.

Appendix I: Key Findings in State Reports from 2008-2015

			Previous Reports					New Reports	
	Finding	Agency	2008	2010	2011	2012	2013	2014	2015
PREVIOUS FINDINGS	1. Costs primarily driven by provider price	AGO		✓			✓		
		CHIA			✓	✓			
		HPC					✓	✓✓	✓✓
		DOI	✓						
	2. High provider price variation	AGO		✓	✓		✓		✓
		CHIA		✓	✓	✓	✓✓✓		✓
		HPC					✓		✓✓
		DOI							
	3. Higher utilization of more expensive providers	AGO		✓					✓
		CHIA				✓	✓✓		✓
		HPC						✓✓	✓✓
		DOI							
	4. No association between provider price and provider quality	AGO		✓	✓		✓		✓
		CHIA			✓	✓	✓✓		✓
		HPC					✓	✓	✓✓
		DOI							
	5. Lowest reimbursement among providers with high public payer case mix	AGO		✓					
		CHIA			✓	✓	✓		✓
		HPC							✓
		DOI							
	6. Higher health care costs among AMCs	AGO							
		CHIA		✓		✓	✓✓✓		✓
		HPC						✓	✓✓
		DOI							
	7. Increased consumer cost sharing in the commercial market	AGO		✓			✓		✓
		CHIA				✓	✓	✓	✓
		HPC					✓	✓✓	✓
		DOI							
	8. Market share influences reimbursement, spending, and volume	AGO		✓					✓
		CHIA		✓		✓	✓✓✓		✓
		HPC					✓	✓✓	✓✓
		DOI							
	9. Concern over impacts of provider consolidation	AGO					✓		
		CHIA		✓			✓		
		HPC					✓	✓✓	✓✓
		DOI							
	10. Challenges to adoption of global payments	AGO		✓	✓		✓		✓✓
		CHIA			✓		✓		✓
		HPC					✓	✓✓	✓✓
		DOI							
NEW FINDINGS	11. Mixed performance against the cost growth benchmark	AGO	Prior reports not reviewed for 2016 analysis.						✓
		CHIA						✓	✓
		HPC						✓	✓
	12. Rising pharmaceutical costs	AGO	Prior reports not reviewed for 2016 analysis.						✓
		CHIA							✓
		HPC							✓
	13. Behavioral health costs and administrative complexity	AGO	Prior reports not reviewed for 2016 analysis.						✓
		CHIA							
		HPC						✓✓	✓
	14. Recommendations of policy action to remedy excessive provider price variation	AGO	Prior reports not reviewed for 2016 analysis.						✓
		CHIA							
		HPC							✓✓

Note: Each ✓ represents one report among those reviewed for analysis. CHIA reports from 2008-2012 were published under the agency's former name, the Division of Health Care Finance and Policy.

Footnotes

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[3] Health Policy Commission. *2013 Cost Trends Report*. Available at http://www.mass.gov/anf/docs/hpc/2013-cost-trends-report-final.pdf. Accessed on December 10, 2015.

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[11] Health Policy Commission. *2013 Cost Trends Report – July 2014 Supplement* (July 2014). Available at: http://www.mass.gov/anf/docs/hpc/07012014-cost-trends-report.pdf. Accessed on December 11, 2015.

[12] Health Policy Commission. *2015 Cost Trends Report: Provider Price Variation* (January 2016). Available at: http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/publications/2015-ctr-ppv.pdf. Accessed on January 21, 2016.

[13] Office of Attorney General Maura Healey. *Examination of Health Care Cost Trends and Cost Drivers, Pursuant to G.L. c. 12, § 11N: Report for the Annual Public Hearing under G.L. c. 6D, § 8* (September 2015). Available at: http://www.mass.gov/ago/docs/healthcare/cctcd5.pdf. Accessed on December 11, 2015.

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Re-examining the Health Care Cost Drivers and Trends in the Commonwealth

A REVIEW OF STATE REPORTS (2008–2015)