Community Hospitals at a Crossroads

Findings from an Examination of the Massachusetts Health Care System

MASSACHUSETTS
HEALTH POLICY COMMISSION

Background of the report: building a path to a thriving, community-based health care system

The need for the report

- Hospitals and health systems across the country are facing **unprecedented impetus to adapt** to new care delivery approaches and value-based payments
- Community hospitals are under particular pressure to change and are uniquely challenged **by current market and utilization trends,** as evidenced by a number of recent consolidations, closures, and conversions in Massachusetts
- The state is pursuing sweeping delivery system transformation to achieve shared cost containment goals, and effective, **action-oriented planning is necessary**

Objectives of the report

- To understand and describe the **current state of and challenges facing community hospitals**
- To examine the implications of **market dynamics** that can lead to elimination or reduction of community hospital services
- **To identify challenges to and opportunities for transformation** in community hospitals
- To **encourage proactive planning** to ensure sustainable access to high-quality and efficient care and catalyze a **multi-stakeholder dialogue** about the future of community health systems

> *"I don't see any future for community hospitals…I think there's a **fantastic future for community health systems**. If small stand-alone hospitals are only doing what hospitals have done historically, I don't see much of a future for that. But I see a **phenomenal future** for health systems with a strong community hospital that breaks the mold [of patient care]."*
>
> *COMMUNITY HOSPITAL CEO*

Key themes of the report

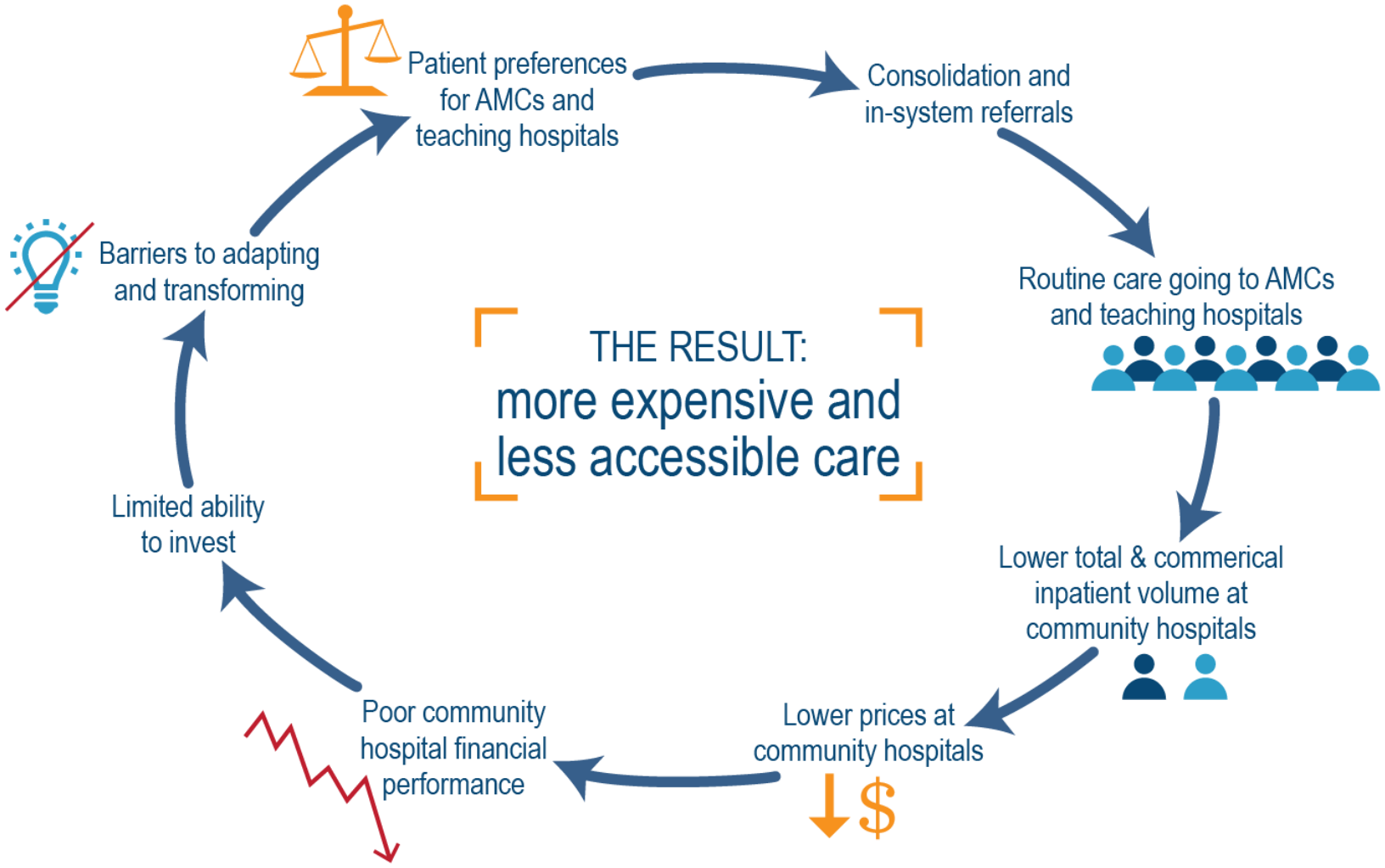
Community hospitals provide a unique value to the Massachusetts health care system

- While individual characteristics vary, as a cohort community hospitals play a critical role in care for publicly insured patients; providing local, community-based access; and, in particular, meeting behavioral health needs
- Community hospitals provide more than half of all inpatient discharges and more than 2/3 of all ED visits statewide
- Community hospitals generally provide high-quality health care at a low-cost, providing a direct benefit to the consumers and employers who ultimately bear the costs of the health care system

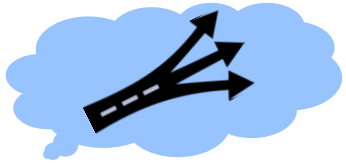
The traditional role and operational model for many community hospitals faces tremendous challenges

- Community hospitals generally have worse financial status, older facilities, and lower average occupancy rates than AMCs and teaching hospitals
- Many hospitals face barriers to transformation:
  - Consolidation of acute and physicians services into major health systems
  - Routine care going to AMCs and teaching hospitals
  - Lower commercial volume and prices leading to lack of resources for reinvestment
  - Difficulty participating in current alternative payment models

Community hospitals face self-reinforcing challenges that lead to more expensive and less accessible care



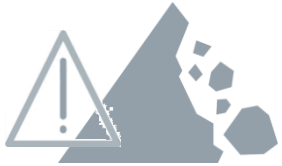
Community Hospitals at a Crossroads: Findings from an Examination of the Massachusetts Health Care System

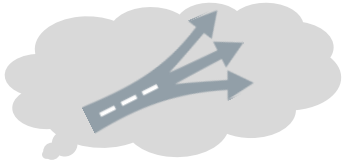


Overview | **Value** | **Challenges** | **Path Forward**

- An **overview** of community hospitals in Massachusetts
- The **value** of community hospitals to the health care system
- **Challenges** facing community hospitals
- The **path** to a thriving community-based health care system

An overview of community hospitals in Massachusetts

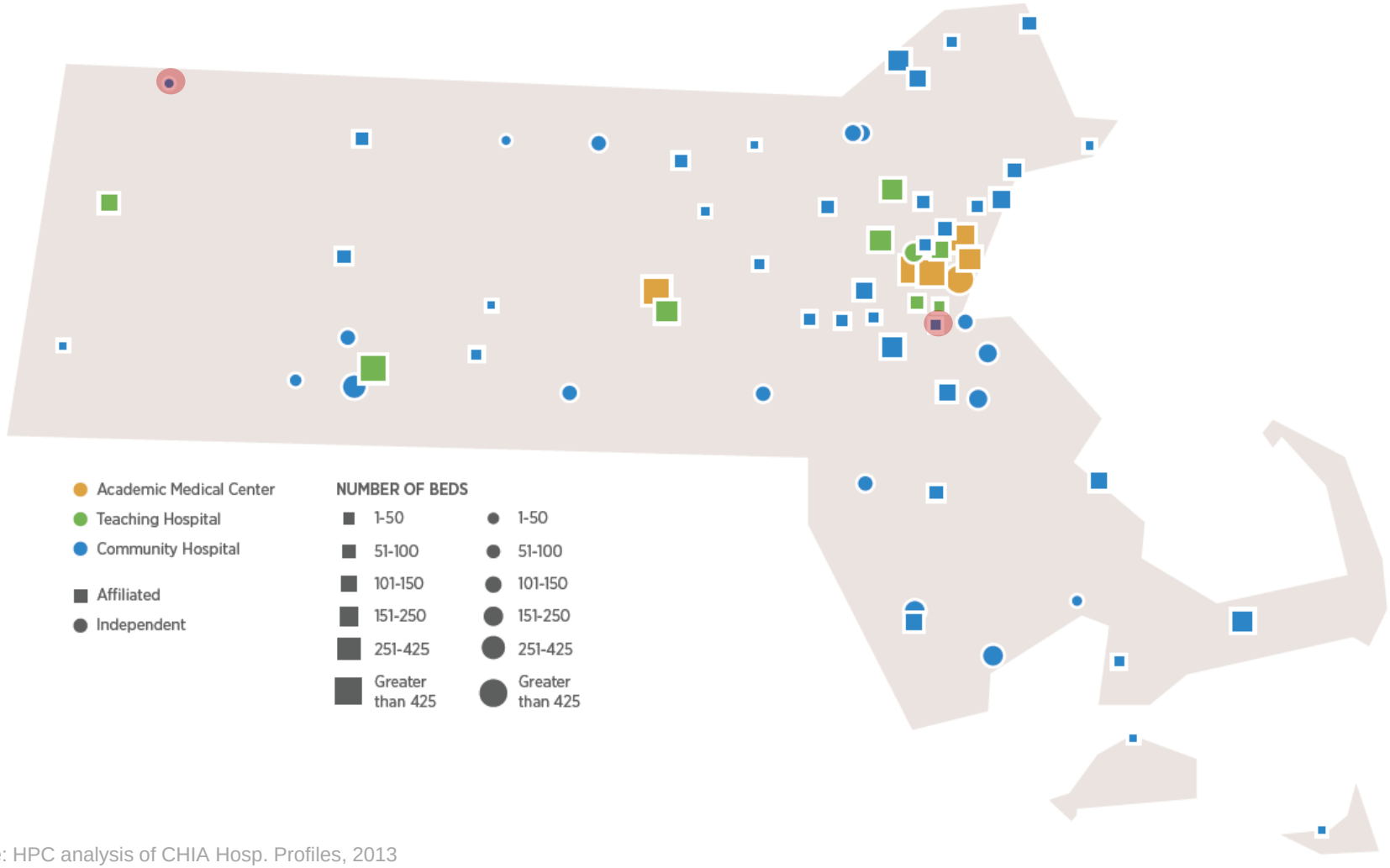




Overview | **Value** | **Challenges** | **Path Forward**

- Key distinguishing features of community hospitals (geographic distribution, patient populations, services, financial condition)
- Key community hospital trends (transitions, consolidation and closure)

Community hospitals serve all parts of the Commonwealth



Source: HPC analysis of CHIA Hosp. Profiles, 2013

Community hospitals at a glance

43
Community Hospitals

27 DSH | **18** non-DSH

7,518 | 52%
more than half of beds statewide
(19 – 556)

417,275 | 51.3%
more than half of discharges statewide
(556 – 40,303)

5.8 million | **42** %
outpatient visits

1.9 million | **65** %
2/3 of ED visits
(10,329 – 155,236)

64% community hospitals | **84%** AMCs
low occupancy rate
(29% – 74%)

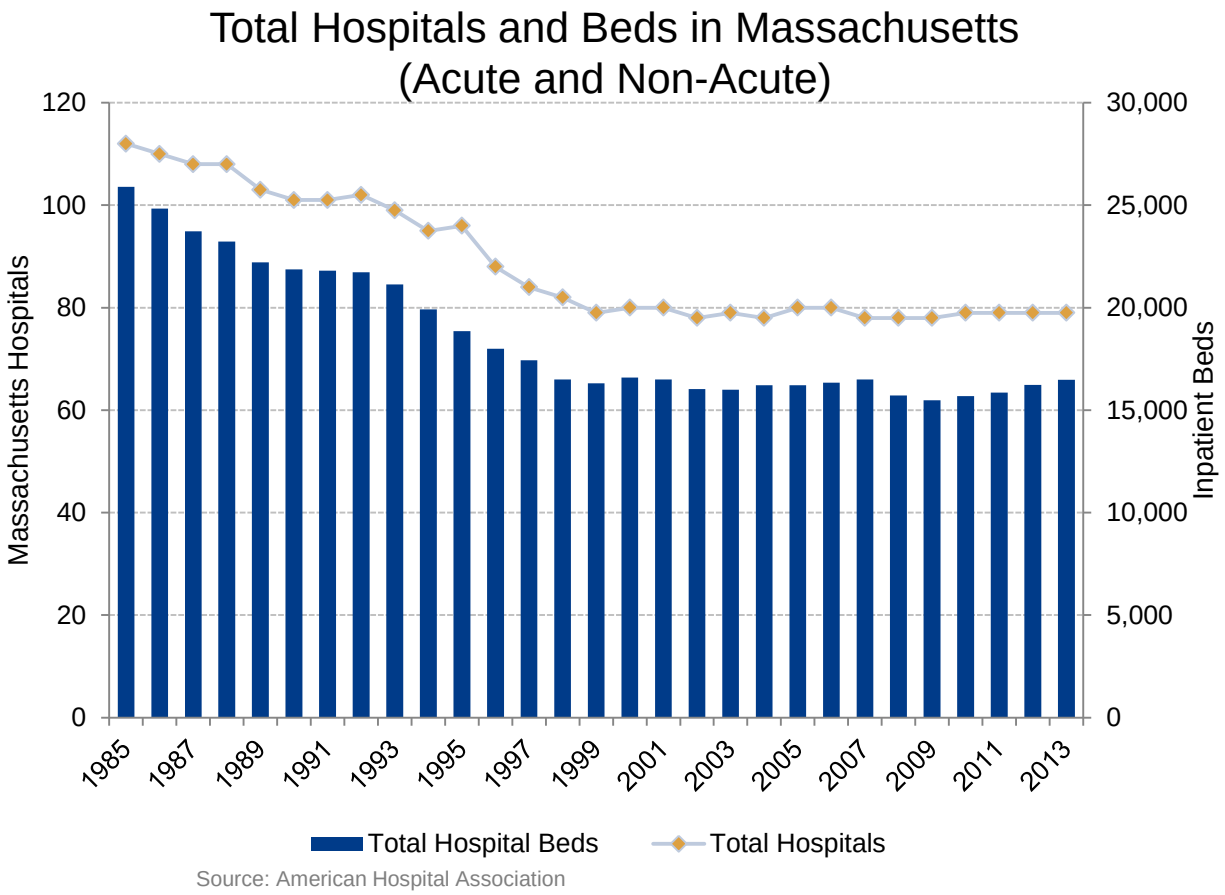
0.8 community hospitals | **1.33** AMCs
low case mix index
(0.60 – 0.93)

9.3 minutes | **+11** minutes
local patients drive 9.3 minutes on average to community hospitals; they would drive 11 minutes more on average to get to the next closest hospital

Older age of plant
Community hospitals generally have older physical plants than AMCs or teaching hospitals

Higher public payer mix
Community hospitals generally have disproportionately high shares of Medicaid and Medicare patients

Consolidations and closures over the last 30 years have contributed to a dynamic hospital market in Massachusetts



Source: American Hospital Association

Recent Conversions in Massachusetts Have Had Varied Impact

North Adams Regional Hospital

Steward Quincy Medical Center

Two Conversions Are Being Currently Contemplated

Baystate Mary Lane Hospital

Partners North Shore Medical Center – Union Hospital

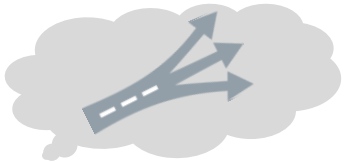
Hospital-related Material Change Notices since 2013

11
mergers or acquisitions of one hospital by another

16
new contracting or clinical relationships between hospitals

5
hospitals acquiring physician groups

The value of community hospitals to the health care system



Overview | **Value** | Challenges | Path Forward

Community-based care and access

- Care close to home / drive time analyses
- Patient populations / payer mix

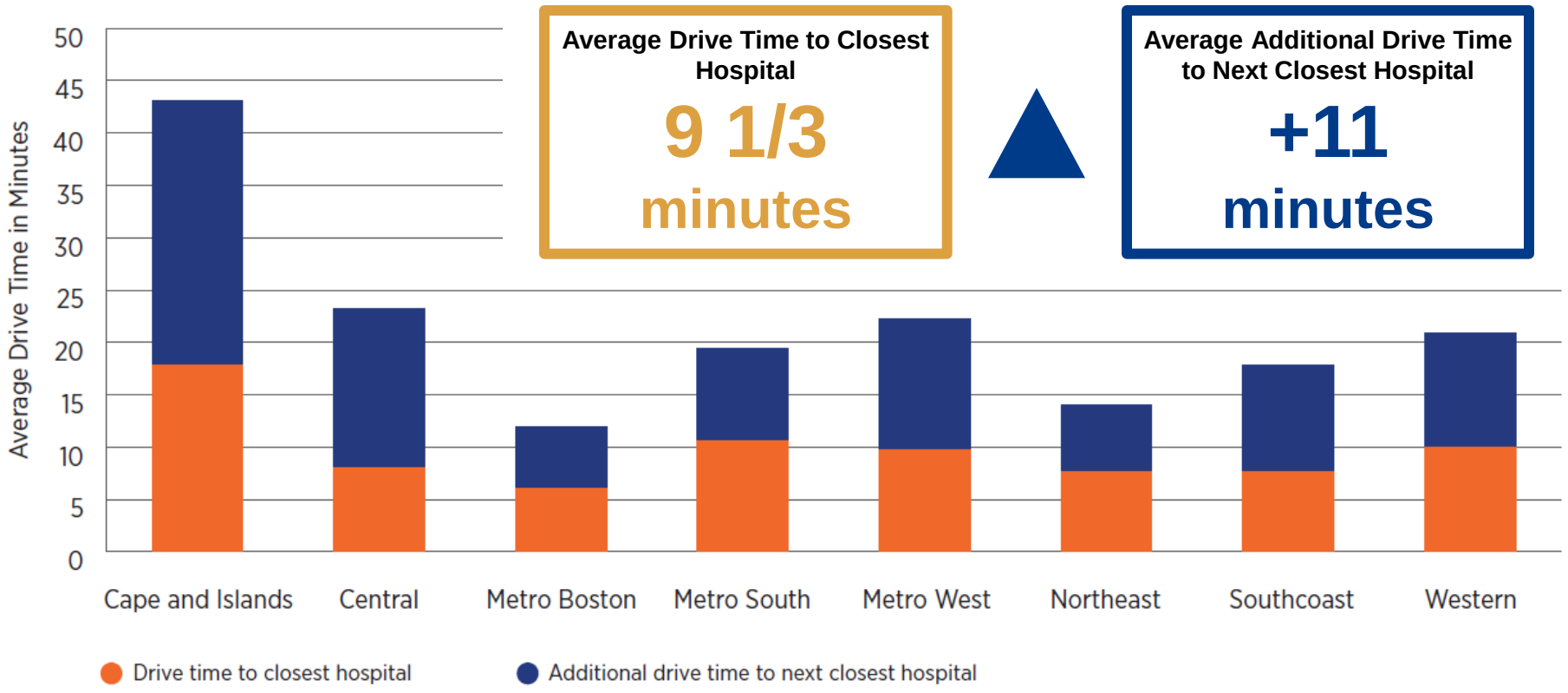
Quality and Efficiency

- Examination of quality performance by community hospitals and patient perception of quality and value
- Variation in spending and costs for community-appropriate care at community vs other hospitals

Community hospitals provide local access for local patients

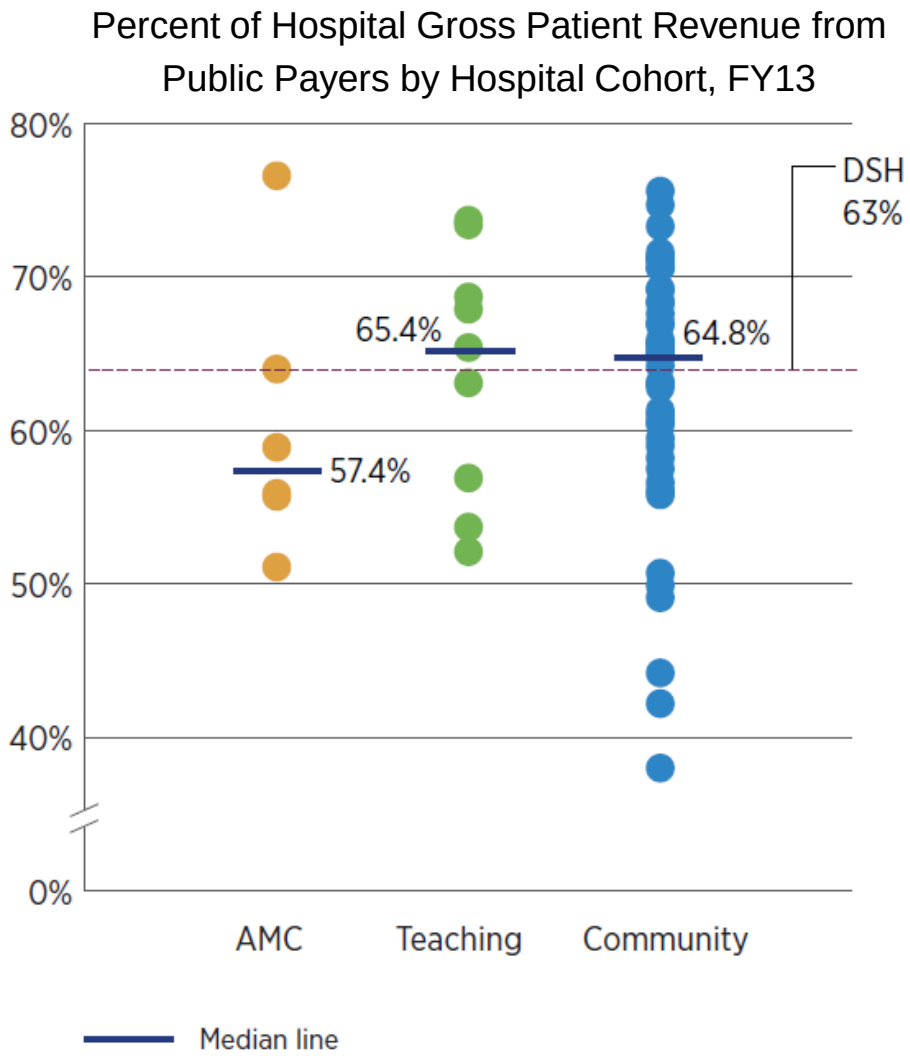
Average Drive Times for Patients Using Their Local Community Hospital

Analysis of patients who use their closest community hospital as a usual site of care



Source: HPC analysis of MHDC 2013 discharge data.
Notes: Drive times may underrepresent travel time and travel time differentials for populations relying on public modes of transportation. The Cape and Islands region includes only Falmouth and Cape Cod Hospital for the purposes of this analysis, since measuring drive times for Hospitals on Nantucket and Martha's Vineyard islands would not be meaningful.

Community hospitals serve a high proportion of vulnerable populations for whom access to care is often difficult, such as elders, individuals with disabilities, and individuals with low incomes



> *The community hospital plays a role as a cultural and social staple for the community that it serves. It's the place you're born at, that you grow up with, and get most of your basic care at…The state should ensure access to community-based, cost-effective care*
>
> *MASSACHUSETTS STATE LEGISLATOR*

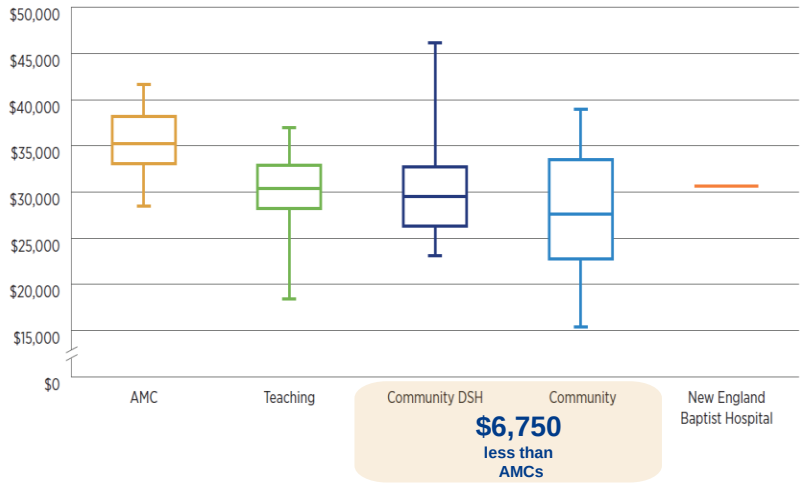
Source: HPC analysis of CHIA Acute Hosp. Databook, supra footnote 11, at Appendix D.
Note: Public payers include Medicate and Medicaid/MassHealth fee for service and managed care plans, Health Safety Net payments, and charges designated by hospitals as "other government."

Spending at community hospitals is generally lower for low-acuity orthopedic and maternity care and is not associated with any difference in quality

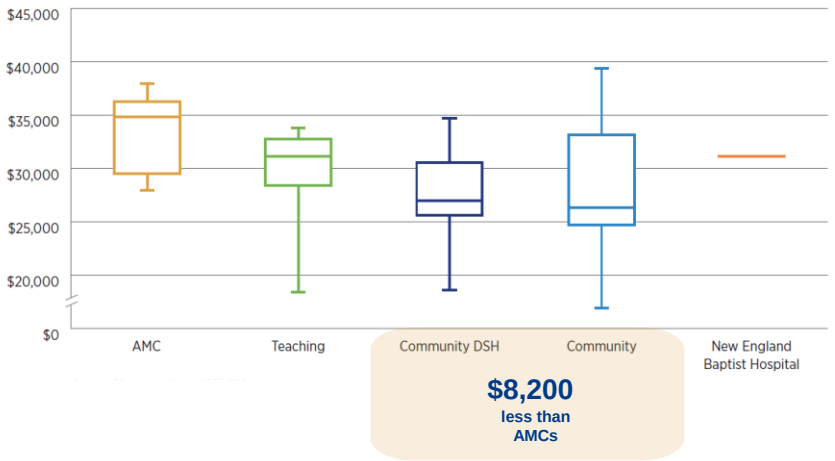
Orthopedics

Deliveries

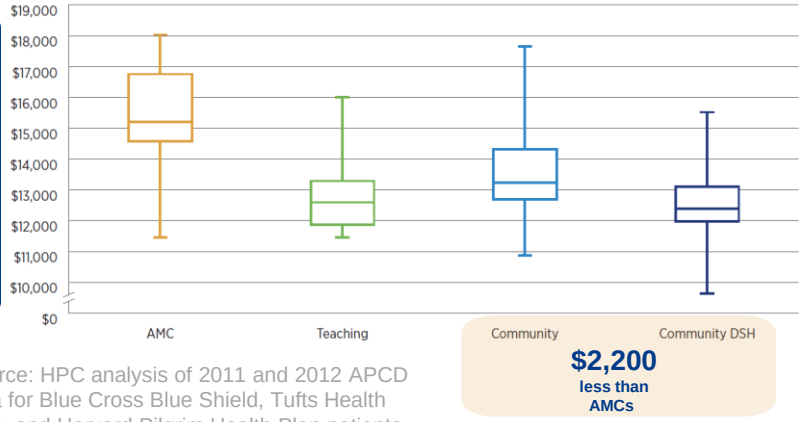
Hip Replacement



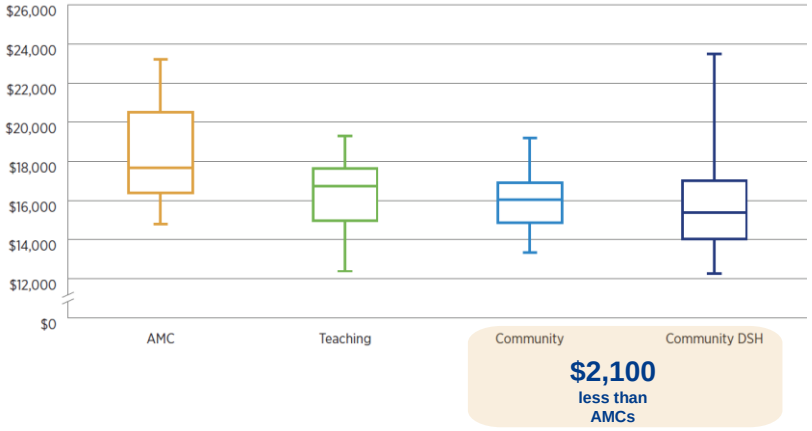
Knee Replacement



Pregnancy - Vaginal Delivery



Pregnancy - Caesarian Delivery

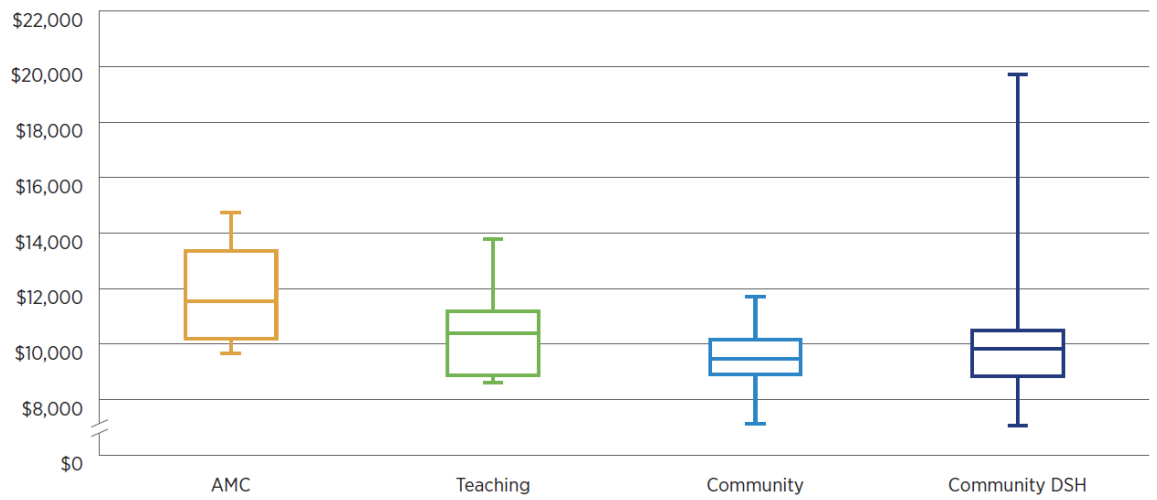


Source: HPC analysis of 2011 and 2012 APCD data for Blue Cross Blue Shield, Tufts Health Plan, and Harvard Pilgrim Health Plan patients

We found no correlation between hospital cost and quality. Each group of hospitals has higher and lower quality performers but no cohort outperforms any other overall.

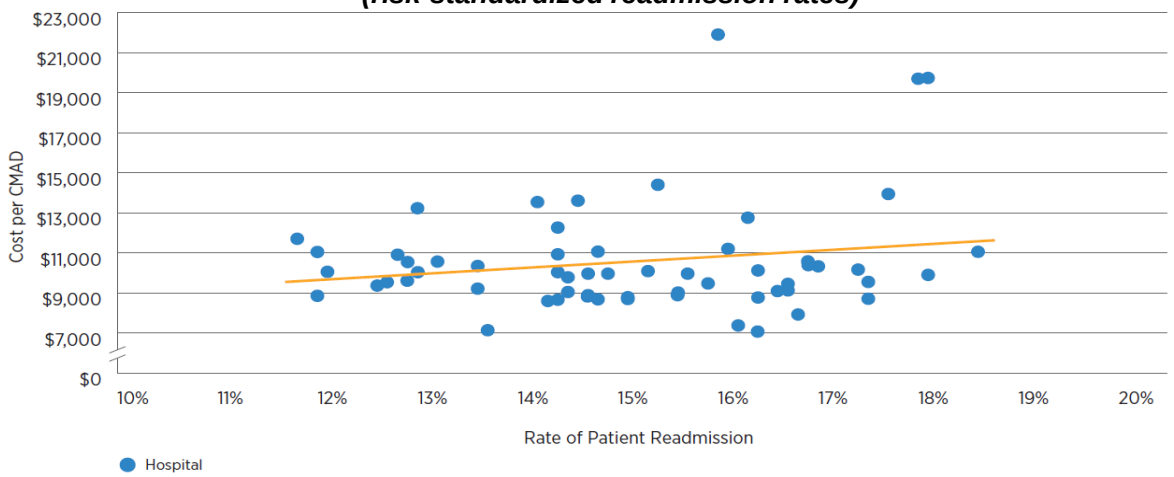
Most community hospitals provide care at a lower cost per discharge, without significant differences in quality

Hospital costs per case mix adjusted discharge, by cohort



Source: HPC analysis of CHIA Hosp. Profiles, 2013

Costs per CMAD are not correlated with lower quality
(risk-standardized readmission rates)



On average, **community hospital costs are nearly $1,500 less per inpatient stay** as compared to AMCs, although there is some variation among the hospitals in each group

Although costs per discharge for community hospitals have grown at a slightly higher rate than those for AMCs, the gap between AMC and community hospital costs has not substantially changed

Reasons for differences in efficiency likely vary, and may include service offerings, support for teaching programs, and, particularly for community hospitals, the pressure of tight operating margins

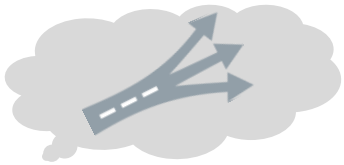
Source: HPC analysis of CHIA Hosp. Profiles, 2013; CHIA Focus on Provider Quality Databook, Jan 2015

Increases in health care spending on inpatient care would result from the closure of most community hospitals, due to commercial price variation

The HPC modeled where patients would likely seek care if community hospitals were to close and to estimate commercial spending impact.

- In most cases, a community hospital closure would **increase annual spending on inpatient care**
- **The majority of these increases would be less than $4 million**, due to the disproportionately low volume of commercially insured patients at many community hospitals
- Spending would increase by **more than $5 million for seven community hospitals**
  - The closure of **Lowell General Hospital** would cause the greatest increase: **over $16 million**
- Spending would actually **decrease** in the event of the closure of any of eight community hospitals, primarily those with higher relative prices
  - The greatest decreases in spending would result from **South Shore Hospital ($4.2 million annually)** or **Cooley-Dickinson Hospital ($2.8 million annually)** becoming unavailable

Challenges facing community hospitals



Overview | Value | **Challenges** | Path Forward

- Referral patterns and consumer perceptions
- Consolidation of hospitals and primary care providers with large systems
- Decreasing inpatient volume and misalignment of supply and demand for hospital services (current and future)
- Payer mix, service mix, and variation in prices
- Competition from non-traditional market entrants
- Implications if current trends continue

Driven by referrals and perceived quality, many patients are choosing AMCs and teaching hospitals over community hospitals for routine care

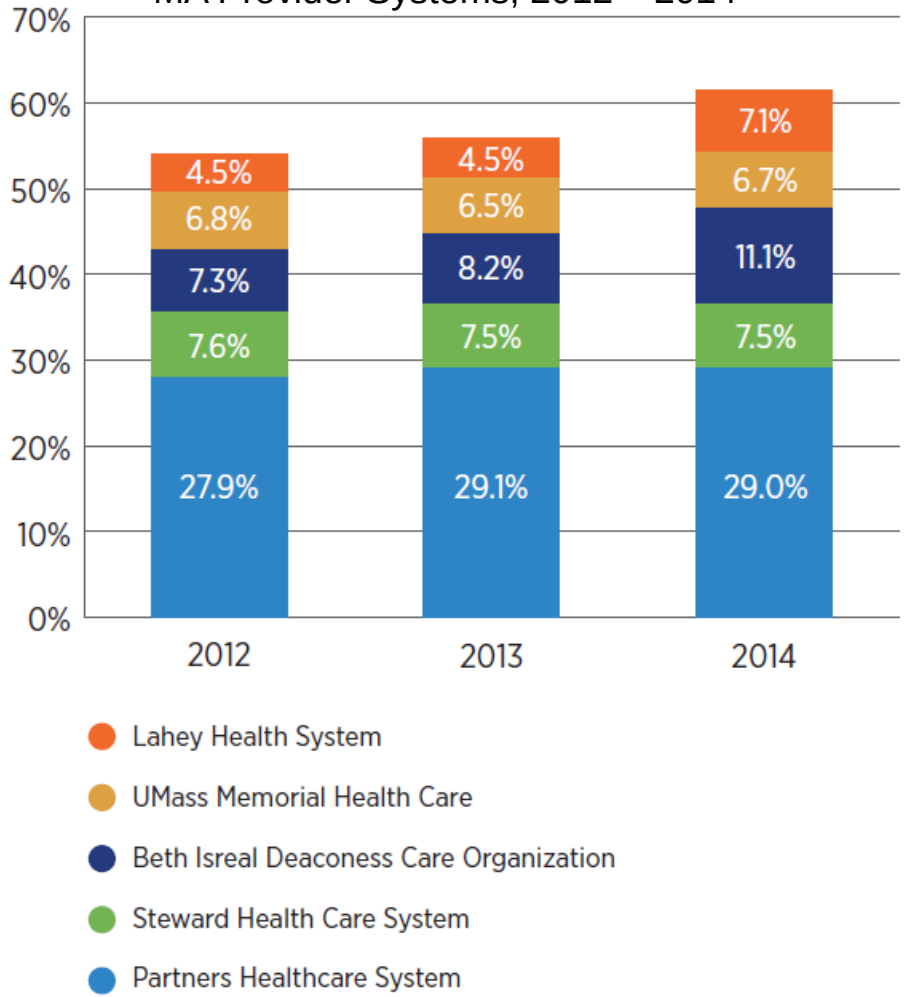
HPC commissioned qualitative analyses (8 focus groups in four regions of the state) by Tufts University to better understand what drives consumer choices of hospitals

> *"I guess it might be something in your psyche because I like brand-name products. So maybe that's what drives me to Boston."*
>
> *FOCUS GROUP PARTICIPANT*

- Patients often mentioned that **they did not feel that they had a choice** of hospitals because their primary care provider or insurance plan determined where they could go for care
- **Two in three Massachusetts adults** have **never sought information** about the safety or quality of medical care, instead valuing the experiences of peers and recommendations of their primary care physicians.
- Many patients stated that they felt that **AMCs and teaching hospitals were better** because they had the best physicians, including doctors who had graduated from medical schools they considered prestigious. Many patients indicated that they **believed AMCs and teaching hospitals had developed reputable brands**
- Some patients stated that the **higher costs of AMCs and teaching hospitals must mean that they provided better quality**, regardless of what quality data showed. Many also said they wanted to "get their money's worth" from the health care system after investing heavily in health insurance coverage. Others reported that **cost is not a factor when it comes to health**

Increased consolidation of providers has driven referrals to large provider systems, including their anchor AMCs and teaching hospitals

Percent of Statewide Inpatient Discharges at the Five Largest MA Provider Systems, 2012 – 2014

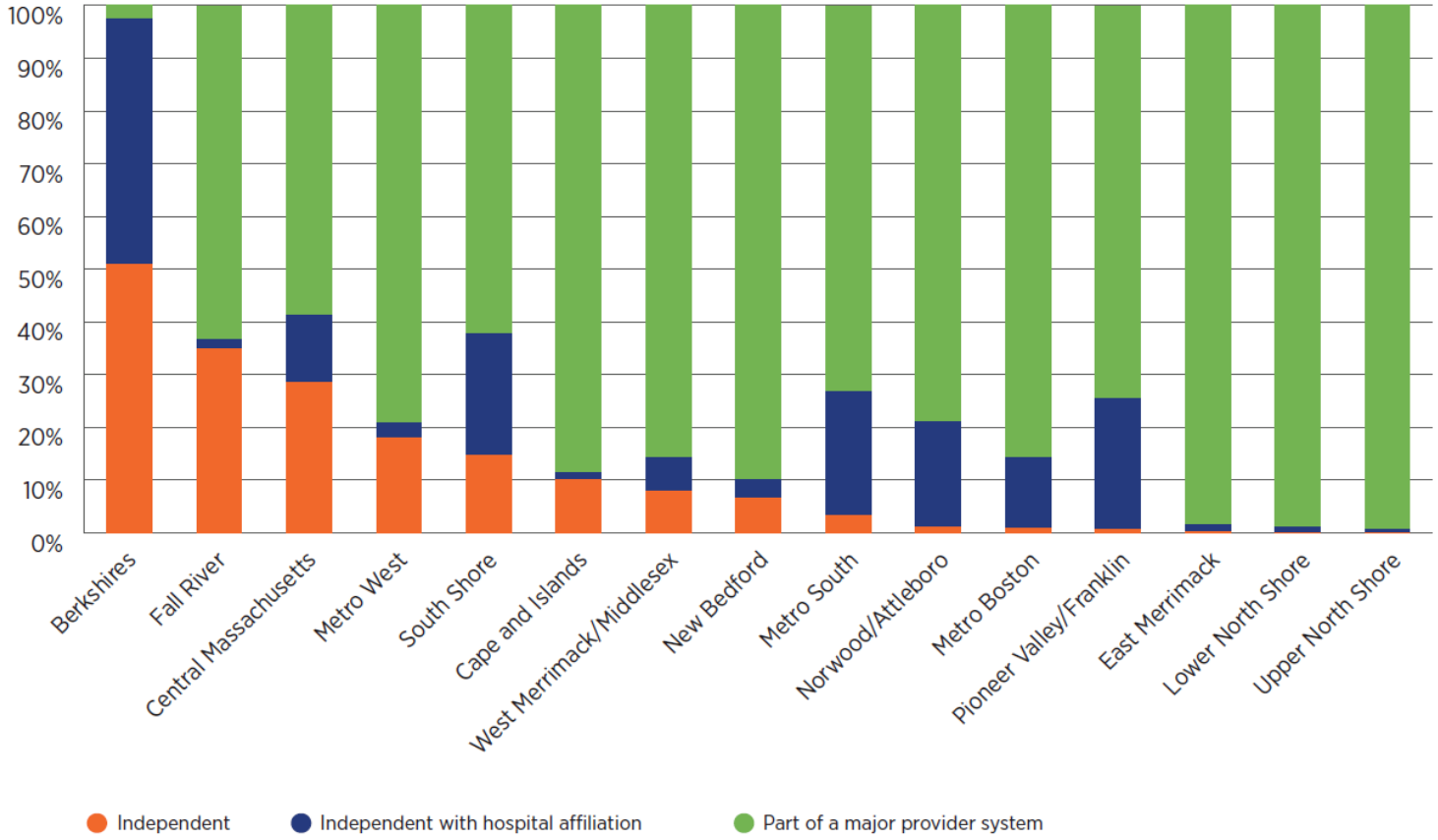


> *"Retaining primary care staff and specialists, 'the gatekeepers to volume' is challenging. Providers continue to leave for big-name systems and AMCs – and patients follow"*
>
> *Synthesis of MASSACHUSETTS PROVIDER INTERVIEWS*

Source: HPC analysis of MHDC discharge data.
Note: Systems shown have the highest total net patient service revenue among providers in the Commonwealth.

Most primary care services are now delivered by physicians affiliated with major provider systems

Percentage of Primary Care Services Delivered by Independent versus Affiliated Physicians by Region, 2012



Percentage of PCPs Affiliated with Eight Largest Systems Grew from

62%

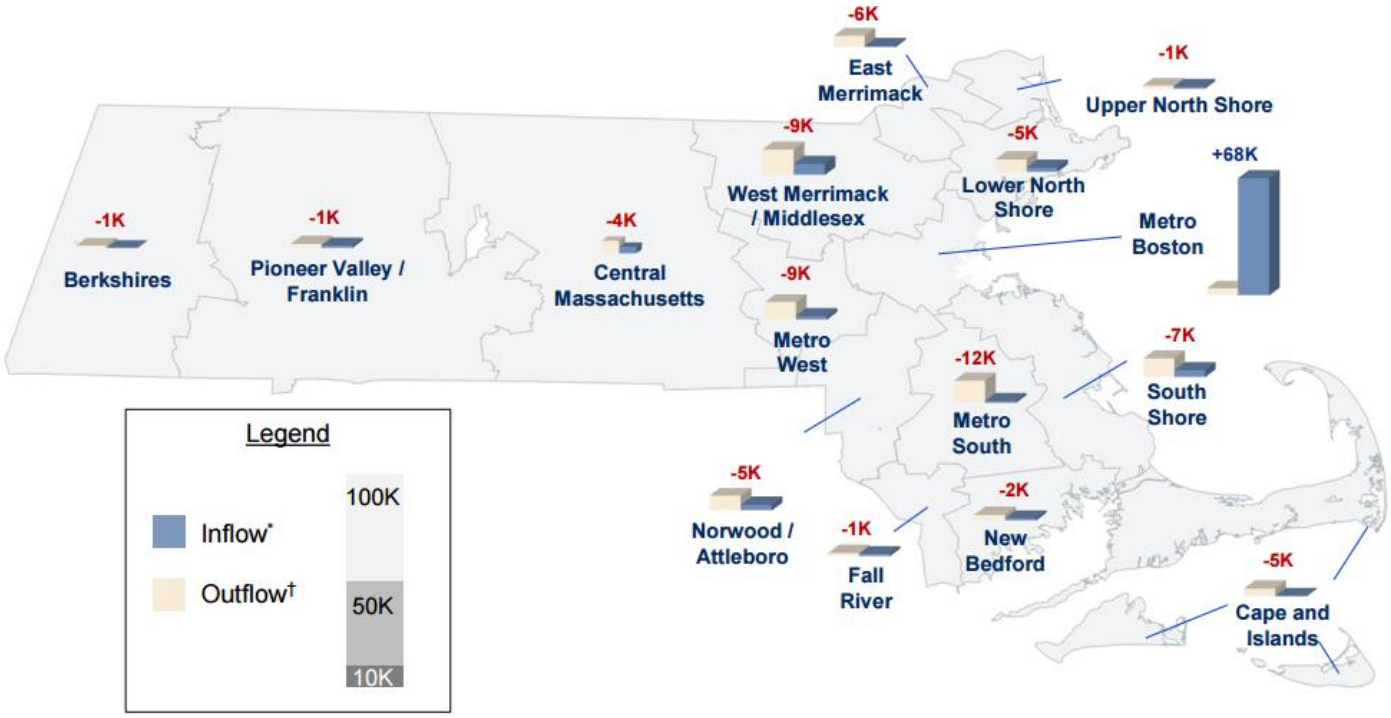
in 2008 to

76%

in 2014

Source: HPC analysis of 2012 APCD claims for BCBS and HPHC ; 2012 MHQP Master Provider Database.
Note: For the purposes of this analysis, major provider systems include Atrius Health, Baycare Health Partners, Beth Israel Deaconess Care Organization, Lahey Health System, New England Quality Alliance, Partners Community Health Care, Steward Health Care Network, and UMass Memorial Health Care. PCPs affiliated with multiple systems are counted as being part of a major provider system.

Most Massachusetts residents who leave their home region for inpatient care seek care in Metro Boston at higher-priced hospitals



Commercially insured patients are most likely to outmigrate to Boston

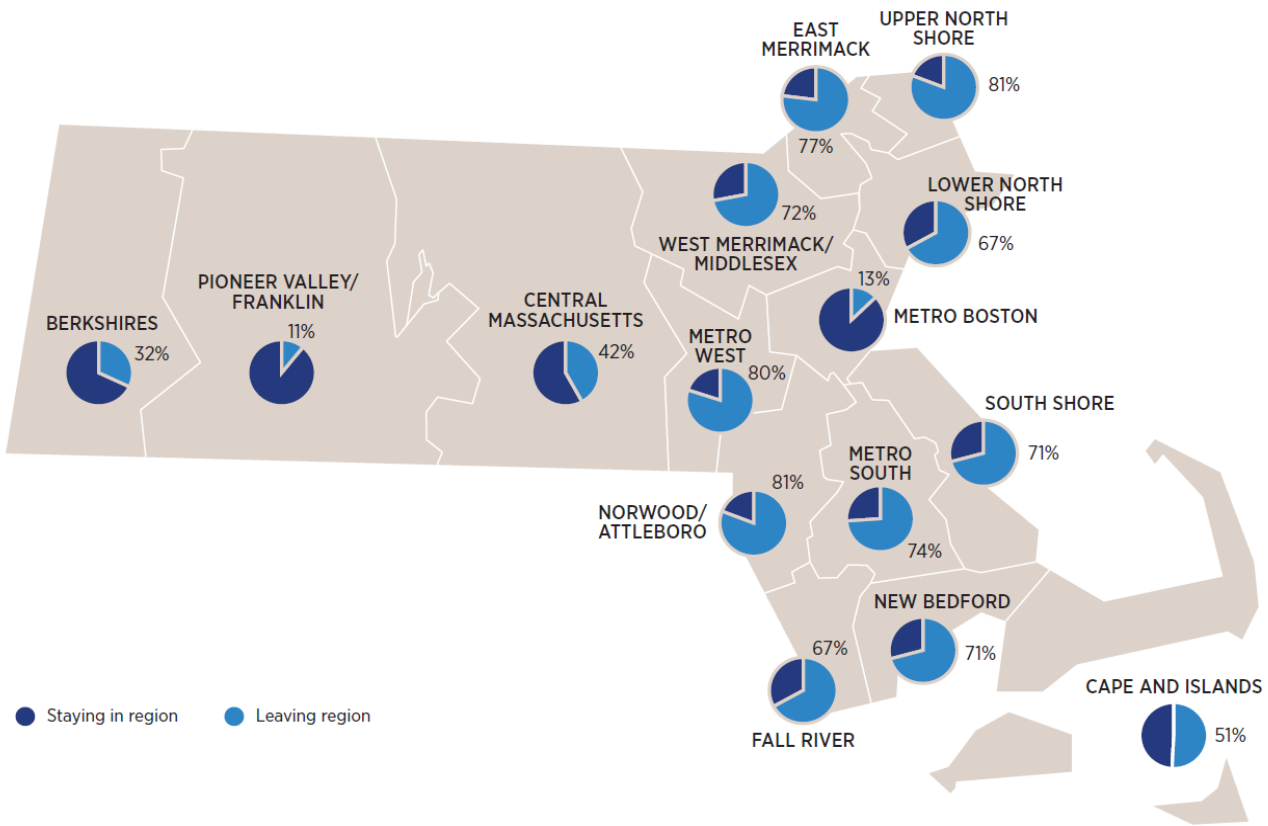
Patients from higher income regions are more likely to outmigrate to Boston

Trends hold across a variety of service lines, including deliveries

* Discharges at hospitals in region for patients who reside outside of region
† Discharges at hospitals outside of region for patients who reside in region
Source: HPC Cost Trends Report, July 2014 Supplement

Large proportions of patients leave their home regions for deliveries

Percentage of Patients Leaving their Home Regions for Community-Appropriate Deliveries, 2013



74%→50%

change in proportion of all births in community hospitals from 1992 – 2012[1]

[1]Healthcare Equality and Affordability League, *Healthcare Inequality in Massachusetts: Breaking the Vicious Cycle*

6 hospitals saw **53%**

of low risk births in 2011-2012. 5 of these hospitals had above average delivery costs.

Massachusetts General Hospital and Brigham and Women's Hospital have highest costs statewide for maternity care and saw

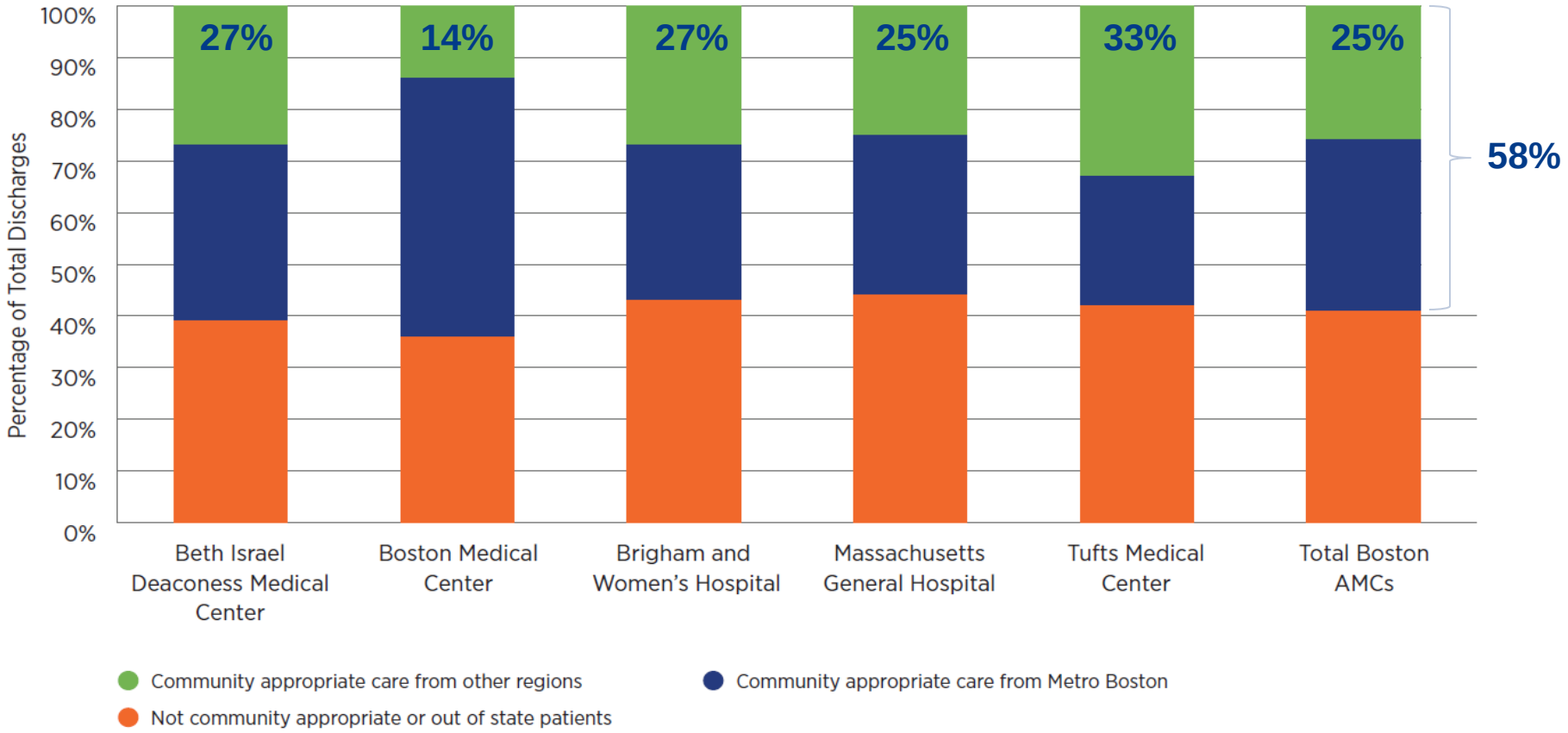
20%

of all low-risk births in the state

Source: HPC analysis of MHDC discharge data.

A significant portion of the care provided at Boston AMCs could be appropriately provided in a community hospital setting

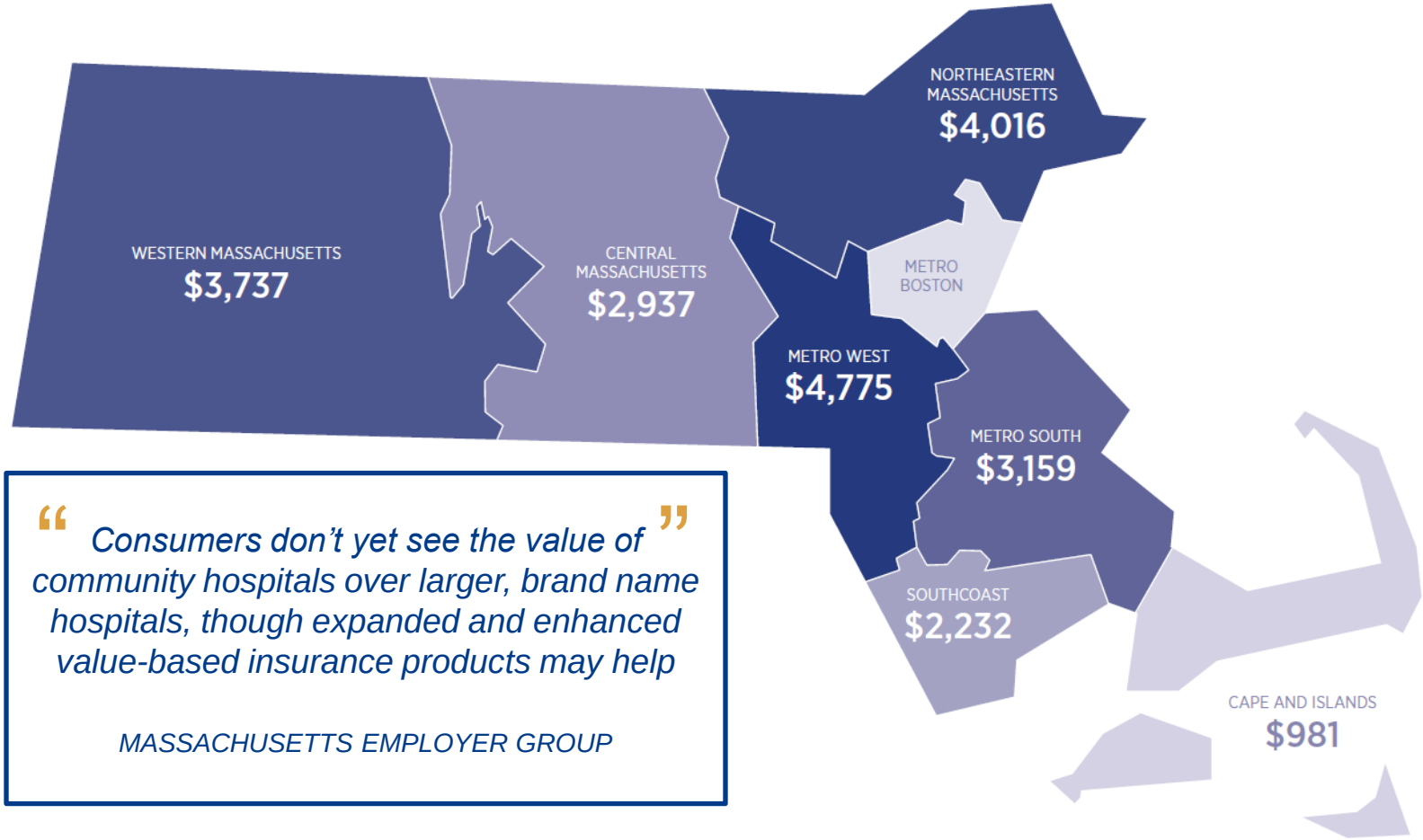
Inpatient Discharges at Boston AMCs, 2013
Community-Appropriate Volume as a Proportion of Total Volume



Source: HPC analysis of MHDC 2013 discharge data.
Note: Figure shows proportion of volume at each hospital, and does not reflect differences in total volume amongst the hospitals shown. Estimates of the volume of community appropriate care provide at AMCs are conservative as community appropriate care is defined to exclude cases which some community hospitals could effectively handle but that many community hospitals could not.

Patient migration to Boston increases health care spending

Average Additional Case-Mix Adjusted Cost for Each Commercial Discharge at a Boston Hospital Rather Than a Local Hospital, by Region of Patient Origin

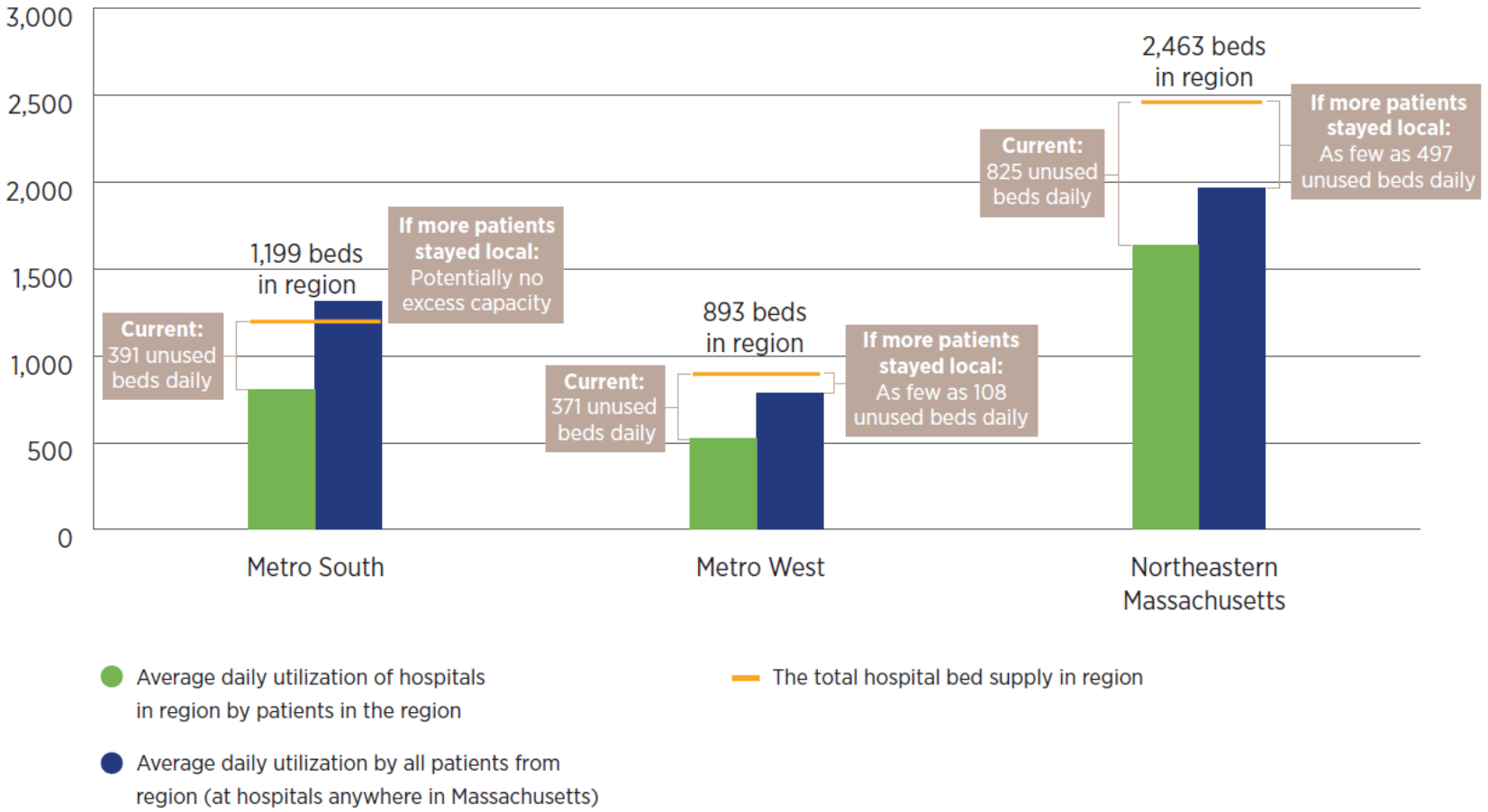


> *"Consumers don't yet see the value of community hospitals over larger, brand name hospitals, though expanded and enhanced value-based insurance products may help"*
>
> *MASSACHUSETTS EMPLOYER GROUP*

Source: HPC analysis of MHDC 2013 discharge data and raw CHIA relative price data.
Note: Figures shown are differences in average commercial revenue per CMAD for hospitals in each region compared to those in Metro Boston, adjusted for payer mix.

In most regions, hospitals have the capacity to treat more patients locally

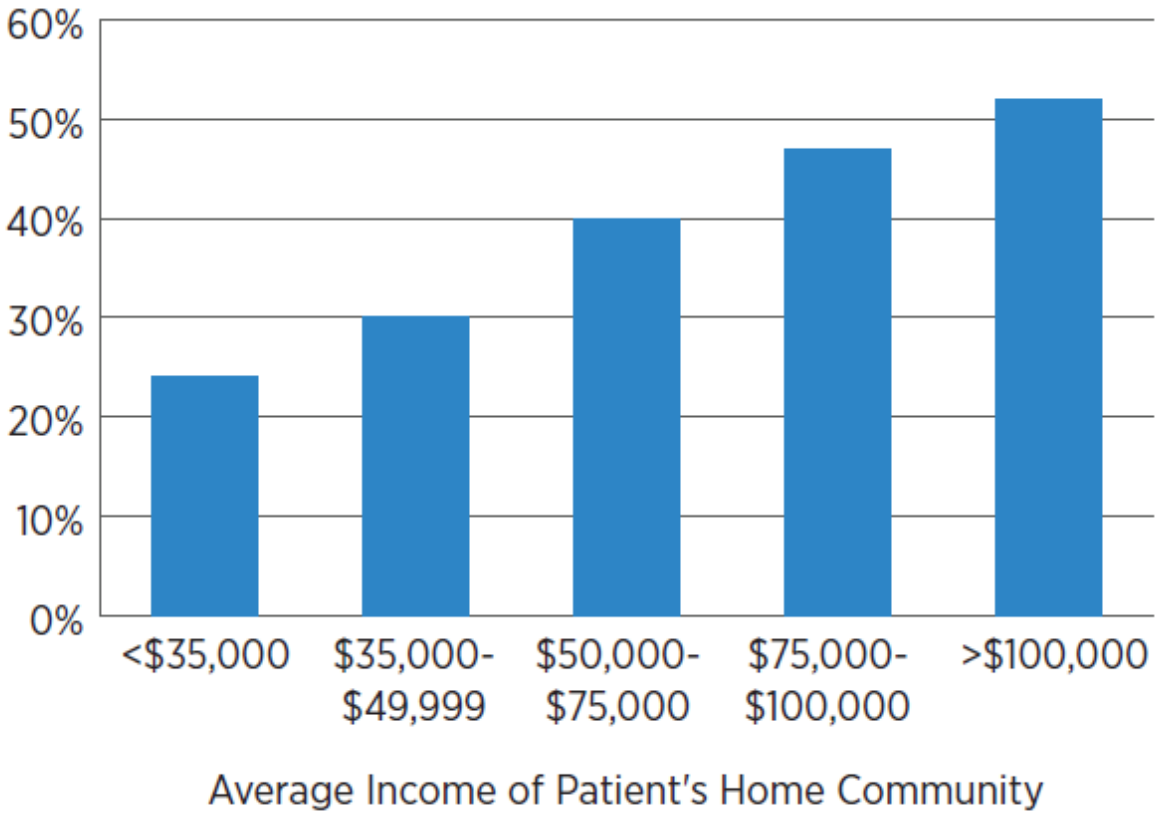
Average Use of Hospitals in Regions Neighboring Metro Boston
versus Average Use of All Hospitals by Region Residents, 2013



Source: HPC analysis of MHDC 2013 discharge data and CHIA hospital 403 reports.

Commercially insured patients and patients from wealthier communities are more likely to migrate to Boston for care

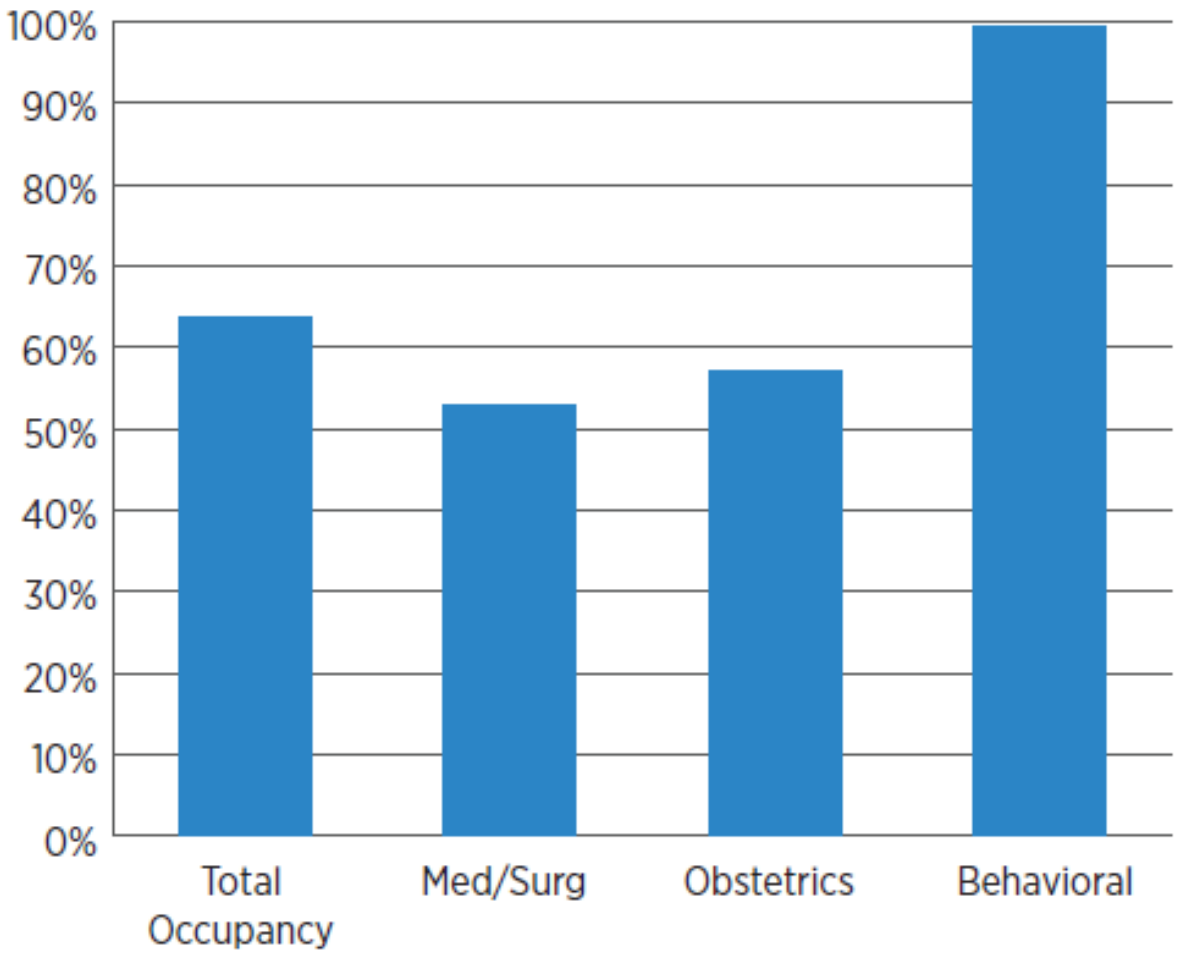
Probability that Patient will Travel Outside of His/Her Home Region for Inpatient Care, Based on Home Community Income



Source: HPC analysis of MHDC 2012 discharge data and U.S. Census Bureau American Community Survey data.

In addition to lowering volume, migration results in community hospitals seeing larger proportions of government payer patients and those seeking low-margin services

Community Hospital Staffed Bed Occupancy Rate by Admission Type



Boarding of behavioral health patients in emergency departments increased by

40%

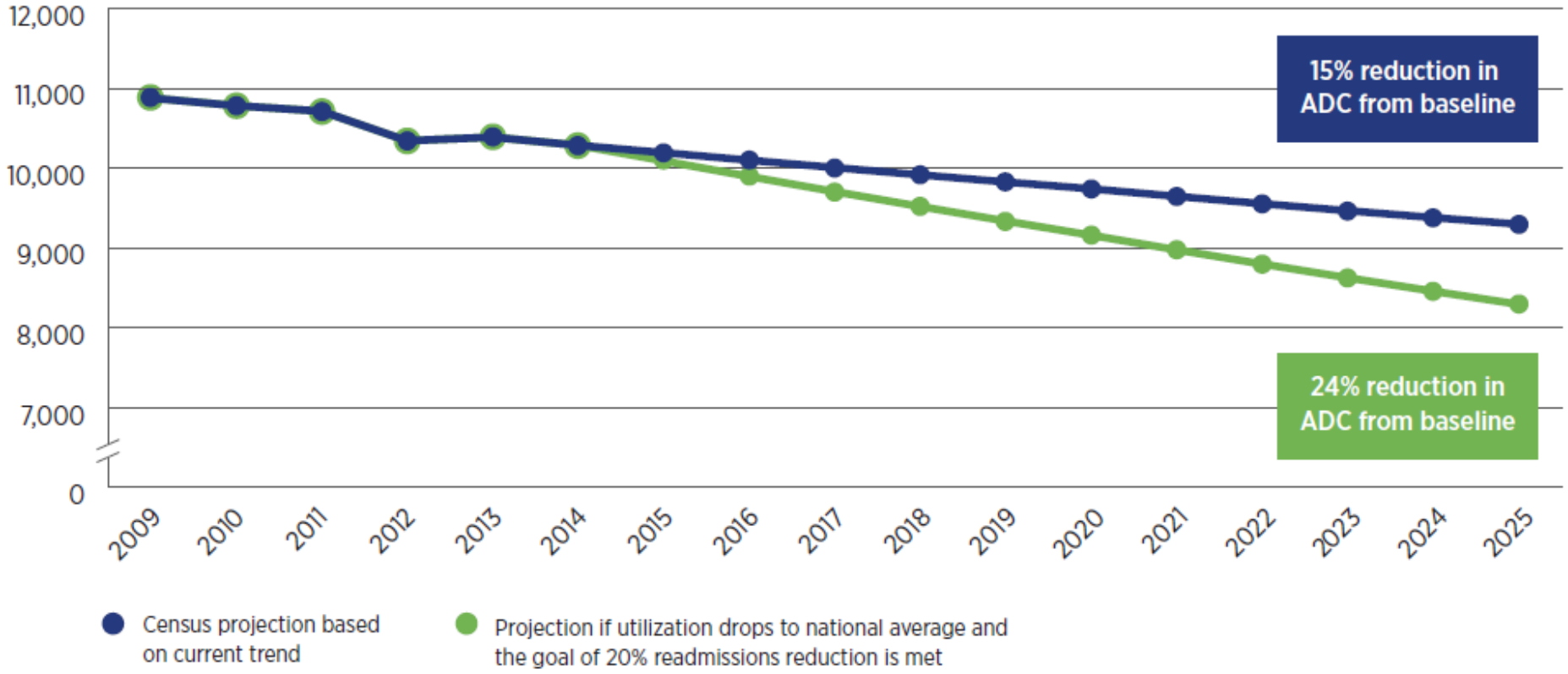
from 2012 - 2014

Source: HPC analysis of Department of Public Health data

Source: HPC analysis of MHDC 2013 discharge data and CHIA hospital 403 reports.

Declining inpatient utilization poses a structural challenge to the traditional community hospital model

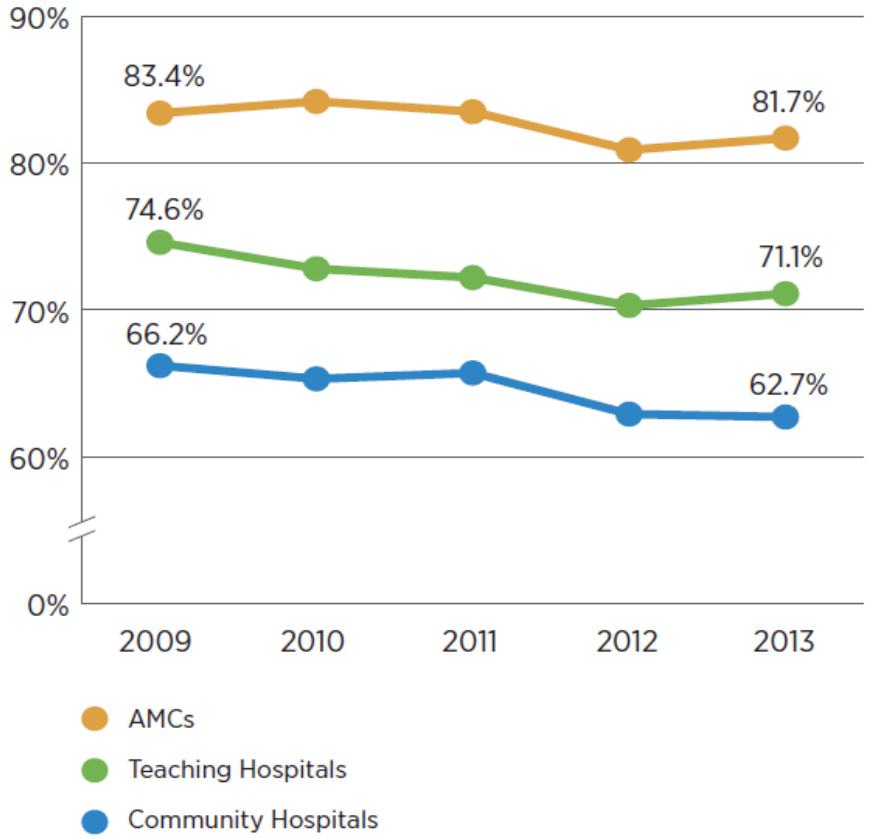
Total Average Daily Census Projections for all Massachusetts Hospitals, 2009 - 2025



Sources: HPC analysis of MHDC discharge data, CHIA hospital 403 reports, AHA Hospital Statistics, and population data from the University of Massachusetts Donahue Institute.
Notes: Projection based on current trend assumes a continuation of recent utilization trends in major service categories, but does not take into account numerous other factors impacting utilization, e.g. the movement of more types of care from inpatient to outpatient settings. The alternate projection assumes a 10.2% reduction that would bring Massachusetts in line with national hospital utilization, and a 20% reduction in readmissions, reflecting goals of reducing unnecessary readmissions.

Community hospitals have lower average occupancy, and declining hospital utilization has further impacted occupancy rates

Total Inpatient Occupancy by Hospital Cohort, 2009 – 2013



Sources: HPC analysis of MHDC discharge data and CHIA hospital 403 reports.
Notes: Based on assessment of discharges and average patient length of stay compared to bed counts. Bed counts as of 2013. Bed types included are medical/surgical (including ICU), obstetrics, behavioral, and neonatology (normal newborn bassinets are excluded).

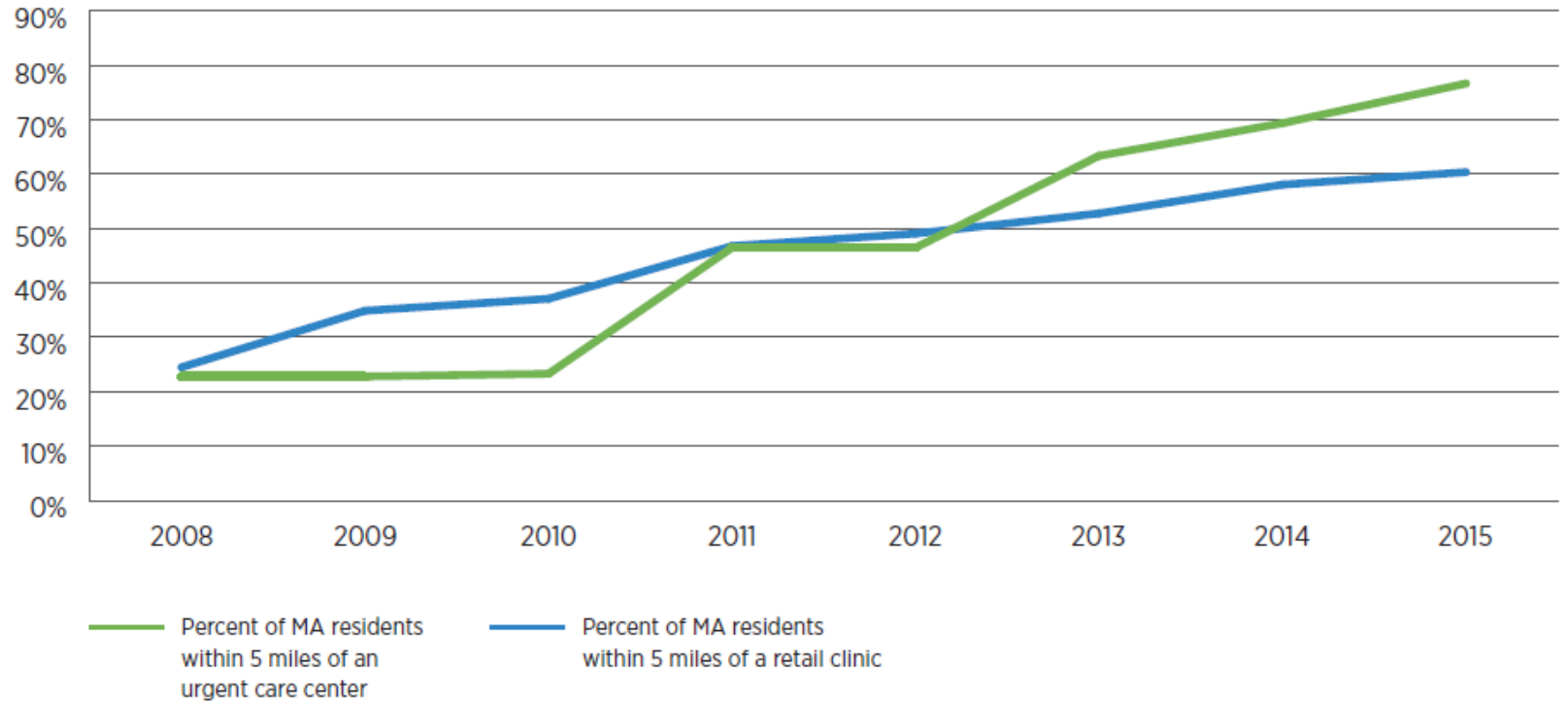
If current trend continues, community hospitals could face average occupancy rates of less than

50% within

10 years

Declining inpatient utilization is driven in part by growing accessibility of non-hospital health care providers

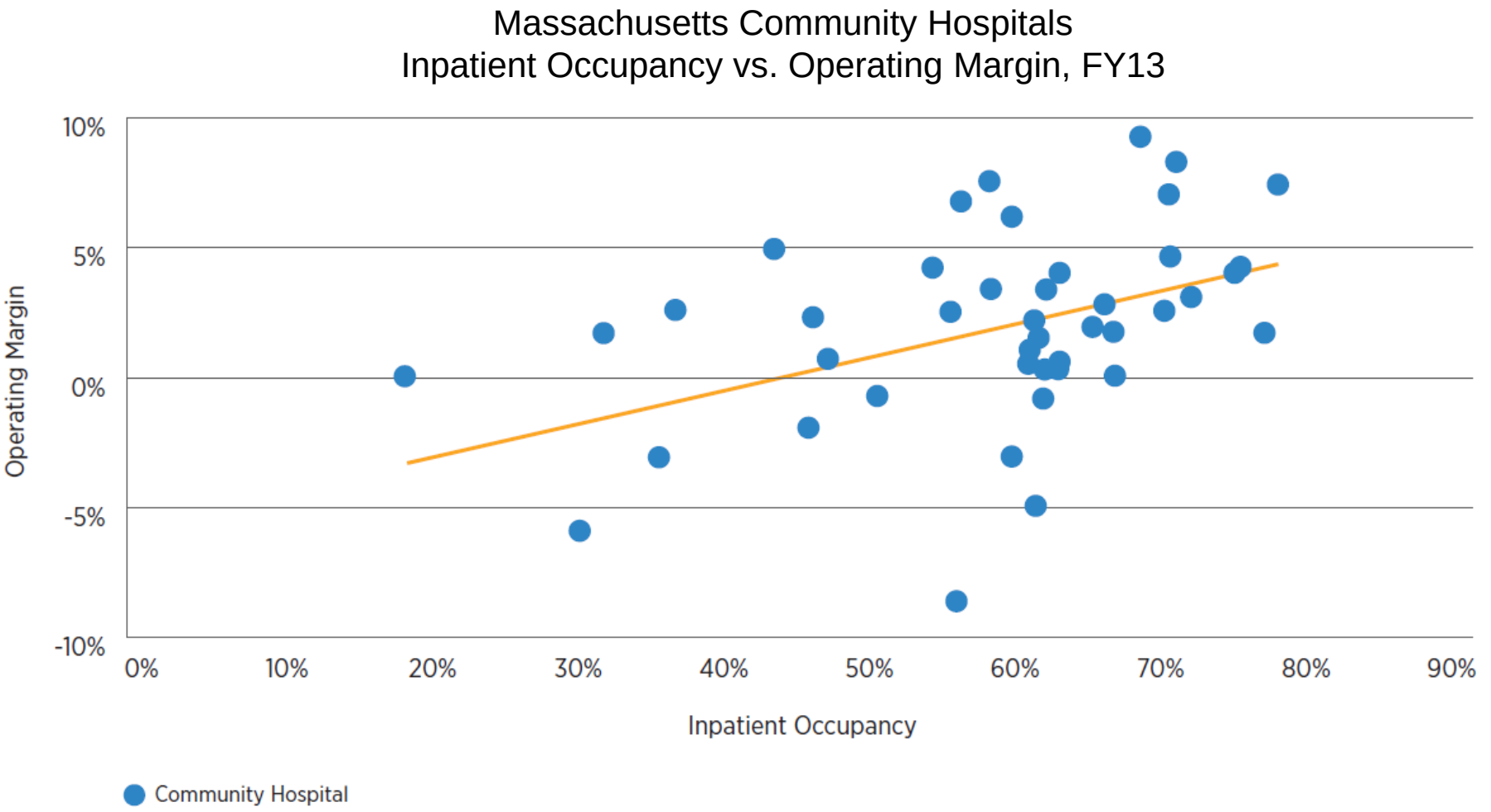
Percent of MA Residents Living Within 5 Miles of Retail Clinics and Urgent Care Centers



Sources: HPC analysis of DPH licensure data, SK&A health care claims database, and National Bureau of Economic Research Zip Code Distance Database.

> *"When [they] opened an urgent care center down the block we saw an immediate and precipitous decline in ED volume, especially the commercially insured, non-acute patients. It might be good for costs in the short term, but if we cannot keep our ED open, then what's next?"*
>
> *COMMUNITY HOSPITAL CHIEF STRATEGY OFFICER*

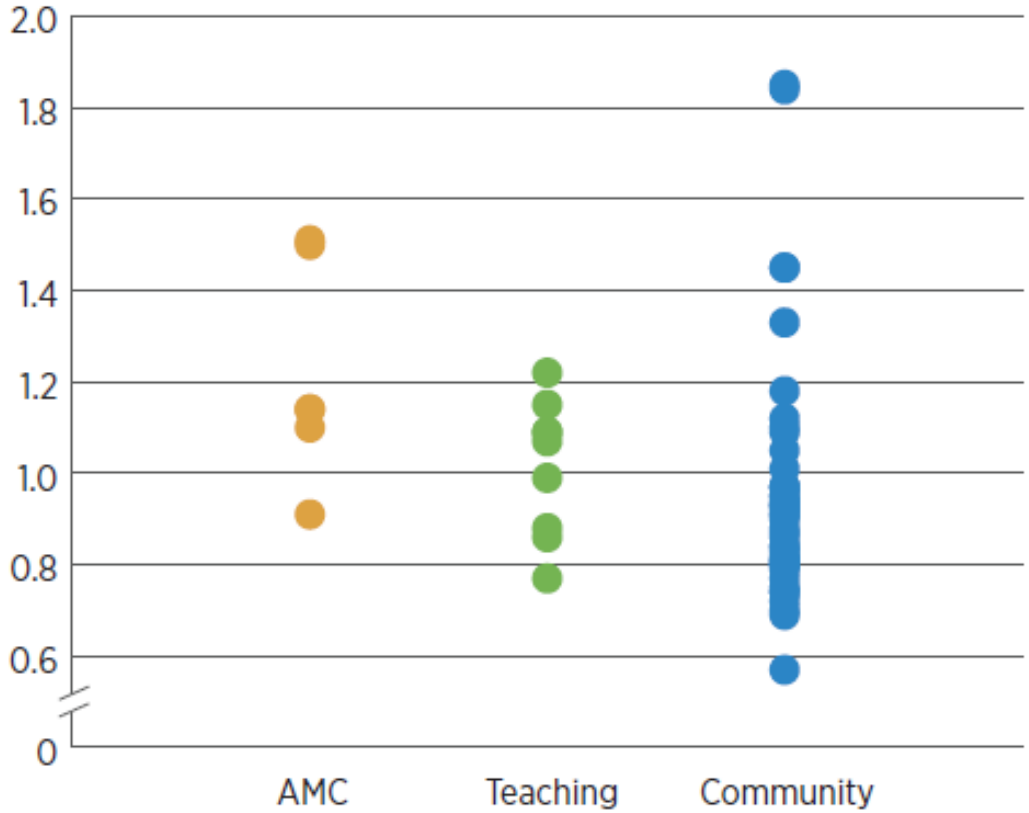
Lower occupancy is associated with lower operating margins for community hospitals, and may threaten their financial stability



Sources: HPC analysis of CHIA Hosp. Profiles, 2013; MHDC 2013 discharge data; CHIA hospital 403 reports

Community hospitals tend to receive lower commercial relative prices than AMCs or teaching hospitals

Hospital Relative Prices by Cohort, BCBS 2013

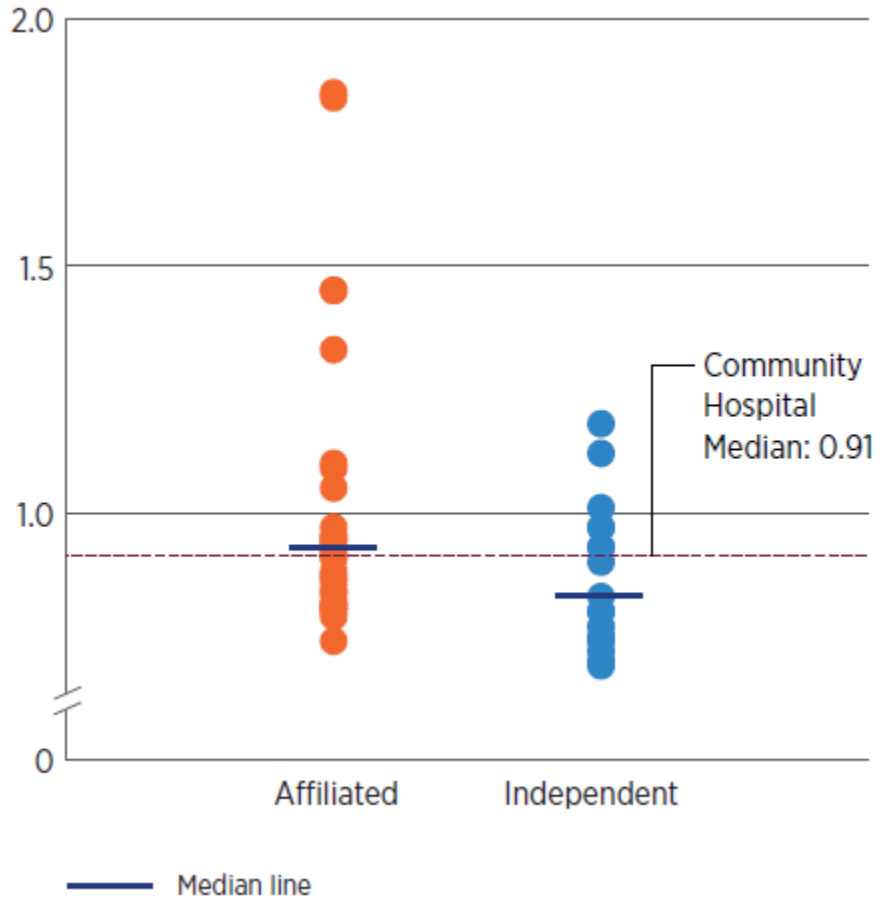


> *"The gap in prices, [which is] a reflection of the market power dynamics in the state, is probably the biggest threat to a lot of the community hospitals"*
>
> *MASSACHUSETTS HEALTH INSURANCE LEADER*

Sources: HPC analysis of Ctr. For Health Info & Analysis, Provider Price Variation in the Massachusetts Health Care Market (calendar year 2013 data), Databook (Feb. 2015), [hereinafter CHIA 2013 RP Databook] available at http://chiamass.gov/assets/Uploads/relative-price-databook-2013.xlsx

Community hospitals affiliated with systems tend to have higher relative prices

Community Hospital Relative Prices and Affiliation Status, BCBS FY13



Source: HPC analysis of CHIA 2013 RP Databook
Note: While this graph shows relative prices for only one major commercial payer, price and affiliation status are similarly correlated for the other two major commercial payers.

Hospitals with higher public payer mix tend to have lower relative prices, compounding financial stresses; cross-subsidization of higher public payer mix with higher commercial prices is not observed

Hospital Commercial RP and Percent of Revenue from Public Payers by Cohort, BCBS FY13

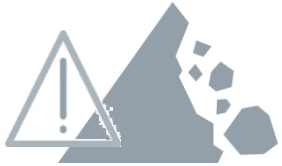
Source: HPC analysis of CHIA 2013 RP Databook and CHIA Hosp. Profiles, 2013

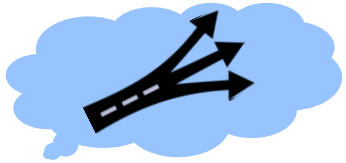
Market participants report facing additional barriers to transformation

To successfully meet challenges and adapt to a changing delivery and payment system, community hospitals must overcome barriers and utilize resources and capabilities that may not be readily available. Barriers reported to the HPC during stakeholder interviews include:

- Lack of **resources**, including financial resources and the ability to attract and retain new staff.
- Lack of needed **data and analytic support** to enable transformation efforts, including a lack of information about health needs and coordinated health planning.
- **Concern about change** by hospital governing bodies and community representatives.
- Challenges **aligning the interests of hospital labor and management** to more effectively pursue transformation efforts.
- Difficulty participating in **alternative payment models**, including challenges under current risk adjustment methodologies for hospitals serving patient populations with socioeconomic disadvantages.
- **Insufficient alignment** among programs designed to fund or assist transformation efforts.
- **Policy or regulatory frameworks** that limit deployment of new structures of care.

The path to a thriving community-based health care system





Overview | Value | Challenges | **Path Forward**

- Most patients should get most care in an efficient and high-quality setting close to home
- Providers must adapt to make this possible, and incentives and policies should align to support them
- Call to develop an Action Plan in concert with market participants

Building a path to a thriving community-based health care system

Vision of Community-based Health

A health care system in which patients in Massachusetts are able to get most of their health care in a local, convenient, cost-effective, high-quality setting.

- **The traditional role and operational model for many community hospitals faces tremendous challenges:**
  - evolution in the health care delivery and payment system
  - persistent market dysfunction → resource inequities and overreliance on higher cost care settings
- **A re-envisioning of the role of community hospitals will require:**
  - development of a roadmap for care delivery transformation focused around the community
  - planning and investment for better alignment of providers with community needs
- **Multi-sector dialogue** is necessary to build consensus and identify a series of targeted actions to be taken by providers, payers, consumers, and government

Fostering dialogue and developing an Action Plan

Community Hospitals at a Crossroads:
A Conversation to Foster a Sustainable Community Health System

Developing a successful path to a thriving community-based health care system requires multi-stakeholder engagement and incorporation of many diverse viewpoints.

The report findings are designed to spur market-wide dialogue and support identification of priority actions to be taken by providers, payers, purchasers and government.

March 29, 2016 at 9:00AM at Suffolk University School of Law

The HPC Commissioners and staff will convene industry leaders and stakeholders to discuss findings from the report and its implications for transformation of the Commonwealth's community hospitals. Interested members of the public are invited to attend: register online at www.mass.gov/hpc

In collaboration with stakeholders, HPC will develop an Action Plan to address findings of the report. Action Plan recommendations will be oriented towards providers, payers, purchasers and policymakers

Community Hospitals at a Crossroads:
A Conversation to Foster a Sustainable Community Health System

Planning and support for community hospital transformation

Encouraging consumers to use high-value providers for their care

Creating a sustainable, accessible, and value-based payment system

> *"We need to **stop playing defense and start playing offense**. This [challenge of supporting community hospitals] is one of the most complex health policy issues we have, but we cannot keep just relying on short term fixes. These hospitals are the backbones of our communities — we owe it to our communities to come together to develop a plan for their future"*
>
> *MASSACHUSETTS STATE LEGISLATOR*