



MASSACHUSETTS
HEALTH POLICY COMMISSION

Health Policy Commission Board Meeting

December 12, 2017



AGENDA

- Call to Order
- Approval of Minutes from the November 1, 2017 Meeting
- Executive Director's Report
- Investment Programs
- 2017 Health Care Cost Trends Report
- Market Performance
- Performance Improvement Plans
- Schedule of Next Board Meeting (TBD)



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VOTE: Approving Minutes

MOTION: That the Commission hereby approves the minutes of the Commission meeting held on November 1, 2017 as presented.



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- Call to Order
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 - Committee Restructuring and Responsibilities
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HPC by the Numbers: The First Five Years



206 public meetings
(board, committee, advisory council,
special events, hearings, listening sessions)



\$80 million
distributed in **grants** to
support innovative care
delivery models



42 publications
(all reports, CMIRs,
data points, issue briefs,
CHART lessons learned,
academy health posters, etc.)



120
practices
participating in
the HPC's Patient-
Centered Medical
Home Program

3.55%
average **health care spending**
growth in MA, 2012-2016

84 ✓
MCNs reviewed

7 ✓
CMIRs issued

HPC by the Numbers: 2017 Highlights

178,193

unique **website** hits



175

HPC articles



31

public meetings

17

applicants
for the **ACO**
Certification Program



3.1%

modified health
care cost growth
benchmark for 2018

Over

1,250

calls to OPP



HPC by the Numbers: 2017 Cost Trends Hearing



AUDIENCE



- Nearly **450** individuals in-person
- Over **2,500** individuals watching online
- Viewers came from the **US, India, Sweden, Philippines, UK, Pakistan, Malaysia** and **China**

MEDIA

- **20** unique articles
- **18** major news outlets



WEBSITE



- **5,595** unique website visits
- **15.7%** of all traffic to the Mass.Gov website
- The majority of people navigated to the **Cost Trends Hearing** agenda and materials

TWITTER



- **125** Official HPC Tweets
- **53,600** impressions
(potential views by unique Twitter users)
- **202** Retweets → **168** Likes → **20** Replies



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Chapter 224 of the Acts of 2012 established the HPC and a target for reducing health care spending growth in Massachusetts.

Chapter 224 of the Acts of 2012

An Act **Improving the Quality** of Health Care and **Reducing Costs** through Increased **Transparency**, **Efficiency**, and **Innovation**.



GOAL

Reduce total health care spending growth to meet the **Health Care Cost Growth Benchmark**, which is set by the HPC and tied to the state's overall economic growth.



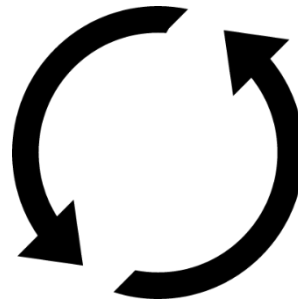
VISION

A **transparent** and **innovative** healthcare system that is **accountable** for producing **better health** and **better care** at a **lower cost** for the people of the Commonwealth.

The HPC, in collaboration with others, promotes and monitors priority policy outcomes that contribute to the goal and vision of Chapter 224.

Strengthen market functioning and system transparency

in which payers and providers openly compete, providers are supported and equitably rewarded for providing high-quality and affordable services, and health system performance is transparent in order to implement reforms and evaluate performance over time.



The two policy priorities reinforce each other toward the ultimate goal of reducing spending growth

Promoting an efficient, high-quality system with aligned incentives

that reduces spending and improves health by delivering coordinated, patient-centered and efficient health care that accounts for patients' behavioral, social, and medical needs through the support of aligned incentives between providers, employers and consumers.

The HPC employs four core strategies to advance the policy priority outcomes.

RESEARCH AND REPORT

INVESTIGATE, ANALYZE, AND REPORT
TRENDS AND INSIGHTS



CONVENE

BRING TOGETHER STAKEHOLDER
COMMUNITY TO INFLUENCE THEIR
ACTIONS ON A TOPIC OR PROBLEM



WATCHDOG

MONITOR AND INFORM TO ASSURE
MARKET PERFORMANCE

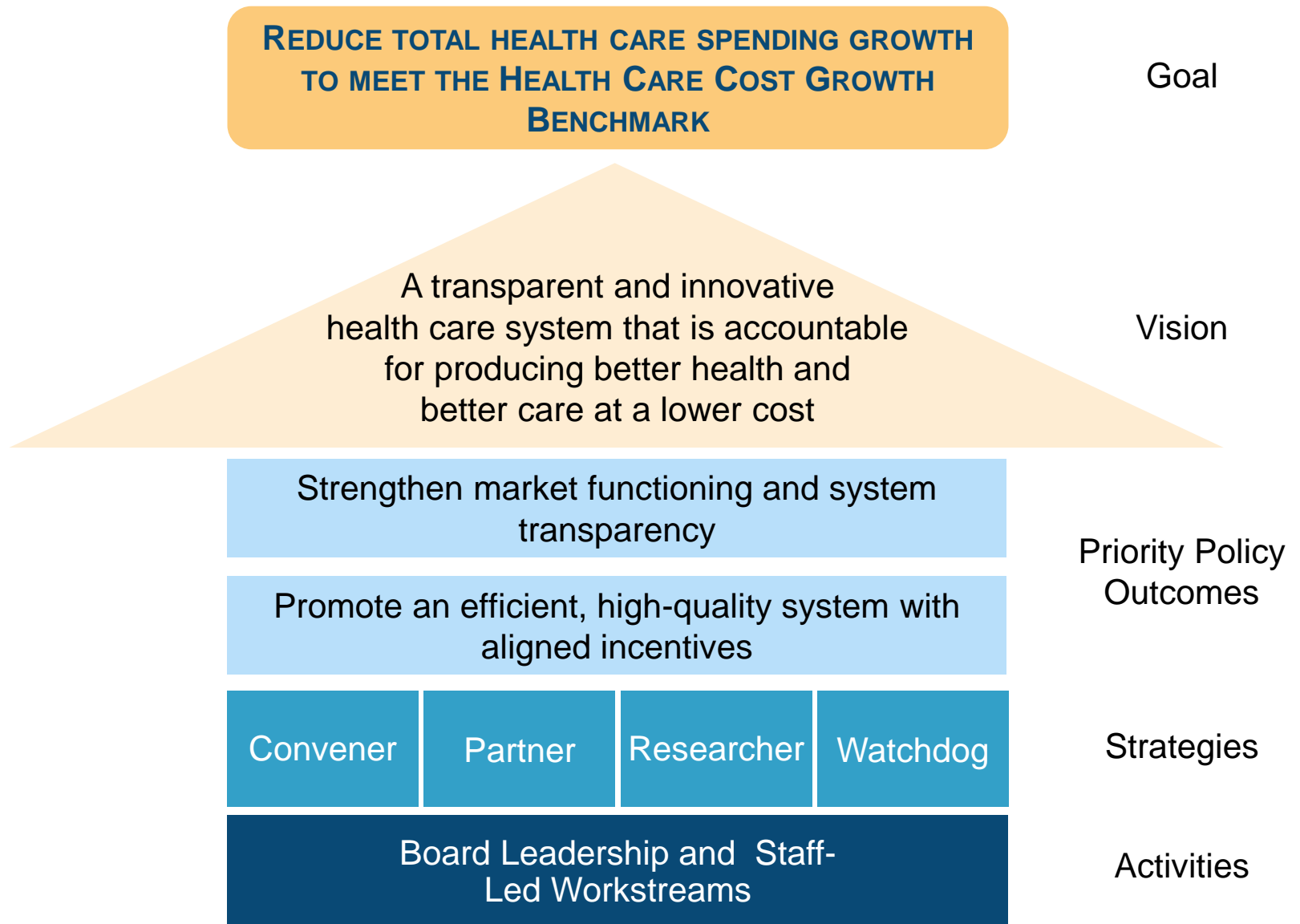


PARTNER

ENGAGE WITH INDIVIDUALS, GROUPS,
AND ORGANIZATIONS TO ACHIEVE
MUTUAL GOALS



Conceptual framework for how the HPC's priority policy outcomes and strategies lead toward the vision and goal of Chapter 224.



HPC Committee Overview: 2013 to 2017



QIPP

36

Meetings

January 16, 2013

Opioid Report
OPP Data and Updates
Behavioral Health Integration



CHICI

27

Meetings

February 6, 2013

CHART Investment Program
HCII Program Launches
Consumer Education Efforts



CDPST

33

Meetings

January 30, 2013

PCMH PRIME Certification
ACO Certification Program
RPO Program Data Release



CTMP

31

Meetings

February 27, 2013

Cost Trends Analyses and Reports
Market Oversight Efforts
Annual Cost Growth Benchmark



A&F

11

Meetings

June 17, 2013

Annual HPC Budgeting
Operational Oversight
ED Performance Review

Proposal: New committee structure aligned with priority policy outcomes

MARKET OVERSIGHT AND TRANSPARENCY

Primary Policy Aim: *Strengthen market functioning and system transparency*

Committee Members

Dr. David Cutler (Chair)

Dr. Wendy Everett

Mr. Richard Lord

Mr. Renato Mastrogiovanni

Secretary Michael Heffernan or Designee

Focus Areas

- Evaluation of market changes (e.g., MCNs/CMIRs)
- Benchmark establishment and monitoring
- Performance Improvement Plans (PIPs)
- Post-transaction reviews
- Registration of Provider Organizations (RPO)
- Research (e.g., pharmaceutical spending, out of network billing, facility fees, provider price variation)

Proposal: New committee structure aligned with priority policy outcomes

CARE DELIVERY TRANSFORMATION

Primary Policy Aim: *Promote an efficient, high-quality system with aligned incentives*

Committee Members

Mr. Martin Cohen (Chair)

Dr. Donald Berwick

Mr. Timothy Foley

Secretary Marylou Sudders or Designee

Vacancy (primary care physician to be appointed by the Governor)

Focus Areas

- Certification programs (ACO, PCMH)
- Investment programs (CHART, HCII, new investments)
- Learning and dissemination activities
- Program evaluation
- Alternative payment methods expansion
- Quality measurement alignment and improvement
- Office of Patient Protection (OPP)
- Research (e.g., avoidable acute care utilization, behavioral health integration, opioid epidemic)

Maintain Administration and Finance Committee membership and focus areas.

ADMINISTRATION AND FINANCE

Committee Members

Dr. Stuart Altman (Chair)

Dr. Wendy Everett

Mr. Richard Lord

Mr. Renato Mastrogiovanni

Secretary Michael Heffernan or Designee

Focus Areas

- Review annual operating budget
- Review financial controls, financial status, and financial reports
- Oversee independent audits
- Evaluate Executive Director performance and compensation

Discussion and Next Steps

Commissioners

- Provide additional feedback to the Chair on structure and focus areas
- If there is consensus, a vote may be taken to establish the new committees and commissioner appointments

Staff

- Work with new chairs to set schedule and agendas for 2018
- Announce schedule publicly at January Board meeting



VOTE: Committee Restructuring

MOTION: That, pursuant to Article 4.1 of its by-laws, the Commission hereby replaces the standing committees on Quality Improvement and Patient Protection, Cost Trends and Market Performance, Care Delivery and Payment System Transformation and Community Hospital Investment and Consumer Involvement with the following standing committees: Market Oversight and Transparency; and Care Delivery Transformation, with the duties and focus areas as described and the appointments as made by the Chair.



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 - Care Transformation and Performance to Date in CHART Phase 2, with Insights from the Addison Gilbert-Beverly Hospital CHART Team
 - New Care Delivery Investment Opportunity (VOTE)
- 2017 Health Care Cost Trends Report
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HPC CHART: Foundational investments in system transformation

Community Hospital Acceleration, Revitalization, and Transformation (CHART)

Funding

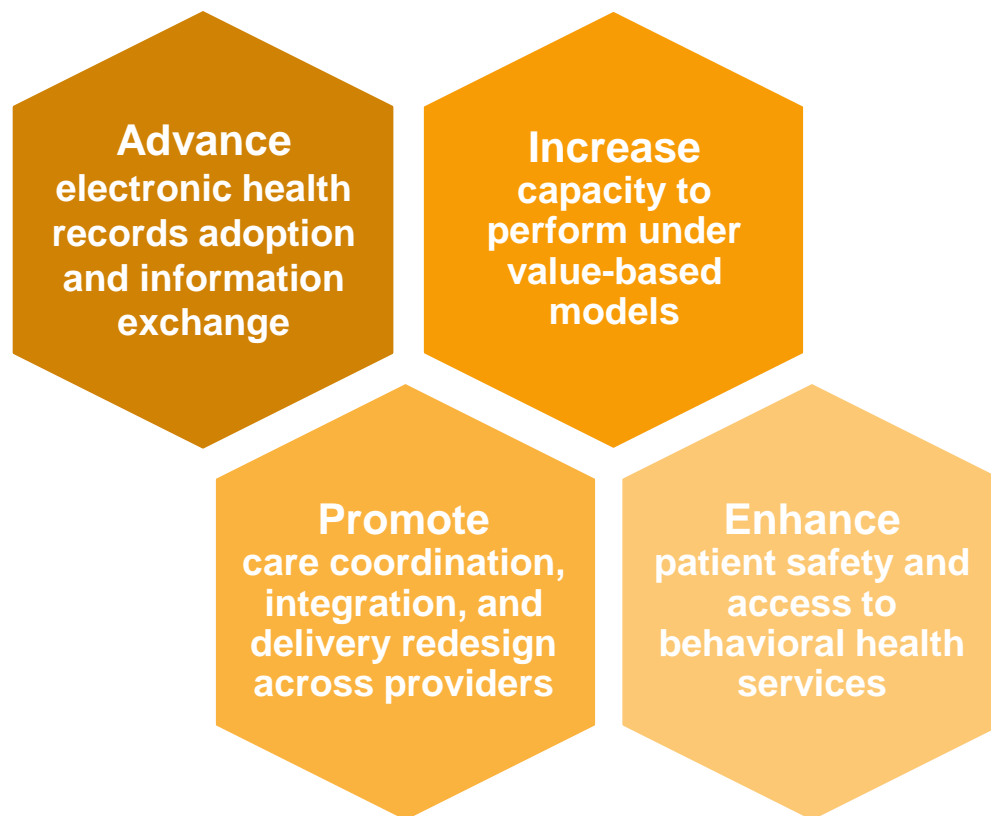
\$9.2M invested in Phase 1; **\$60M** committed in Phase 2. The funding source is a one-time assessment on health plans and well-financed acute care hospitals.*

Eligibility

Massachusetts community hospitals that are **non-profit**, **non-teaching**, and have **relatively low price**.

Goal

To enhance the delivery of efficient, effective care for **health system transformation**.



HPC CHART Program: Phased Investment for MA Community Hospitals

Phase 3 (funding eliminated*)

~\$20M

- Support successful transition to a sustainability model supported by market incentives and APMs
- Continue and enhance promising interventions from Phase 2
- Strengthen relationships with community partners
- Supportive, but not duplicative, of DSRIP goals

**Sustaining
Transformation**

2018 – 2019

Phase 2

\$60M

- Incentivize care delivery transformation
- Maximize appropriate hospital use
- Enhance behavioral health care
- Improve quality and safety by optimizing processes

**Driving
Transformation**

September 2015 – January 2018

Phase 1

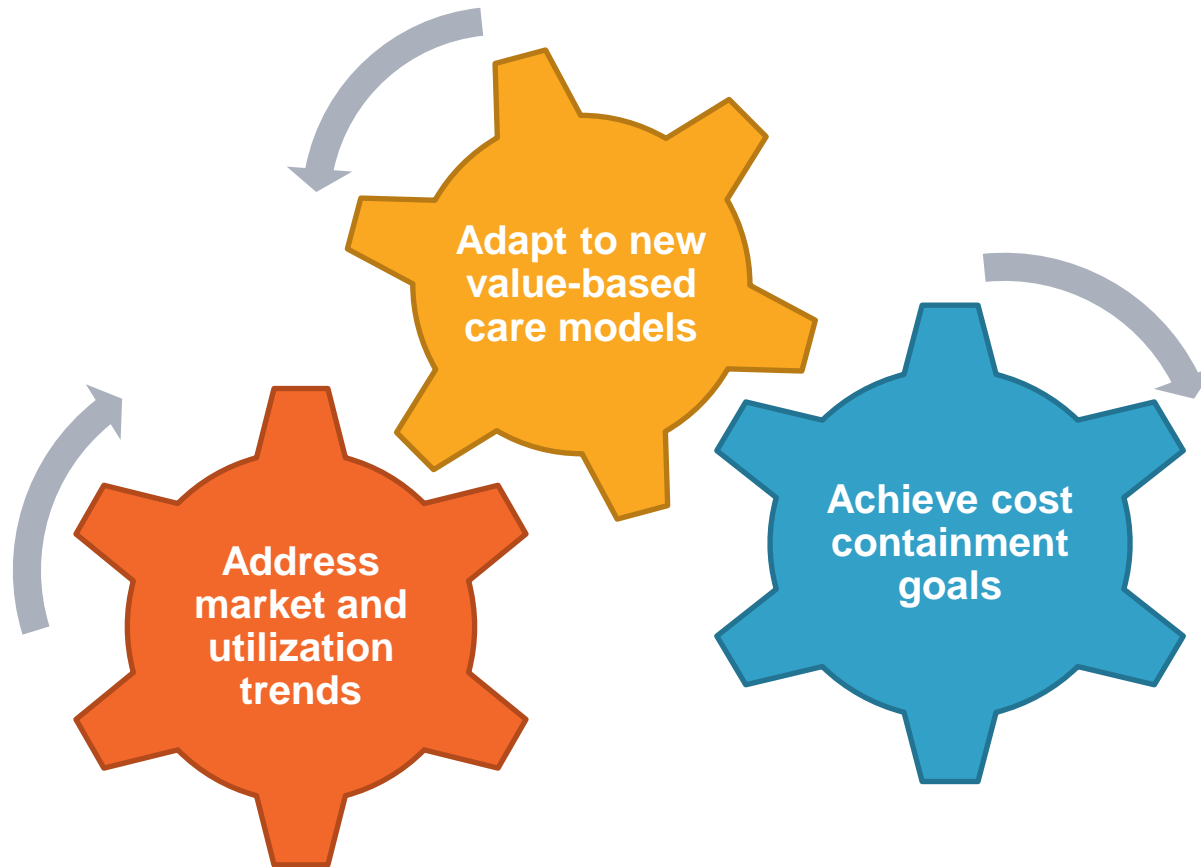
\$9.2M

- Support capacity building through short-term, high-need expenditures
- Promote engagement and foster learning

**Foundational Activities to Prime
System Transformation**

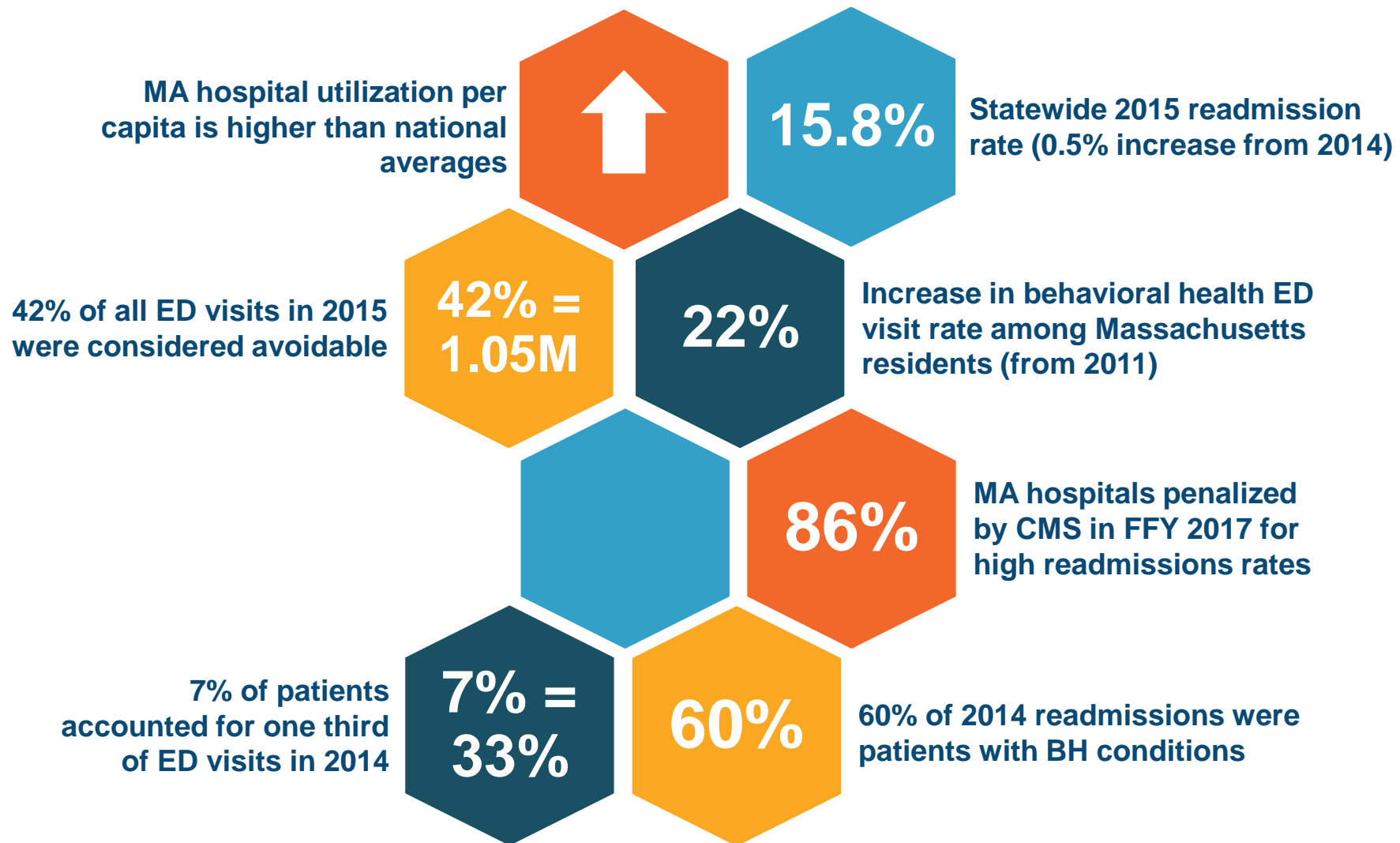
February – September 2014

Working toward a community-based health care system

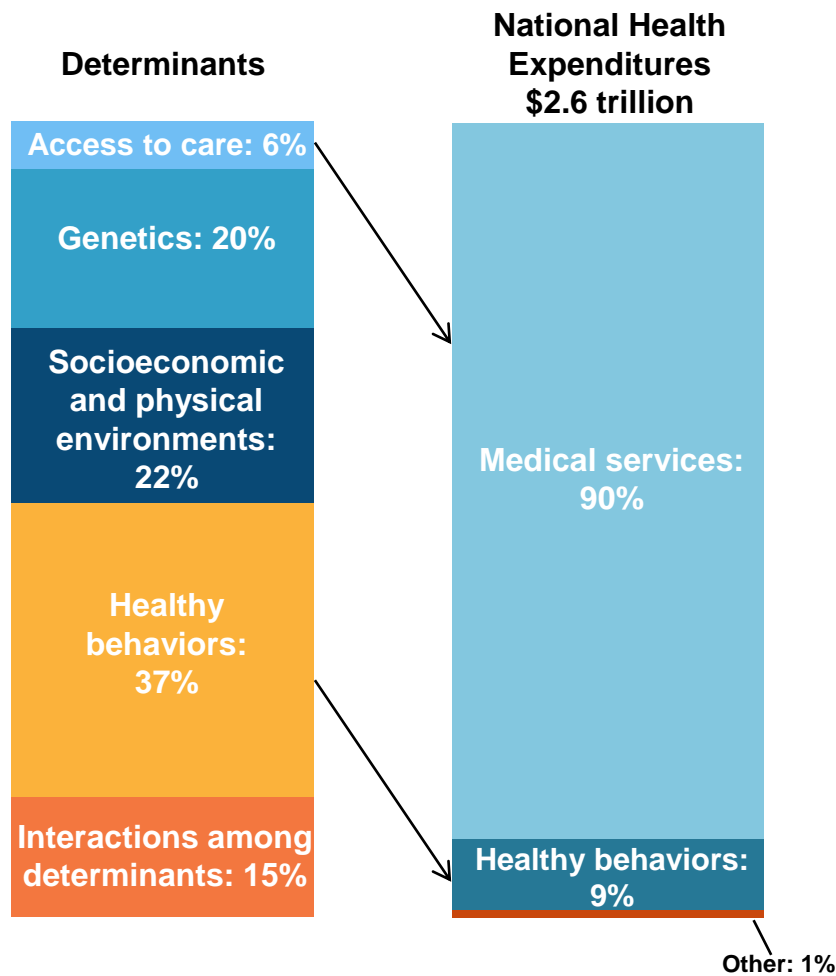


“ I don’t see any future for community hospitals...I think there’s a **fantastic future for community health systems**. If small stand-alone hospitals are only doing what hospitals have done historically, I don’t see much of a future for that. But I see a **phenomenal future** for health systems with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

Hospital utilization in Massachusetts



Social determinants account for a significant proportion of health determinants, yet health spending does not match this reality



Patients with high utilization have:



Lower socioeconomic status



Higher rates of Medicaid coverage



One or more chronic diseases, including behavioral health conditions

To better address high utilization in the ED and hospital, care delivery models can **address the social determinants of health:**



Economic stability



Housing



Nutrition



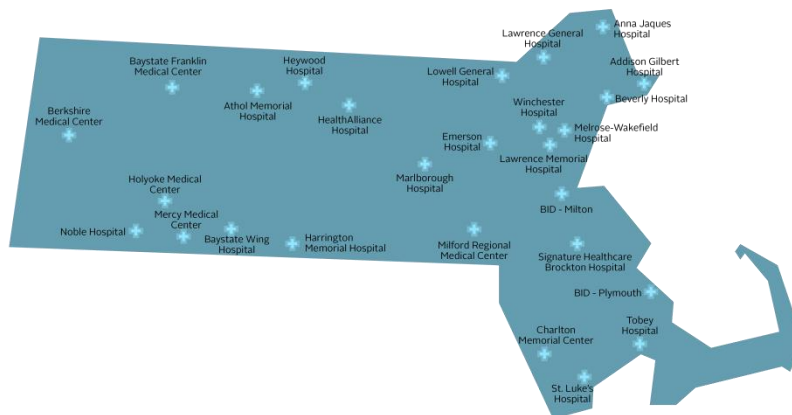
Education



Community supports

Sources: NEHI and University of California, San Francisco, 2013; Johnson et al. (2015). For many patients who use large amounts of health care services, the need is intense yet temporary. *Health Affairs*, 34(8), 1312-1319; Schroeder, S. (2007). We can do better—improving the health of the American people. *New England Journal of Medicine* 357(12), 1221-1228; Vinton et al. (2014). Frequent users of US emergency departments: characteristics and opportunities for intervention. *Emergency Medicine Journal*, 31(7), 526-532.

CHART Phase 2: By the numbers



2 YEARS*
25 AWARDEES
\$60 MILLION

Phase 2 projects serve patient populations that include, e.g.:



Patients with high utilization of the hospital and/or ED
example: ≥ 4 inpatient admissions or ≥ 6 ED visits in the last 12 months



Patients with a behavioral health diagnosis
example: primary or secondary behavioral health diagnosis

With the goal of achieving primary aims that include, e.g.:



Reducing unnecessary hospital utilization
example: reduce 30-day readmissions by 20%



Reducing avoidable ED utilization
example: reduce 30-day ED revisits by 10%
example: reduce ED length of stay by 10%

* CHART Phase 2 programs launched on a rolling basis beginning September 2015 and were implemented over the period of 24 months, with the final Period of Performance ending January 31, 2018.

Note: These are examples only and are not an exhaustive representation of all CHART Phase 2 target populations and aim statements.

A large majority of CHART Phase 2 hospitals are achieving measurable results; all saw care delivery transformation

Since program launch, CHART Phase 2 teams have served **188,000** patient encounters¹



83%

are achieving
measurable results
toward their aim¹



100%

made progress toward
care delivery
transformation

Individual hospital examples:



Reduced returns by 27% for high risk patients

Target population: All med/surg/behavioral health patients with a high risk of readmission



Reduced ED visits by 24% for multi-visit patients

Target population: Patients with ≥ 10 ED visits in the past 12 months



Reduced ED revisits by 34% for behavioral health patients

Target population: Adult patients with a primary or secondary behavioral health diagnosis in the ED setting



Community partner engagement

Established new relationship and formal check-ins with community shelter for patients with housing insecurity



Care delivery innovation

Inspired hospital-wide adoption and hardwiring of ED care plans for non-CHART patients to document and communicate drivers of utilization



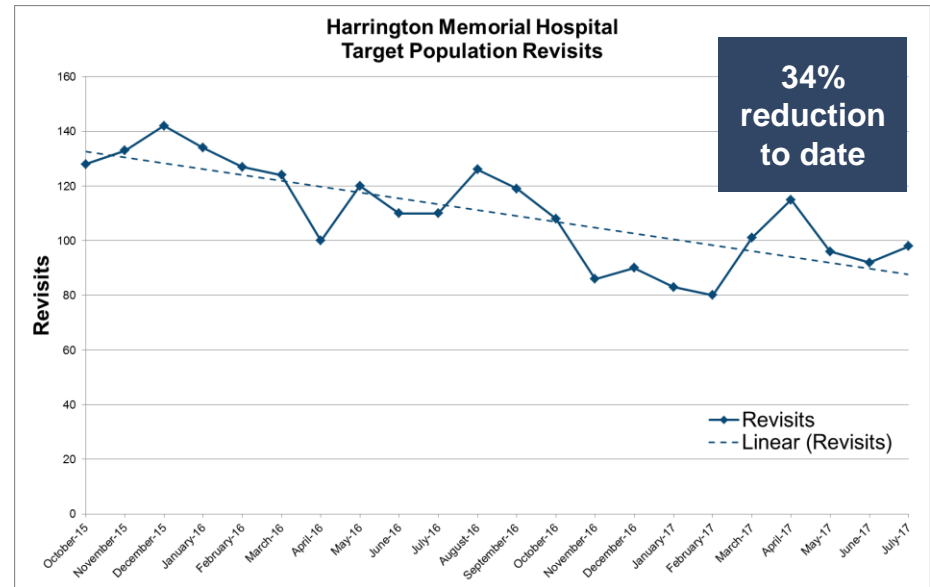
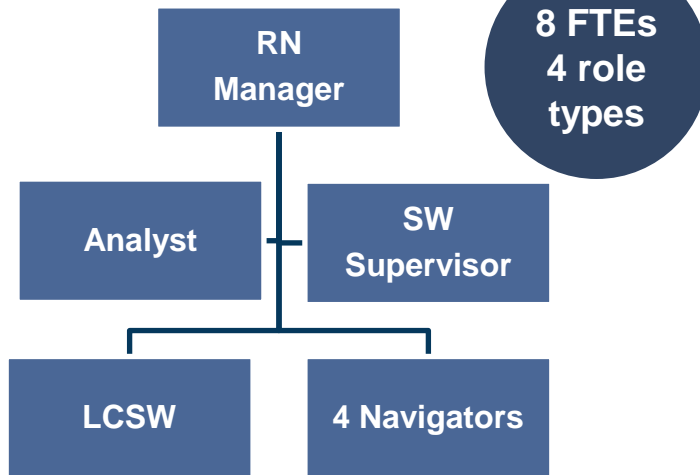
Team development and culture

Hospital leadership held facilitated retreat for CHART staff to review and standardize protocols and practices to care for behavioral health patients in the ED

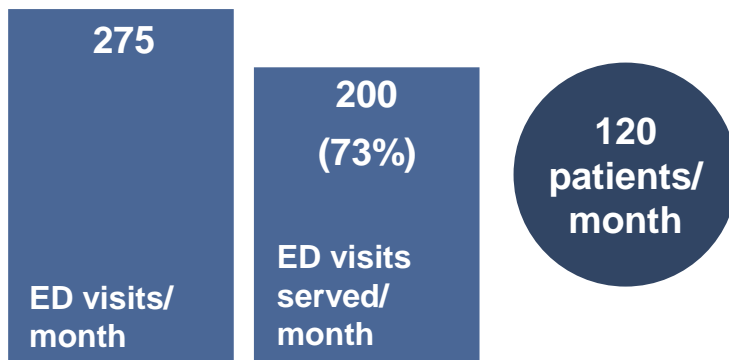
Harrington Memorial Hospital

Improving care for behavioral health ED patients

Team



Average volume



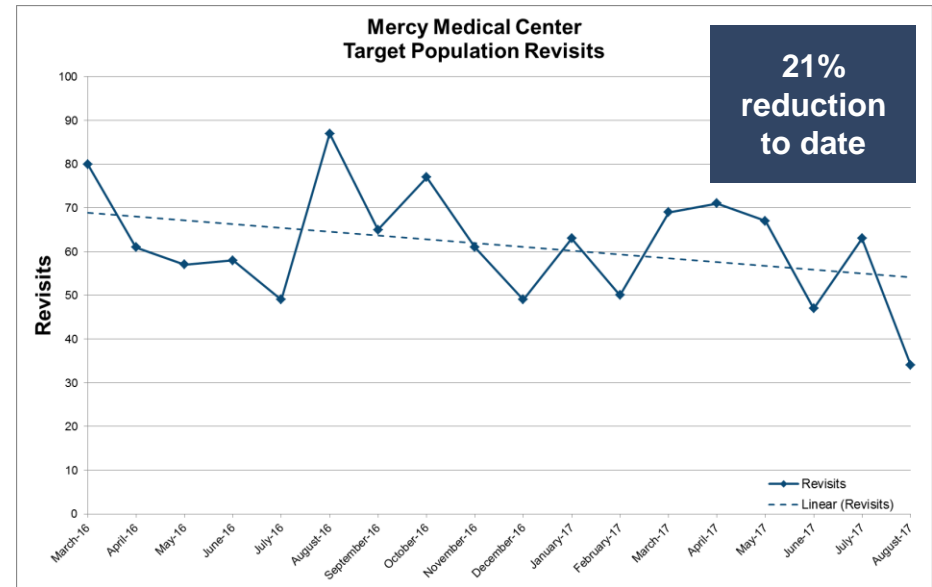
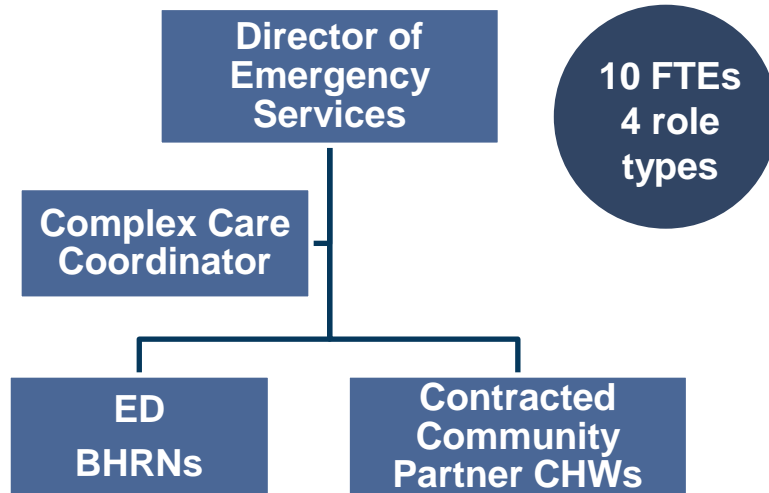
Success factors

- ✓ Address patients' basic needs first
- ✓ Creatively leverage community resources
- ✓ Effective engagement tactics, frequent contact
- ✓ Adapt care model to achieve outcomes
- ✓ Drill down on data to understand impact

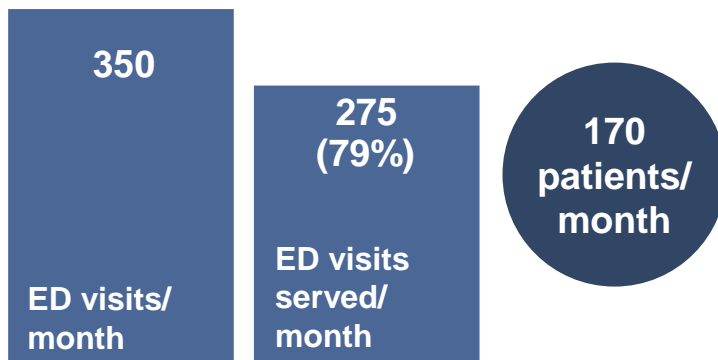
Mercy Medical Center

Reducing ED utilization for behavioral health patients

Team



Average volume



Success factors

- ✓ “Whole Person” approach
- ✓ CHWs with local knowledge
- ✓ Quick and extensive community contacts
- ✓ 24/7 BHRN coverage in ED BH pod
- ✓ Solid support from hospital leadership

Transformation highlights in CHART Phase 2

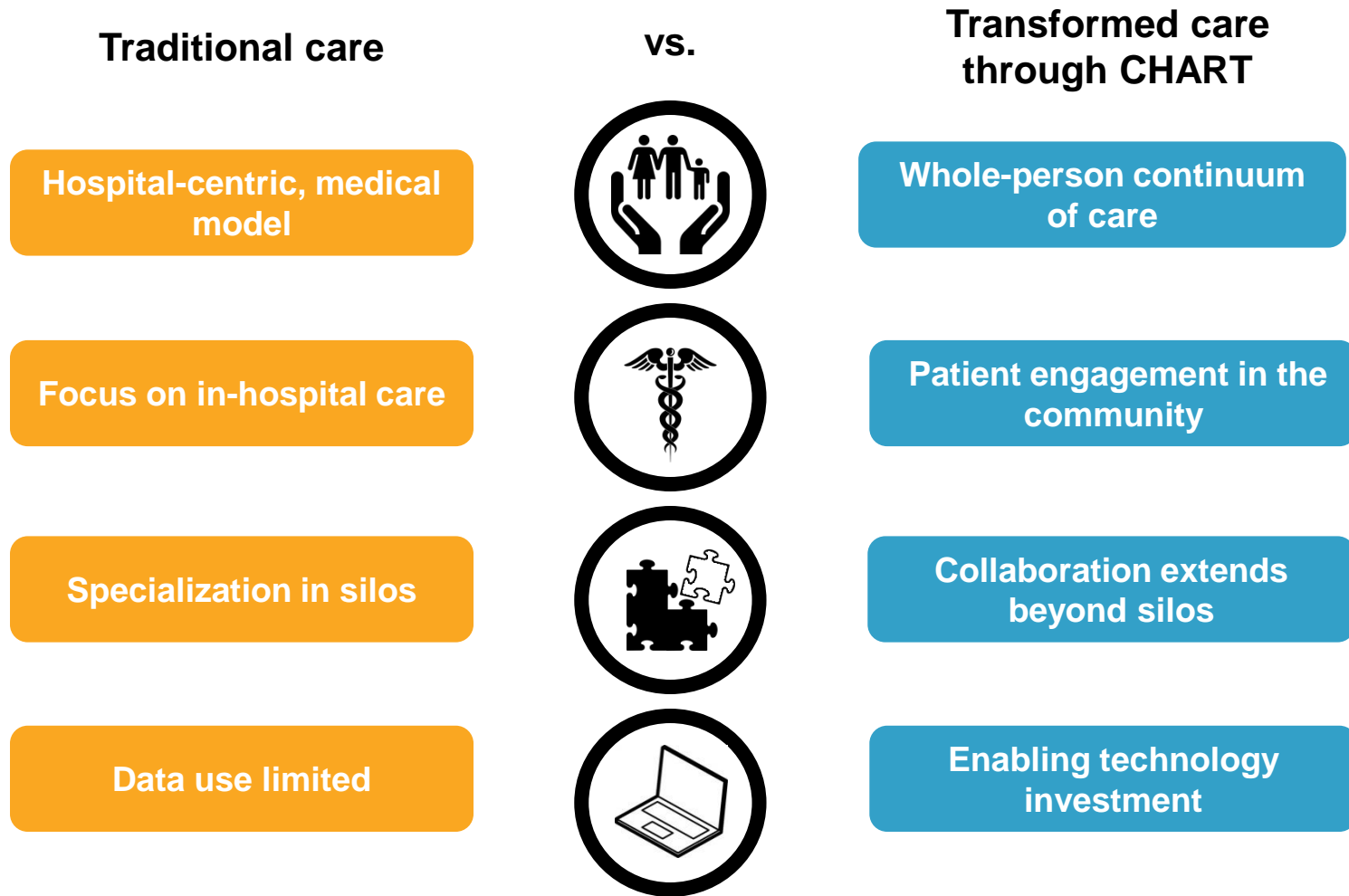


CHART transformation highlights: Whole-person continuum of care



Care delivery model redesign

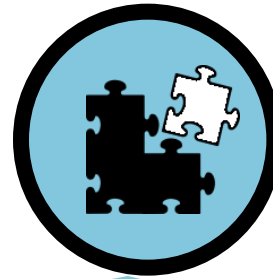
- **All payer**
 - CHART hospital programs serve publicly- and privately-insured patients
- **At scale**
 - CHART hospital programs endeavor to serve all patients within a given target population
- **Beyond discharge**
 - Patients no longer have to navigate a complicated, fragmented system alone as clinical staff help care providers connect the dots

CHART transformation highlights: Patient engagement in the community



- **Empowering non-medical staff**
 - Community Health Workers (CHWs) form close bonds with patients as advocates and coaches
- **Meeting patients where they are**
 - Open to connecting with patients in non-traditional settings including community centers, parks, and coffee shops
- **Uncovering psycho-social complexities**
 - CHWs, trained in motivational interviewing, work to identify the root causes of Emergency Department utilization including barriers to transportation, lack of insurance, and food and housing insecurity

CHART transformation highlights: Collaboration extends beyond silos



- **Coalition building with community partners**
 - Skilled Nursing Facilities, Visiting Nurse Associations, law enforcement, pharmacies, schools, mental health providers and others coordinate patient care
- **Coordination of resources**
 - Teams work with other care providers to streamline services, avoid duplication of efforts
- **Transdisciplinary problem-solving**
 - Disciplines work together to generate innovative ways to improve access and quality of patient care while increasing efficiency

CHART transformation highlights: Enabling Technology investment



- **Enabling real-time patient identification**
 - Teams notified of target population admission and discharge
- **Engagement upon admission, discharge**
 - Teams maximize face-to-face encounters to establish trust with patients
- **Automation of timely reporting**
 - Data collection and analyses are expeditiously produced for team review
 - Teams adapt care delivery model as informed by data reports and trends

CHART Phase 2 hospitals are playing a critical role in addressing the opioid epidemic at the individual, facility, and community levels



Individual hospital examples:



- Provides a bridge for buprenorphine treatment through Suboxone Bridge Program
- Initiates buprenorphine treatment using televisits with Neighborhood for Health psychiatrist



- Targets obstetric patients with SUD and patients with non-fatal opioid overdoses
- Collaborates with local police post overdose reversals



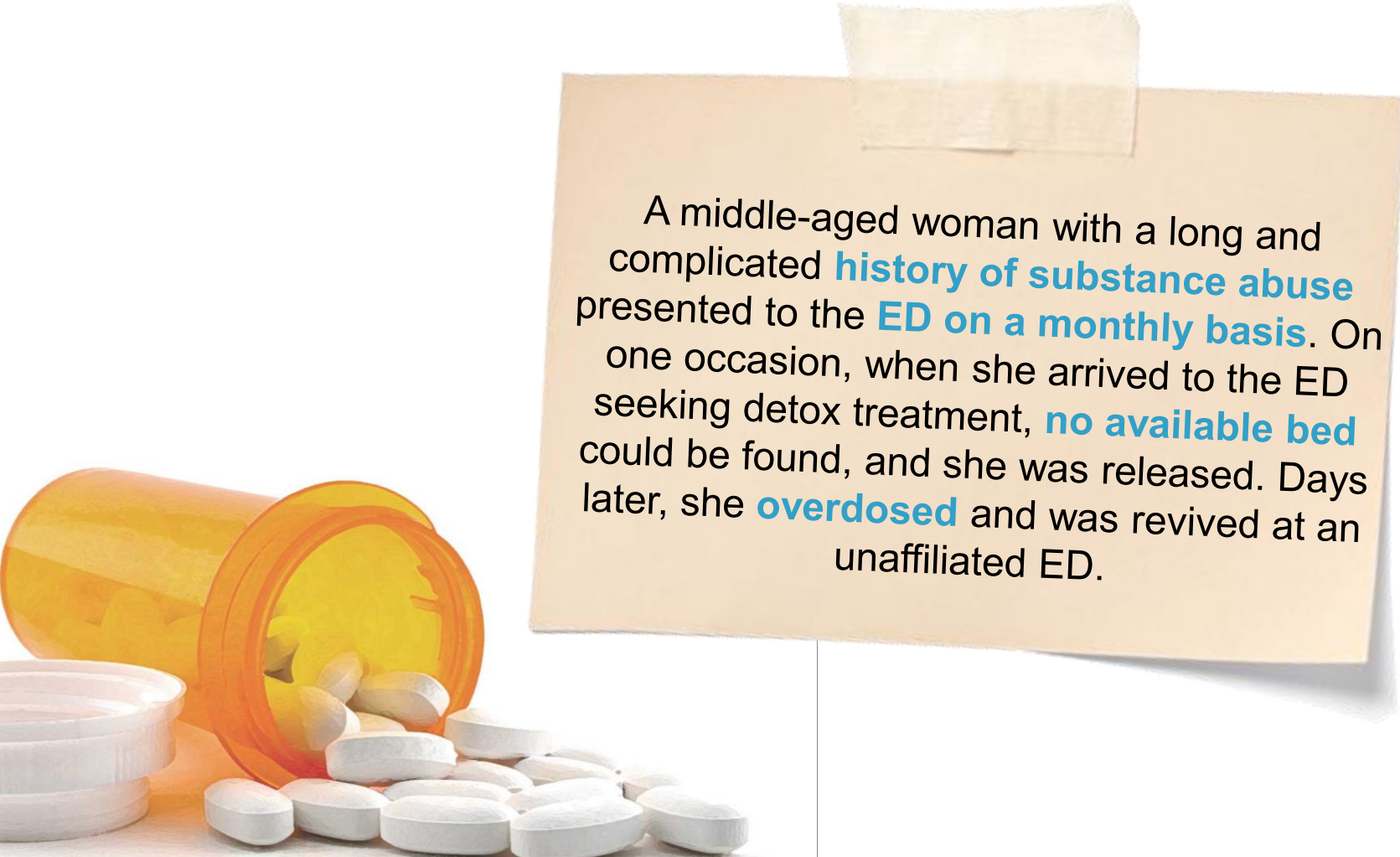
Beth Israel Deaconess Hospital
Plymouth

- Provides addiction assessment in ED and linkages to detox, outpatient pharmacy, and primary care
- Makes referrals to drug and mental health court



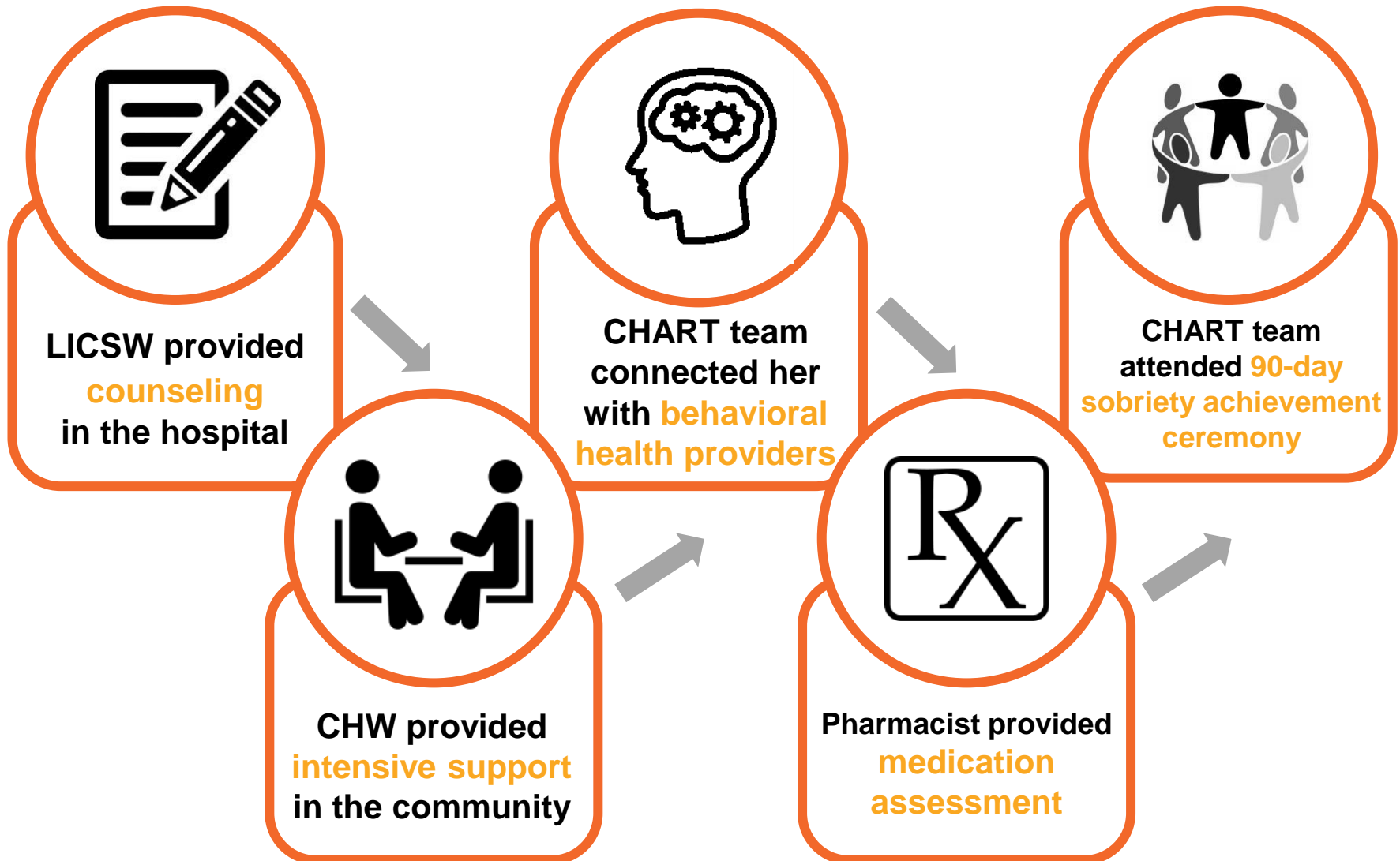
- Provides support for patients with opioid-related court involvement
- Implements an integrated care model with screening for opioid use disorder in ED and inpatient units

Patient story 1: Before CHART engagement

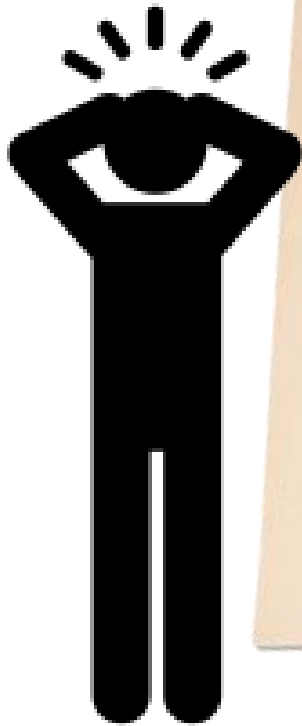


A middle-aged woman with a long and complicated **history of substance abuse** presented to the **ED on a monthly basis**. On one occasion, when she arrived to the ED seeking detox treatment, **no available bed** could be found, and she was released. Days later, she **overdosed** and was revived at an unaffiliated ED.

Patient story 1: CHART intervention



Patient story 2: Before CHART engagement



A male patient **repeatedly presented to the ED** for anxiety and acid reflux. He requested assistance **reconnecting with a prescriber** to obtain medications. He was referred to the hospital's CHART services, but a CHART community health worker (CHW) **could not reach him** the following day. The next time the patient presented to the ED, the ED Navigators notified the CHART team for **a face-to-face meeting**.

Patient story 2: CHART intervention

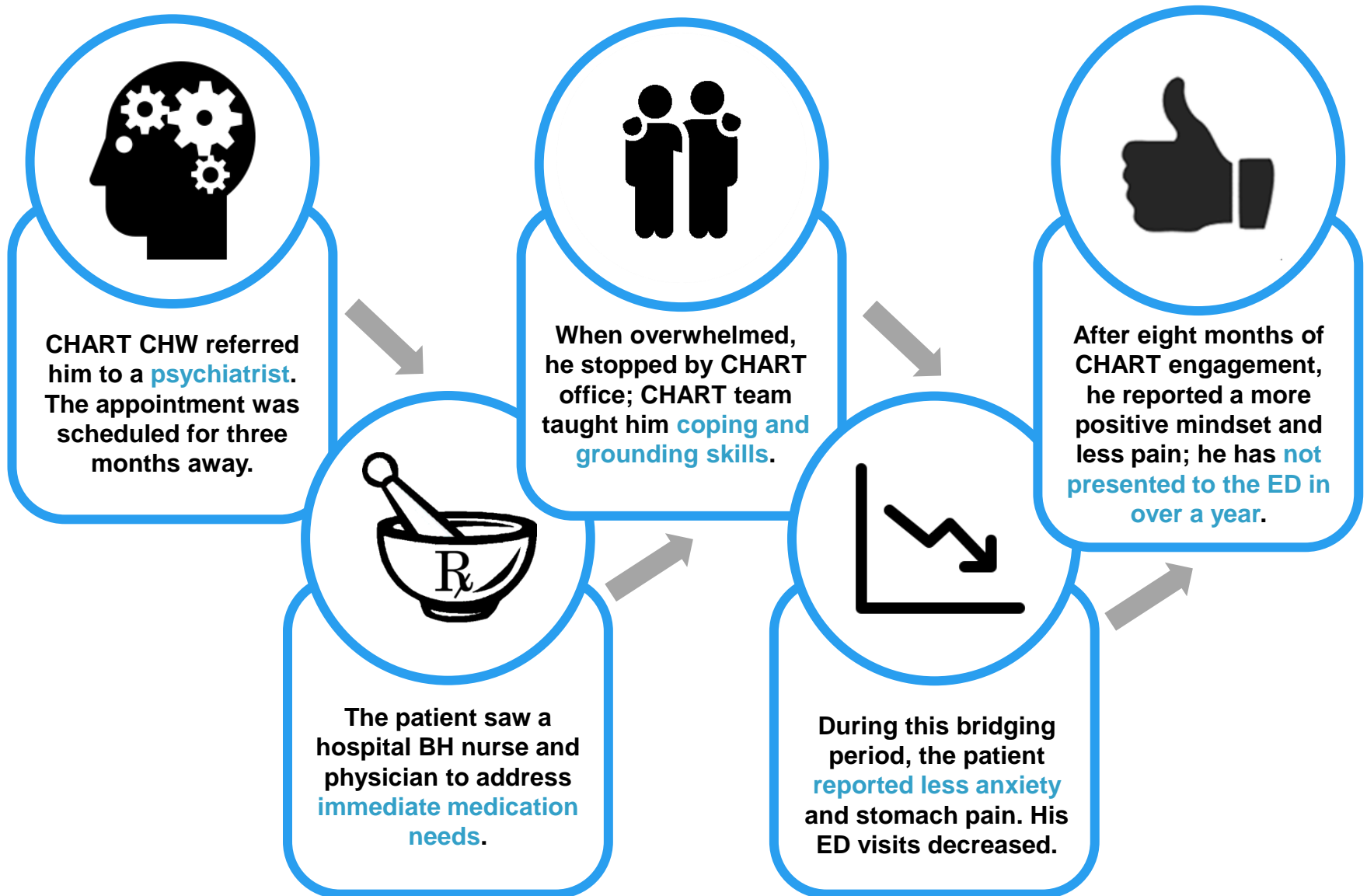


CHART Phase 2 workforce is multidisciplinary and committed

CHART Phase 2: 250 full-time equivalents across 27 sites

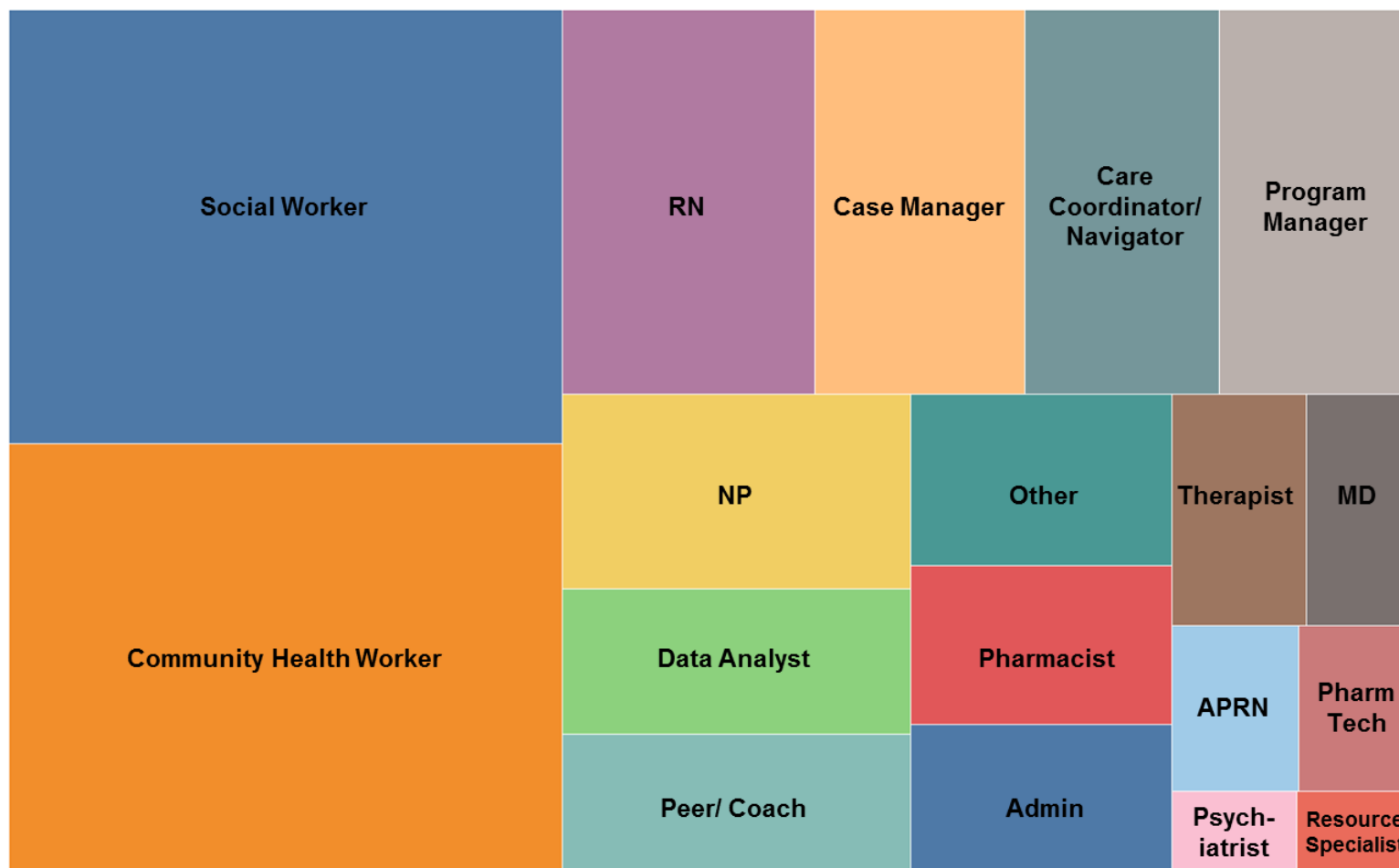


CHART Phase 2 workforce is multidisciplinary and committed

“Not only has this program helped our patients, but it has also helped the staff here at Holyoke Medical Center. We've learned how to work together as a team for our patients' needs and how to communicate better with each other.”

– Community Outreach Worker, Holyoke Medical Center

“CHART allowed us to shift the paradigm from ‘talk and tell’ to ‘listen and ask.’”

– Director of Quality/Patient Safety, Winchester Hospital

“We build a bridge between services.”

– Community Health Worker, Behavioral Health Network

“This [CHART] grant has humanized these patients.”

– Director, Care Integration, BID - Milton

“It's not easy to move from a ‘patient-’ to a ‘person-centered’ approach, but that's what our patients need from us.”

– Program Manager, Baystate Franklin Medical Center

Throughout implementation, CHART initiatives have been recognized locally and nationally

Since program launch, the CHART Phase 2 hospital teams have been recognized through speaking engagements at national conferences, spotlights in regional and state news, and high profile publications

Individual hospital examples:



BID – Milton presented at the December 2017 **Advanced Training Program Alumni Reunion/IHI's National Forum on Quality Improvement**



Emerson Hospital, BID – Milton, BID – Plymouth, Signature Healthcare Brockton Hospital, and Milford Regional Medical Center included in the **2017 MHA Compass Awards Compendium**



BID – Plymouth runner-up for the **2016 Better Government Competition**: “Improving the Quality and Access to Care for Individuals Living with Mental Illness”



Hallmark Health System's COACHH program featured on **Boston 25 News, October 2017**: “Local hospital program fills a gap in the road to beating drug addiction”

As a part of CHART Phase 2, hospitals were supported by the HPC in strategic planning activities

Awardees had access to up to \$50,000 in CHART funding for strategic planning activities

Who was involved?

A diverse group of community partners, CHART staff, and hospital leadership including: Clinical staff, administrative staff, C-suite hospital leadership, business office, patients, patients' families, post-acute care settings, behavioral health community partners, consultants.

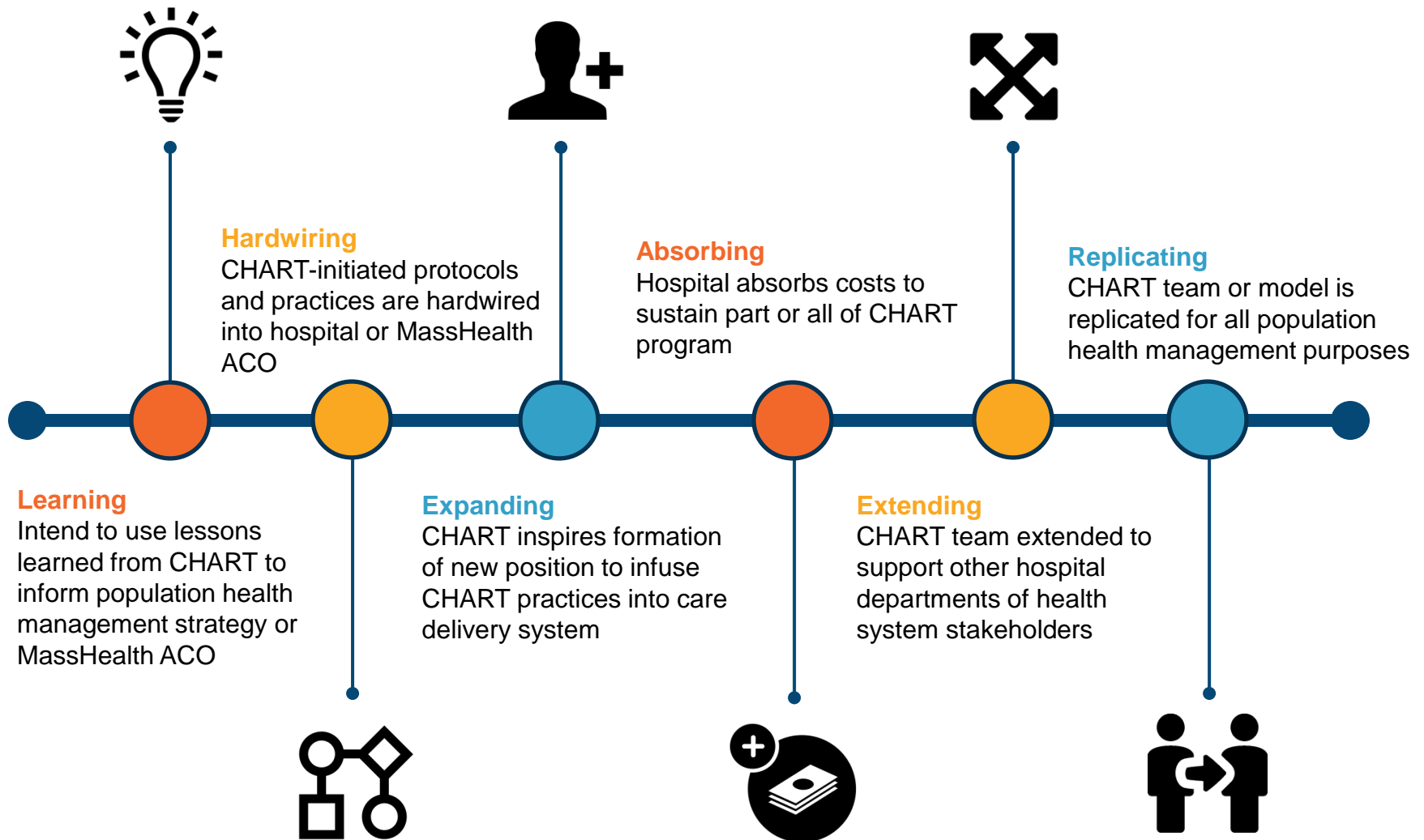
What did they do?

Internal and external interviews, outcome evaluations, and cost analyses including: Patient interviews, CHART staff interviews, hospital staff interviews, business case analysis (ROI), community impact evaluation, assessment of CHART program alignment with hospital goals, presentations to the hospital Board, focus groups.

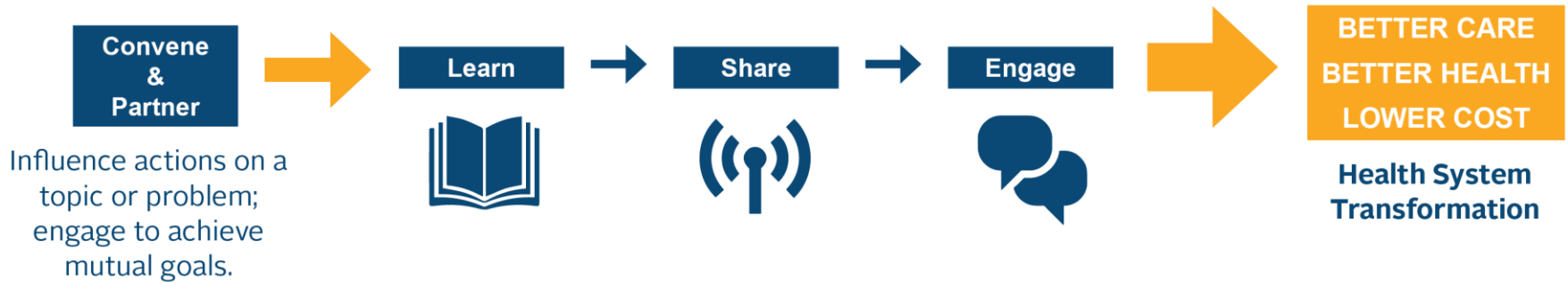
What's next?

CHART will extend past the grant period in various forms including: joining a MassHealth ACO, deployment of CHART-trained staff throughout hospital departments, dissemination of CHART processes, generating new funding for CHART position, using lessons learned to inform ACO planning, model replication to be main population health management strategy.

After the Strategic Planning process, 100% of CHART hospitals intend to sustain part or all of their programs in a variety of ways



The HPC is committed to maximizing the impact of CHART Phase 2 through learning and dissemination

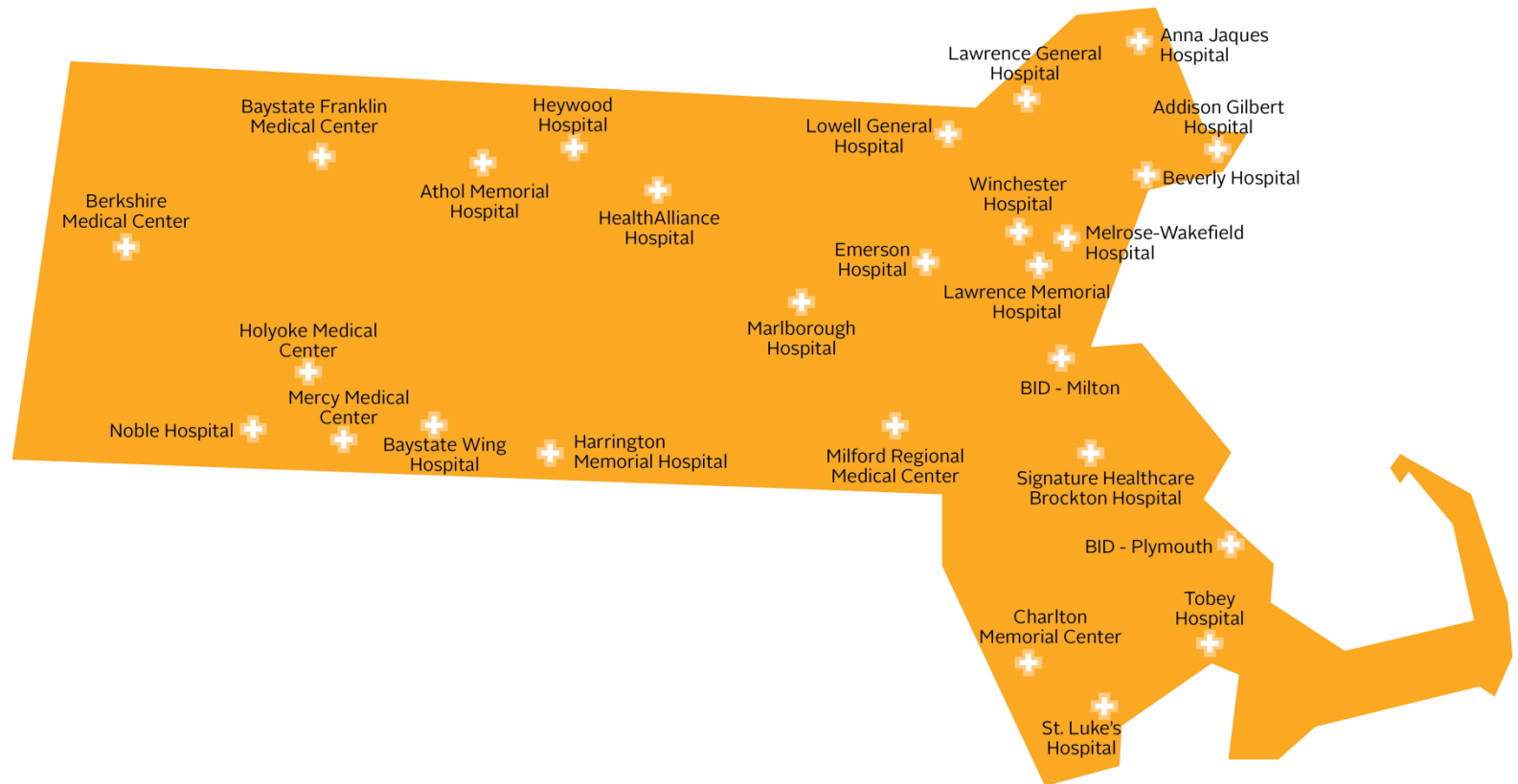


There is an appetite for learning among those implementing programs to address patients with complex needs, and CHART Phase 2 hospitals are eager to share their experiences.

In close collaboration with CHART Phase 2 alumni, the HPC will share lessons learned derived from program implementation with the broader community in a manner that is:

- 1 Actionable, practical, and timely**
- 2 Adaptable to community need and local context**
- 3 Reinforced by experiential evidence**

Thank you for your partnership and commitment to serving the Commonwealth's most vulnerable populations



Strategic Planning for Sustainability: ***Beverly & Addison Gilbert Hospitals*** **Reducing Readmissions for High-Risk Patients**

Cynthia Cafasso Donaldson

Vice President, Addison Gilbert Hospital and Lahey Outpatient Center,
Danvers

Sandi Akers, RN, MSN

CHART Clinical Administrator

Dec 12, 2017

AGENDA

- **CHART 2 Program Background**
 - Objective
 - Team Composition
 - Target Population
- **Strategic Planning Process**
 - Task Force
 - Data Analysis
 - Qualitative
 - Quantitative
 - Lessons Learned
 - Sustainability Proposal
- **Future Direction/Sustainability**
 - Restructuring of Team for sustainability
 - Impact on Medicaid ACO

Objective/Aim

Addison Gilbert/Beverly Hospital CHART 2

Objective of CHART 2

- Prepare Community Hospitals for operating in new payment models (i.e. value-based payments and accountable care organizations)

Aim of Addison Gilbert and Beverly Hospital programs

- Reduce “returns” (any bed observation or inpatient) by 20%
- Reduce ED returns by 10% (secondary aim)

The CHART High Risk Intervention TEAM

TEAM Members

Sandi Akers, RN, MSN – Clinical Administrator –Program Manager (.5 FTE)

Sheila Laffy, System Analyst (1.0 FTE)

Addison Gilbert Hospital (2.75 FTE's)

- 1 Nurse Practitioner – Charmaine Lastimoso, NP, MPH
- 1 Pharmacist – Niki Patel, PharmD
- 1 Social Worker – Paul Larrabee, LICSW

Beverly Hospital (6 FTE's)

- 2 RN's – Jennifer Carter, RN – Meredith Olson, RN
- 2 Pharmacists – Pooja Patel, PharmD, Christine Bertoli, RPh
- 2 Social Workers – Joellen Falk, LICSW, Priyanka Subash, LICSW

Addison Gilbert and Beverly Hospital

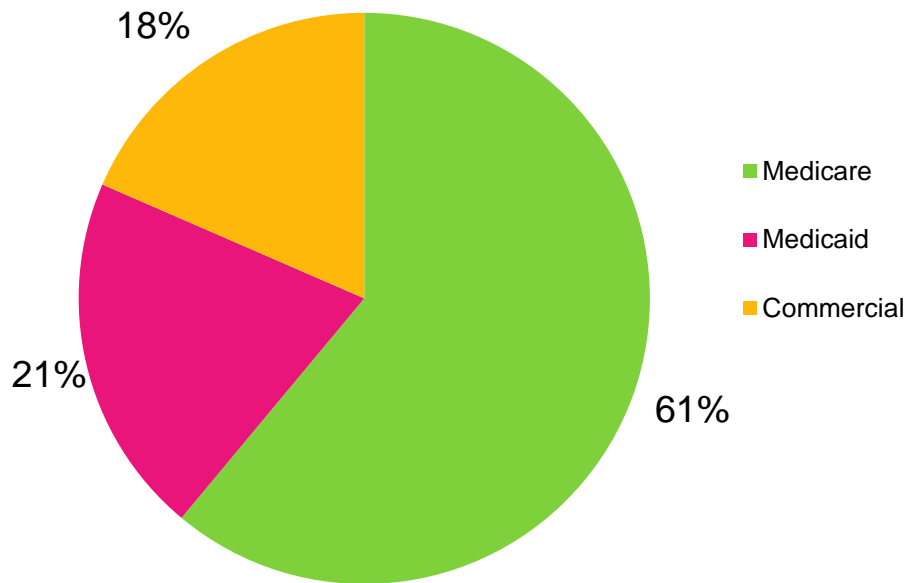
The TARGET Population

Target population:

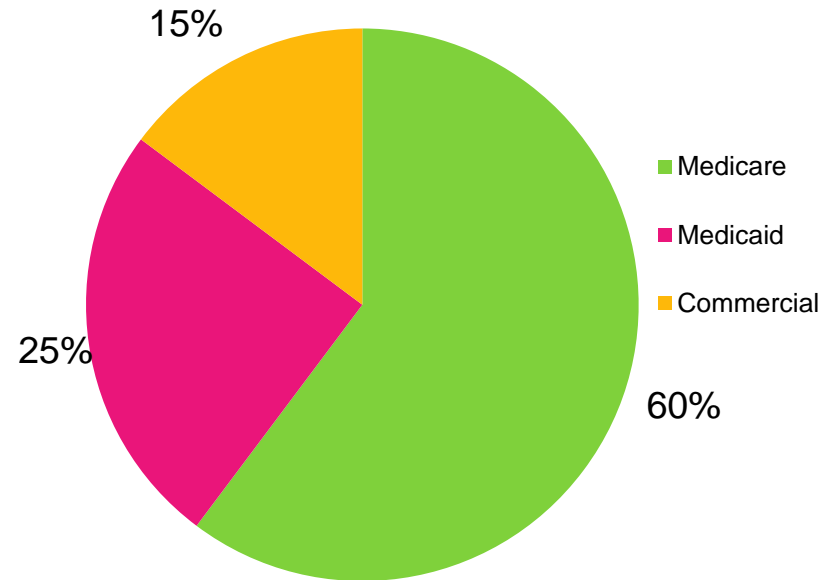
- High Utilizers (4 or more inpatient stays in a year)
- Readmissions within 30 days
- Socially Complex (Substance Use Disorder, Medicare <65, Medicaid, Homeless)
- Target population selected because their readmission rate was 3 times higher than hospital average
- Total Enrolled Discharges to date: AGH=1574, Beverly=6140
- Target Population accounts for 33% of total hospital discharges
- Enrolled at any one time: AGH – 90; Beverly - 380

Target Patients by Payer

Beverly Hospital



Addison Gilbert Hospital



82 to 85% of the target population has a public payer (Medicare or Medicaid)

The Strategic Planning Process: Overview

- **Purpose:** To objectively evaluate CHART 2 program and provide recommendations for sustainability
- Task Force selected and met a total of **8 times** from May to Sept. of 2017
- An independent facilitator was engaged to conduct focus groups utilizing a standardized interview process with HRIT staff, colleagues, stakeholders, and patients. (July 11th and July 12th 2017).
- Data analysis included a quantitative and qualitative assessment process of the CHART 2 program.
- Budget review, return on investment, and sustainability options were explored in detail.
- Numerous presentations including the NHS Quality Committee Board of Trustees, Lahey Readmission SWAT team, the NHC CEO, Phil Cormier, and Senior Leadership
- Guidance from HPC -Dr. Amy Boutwell and Tayler Rohlfing invaluable!!

The Strategic Planning Process: The Strategic Planning Task Force

Sandi Akers, RN, MSN – Clinical Administrator CHART GRANTS

Cindy Donaldson, RPh, MBA, V.P. Addison Gilbert Hospital and Lahey
Outpatient Center, Danvers

David Dichiara, MD Associate Chief Medical Officer, AGH and Beverly

Carol Jones, BSN, MBA Director Performance Improvement and Quality

Nicole DeVita, RPh. Chief Operating Officer

Connie Woodsworth, MBA Chief Financial Officer, AGH and BH

Les Sebba, MD. President and Chief Medical Officer, Lahey Clinical
Performance Network (ACO)

Qualitative Data Analysis: Hear the VOICES of Stakeholders

DATA COLLECTION

- 8 Focus Groups conducted: 4 at Addison Gilbert, 4 at Beverly, 50+ Attendees
- Independent facilitator
- Standard process/questions

What interventions and what roles were most effective?

- **Patient Responses:** Home visits, 48 hour calls, persistent outreach to patients.
 - Social workers role perceived by patients as the face of outreach-biggest impact
- **Colleagues/Providers:**
 - improved med reconciliation
 - improved coordination of care
 - increase job satisfaction for colleagues, someone to refer/call for behavioral intervention.
 - Improved collaboration with community partners

Patient Focus Groups very powerful statements of HRIT impact

- “I wouldn’t be alive today if it wasn’t for JoEllen”, “The HRIT Team saved my daughters life. She is sober today because of this team”.

Quantitative DATA

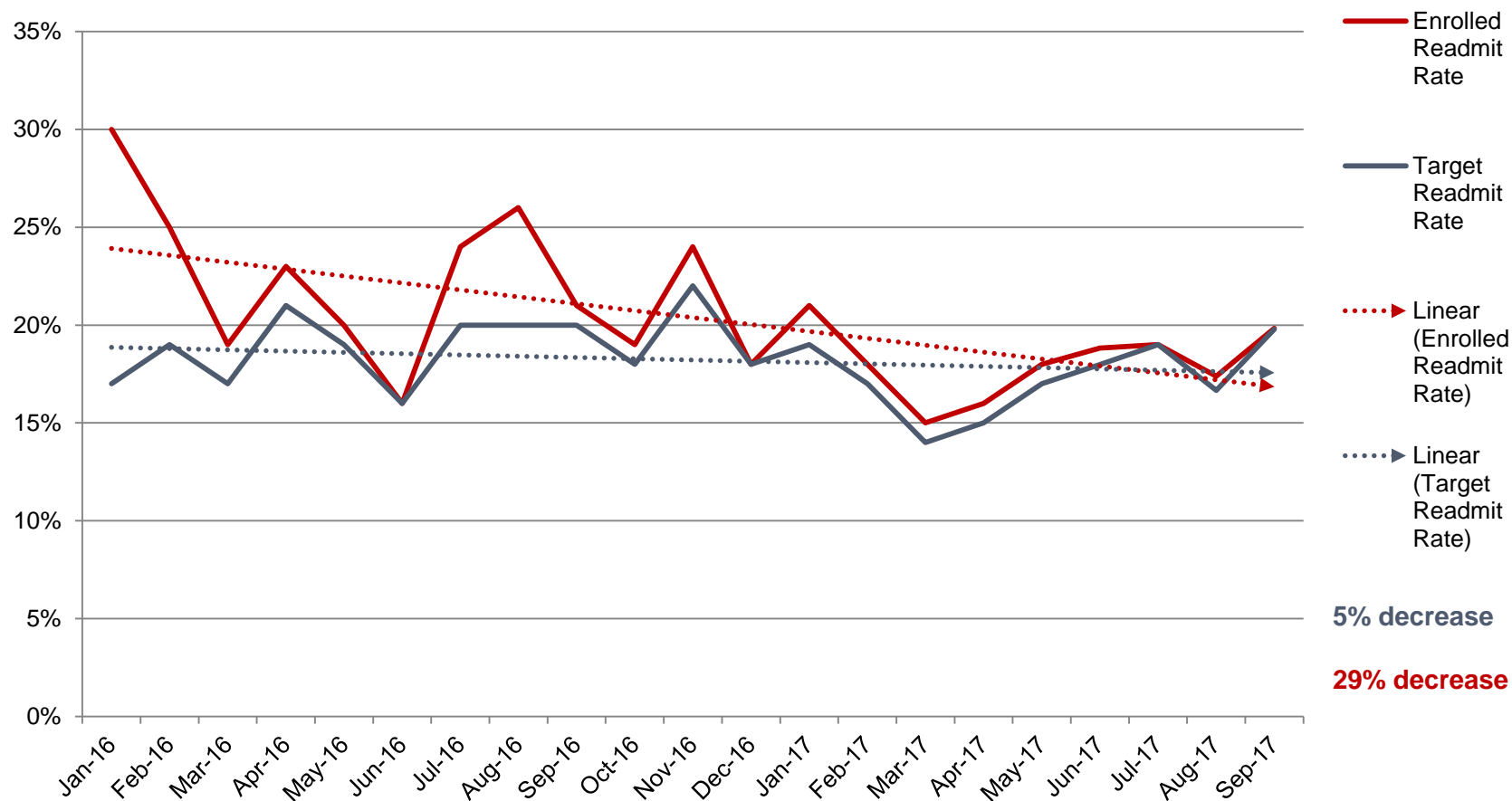
Reduction in Enrolled Admissions

Quantitative Data demonstrates measureable improvements in readmissions particularly for enrolled patient population

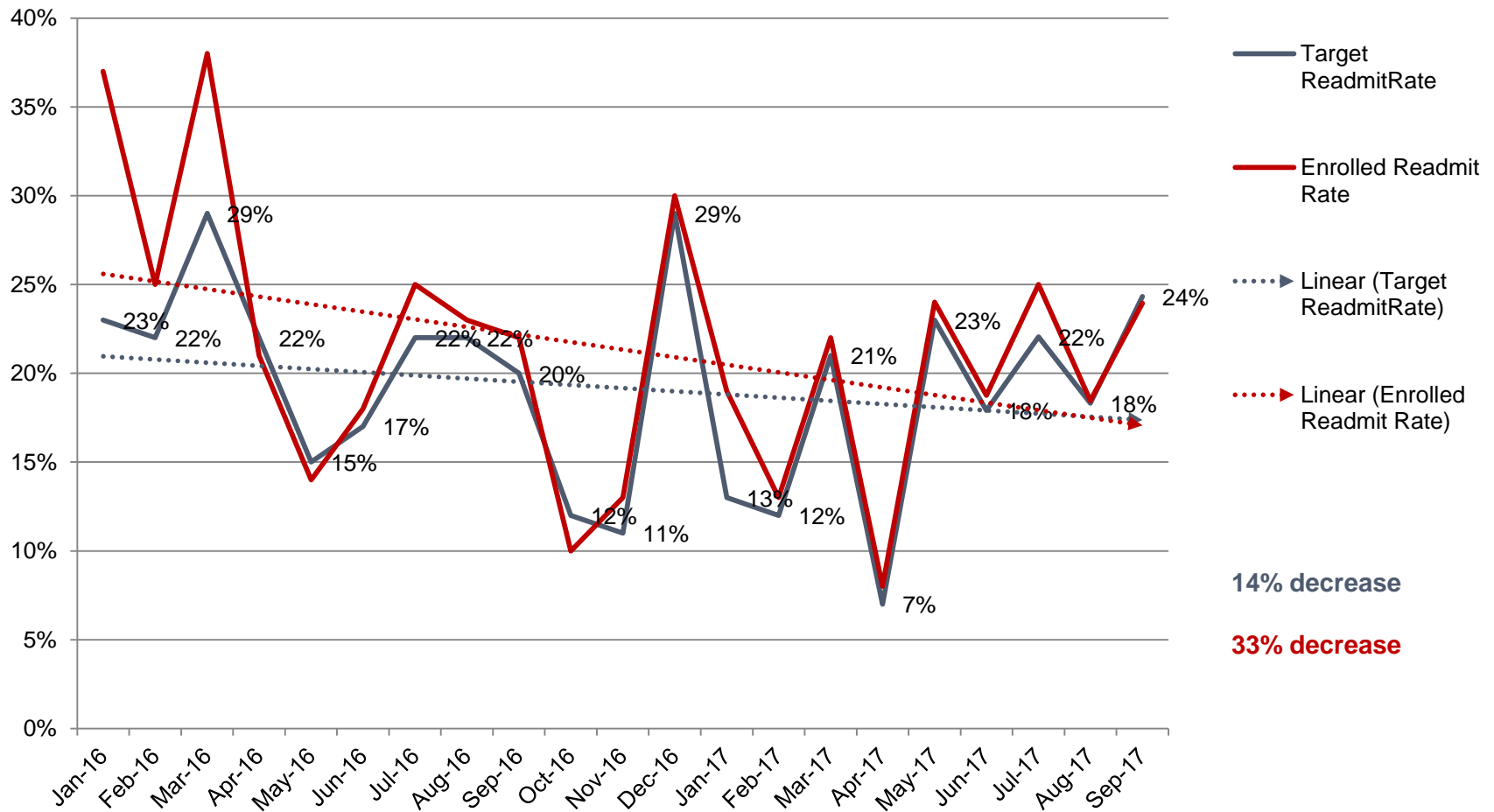
- 29 % linear rate reduction in Beverly admissions for enrolled population
- 33% linear rate reduction in Addison Gilbert Hospital for enrolled population
- 29% reduction in readmission from SNFs at AGH (2016 to 2017)
- 9% reduction in readmission from SNFs at Beverly (2016 to 2017)
- 24 % reduction in Medicaid readmissions for AGH and Beverly combined

Beverly Readmission Rate by Population

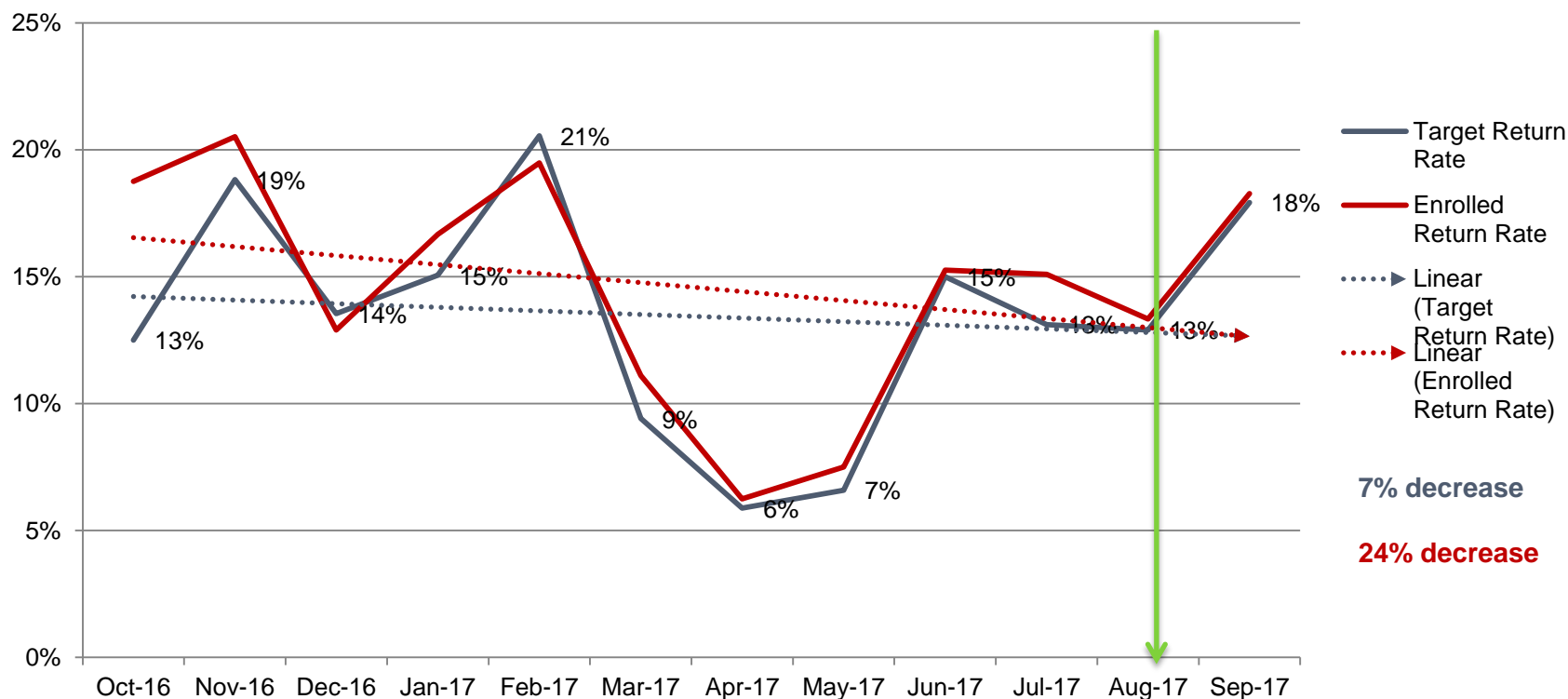
Beverly Readmission Rate by Population



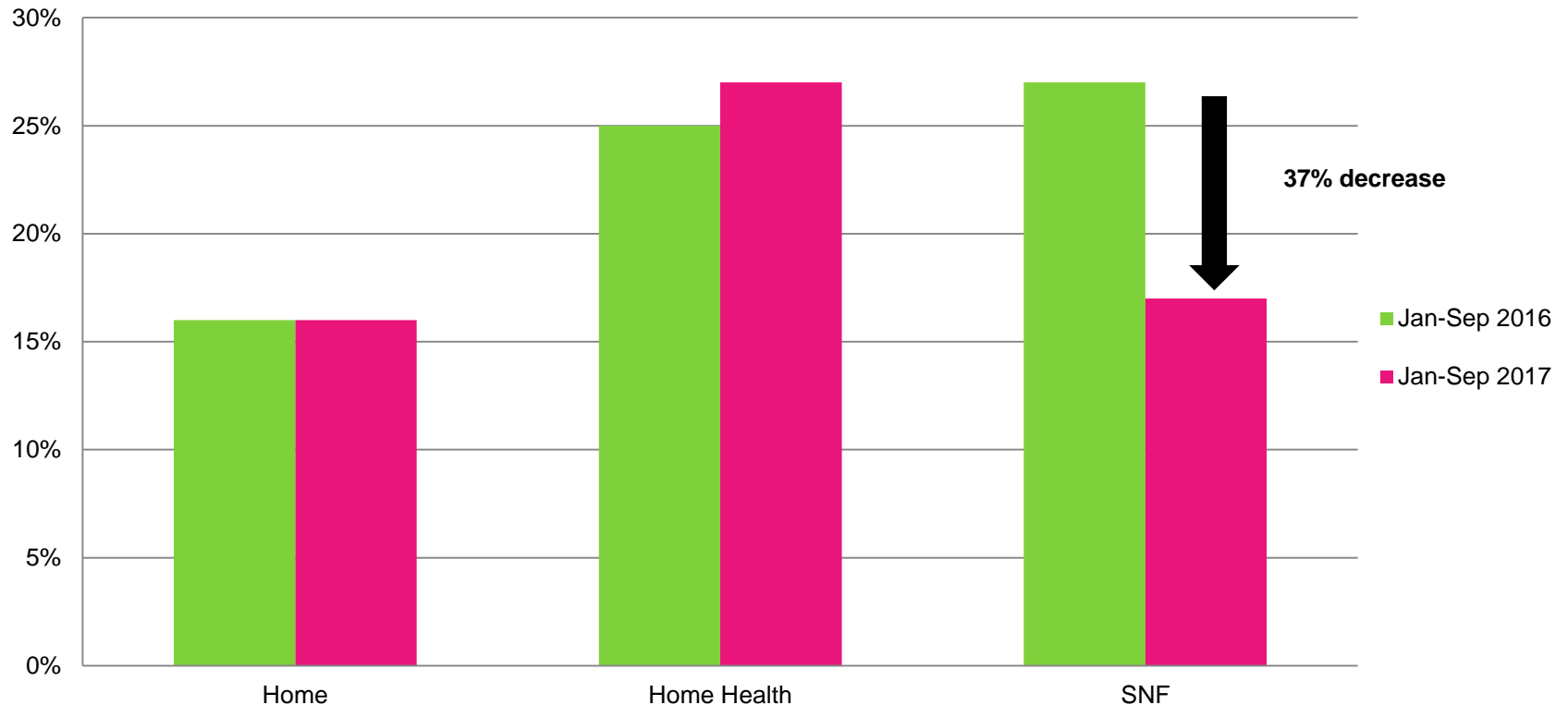
AGH Readmission Rate by Population



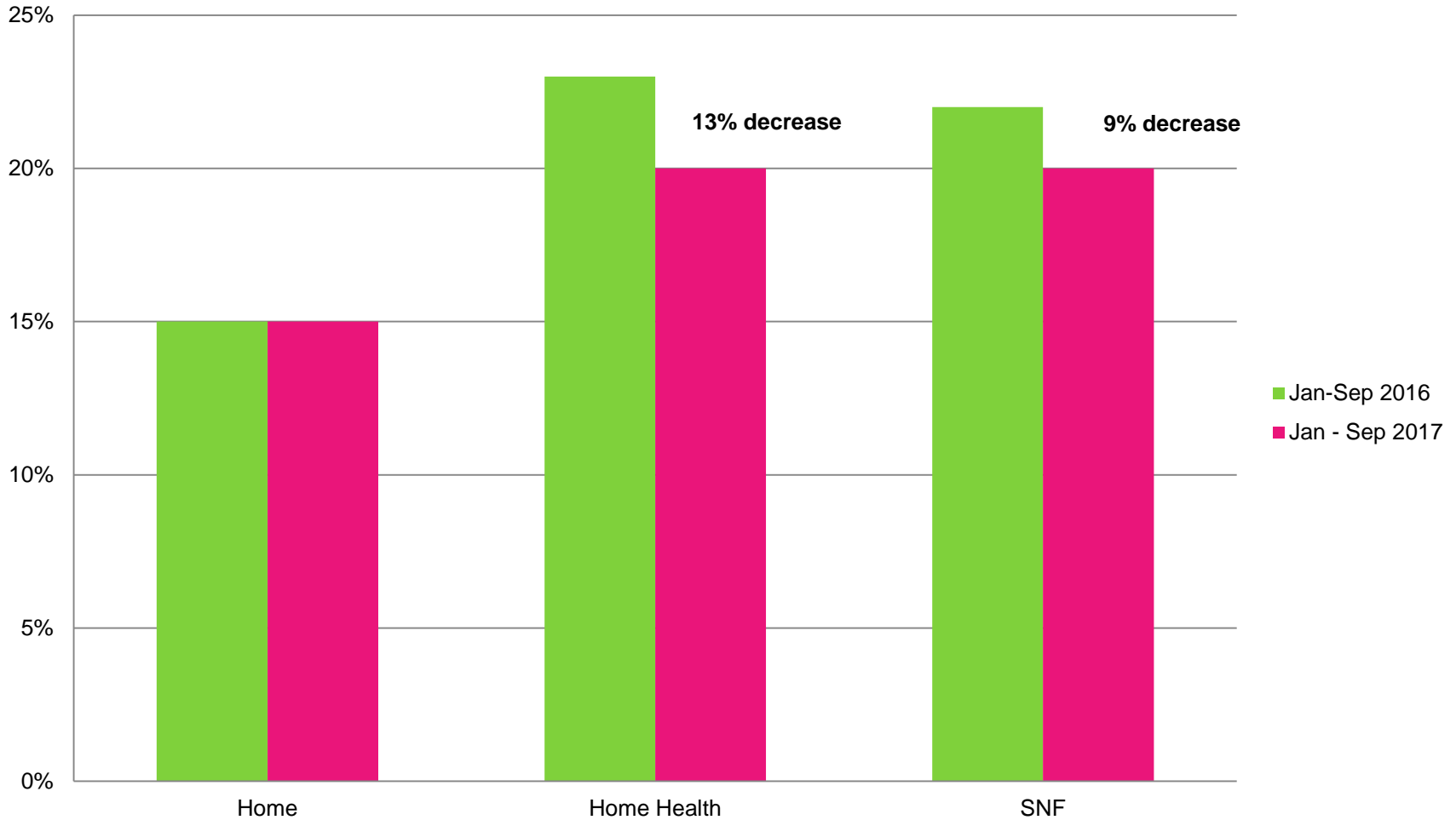
Beverly and Addison Gilbert Hospital Medicaid Readmission Rate Enrolled and Target Population



Addison Gilbert Readmission Rate for Patients by Discharge Disposition



Beverly Readmission Rate for Patients by Discharge Disposition

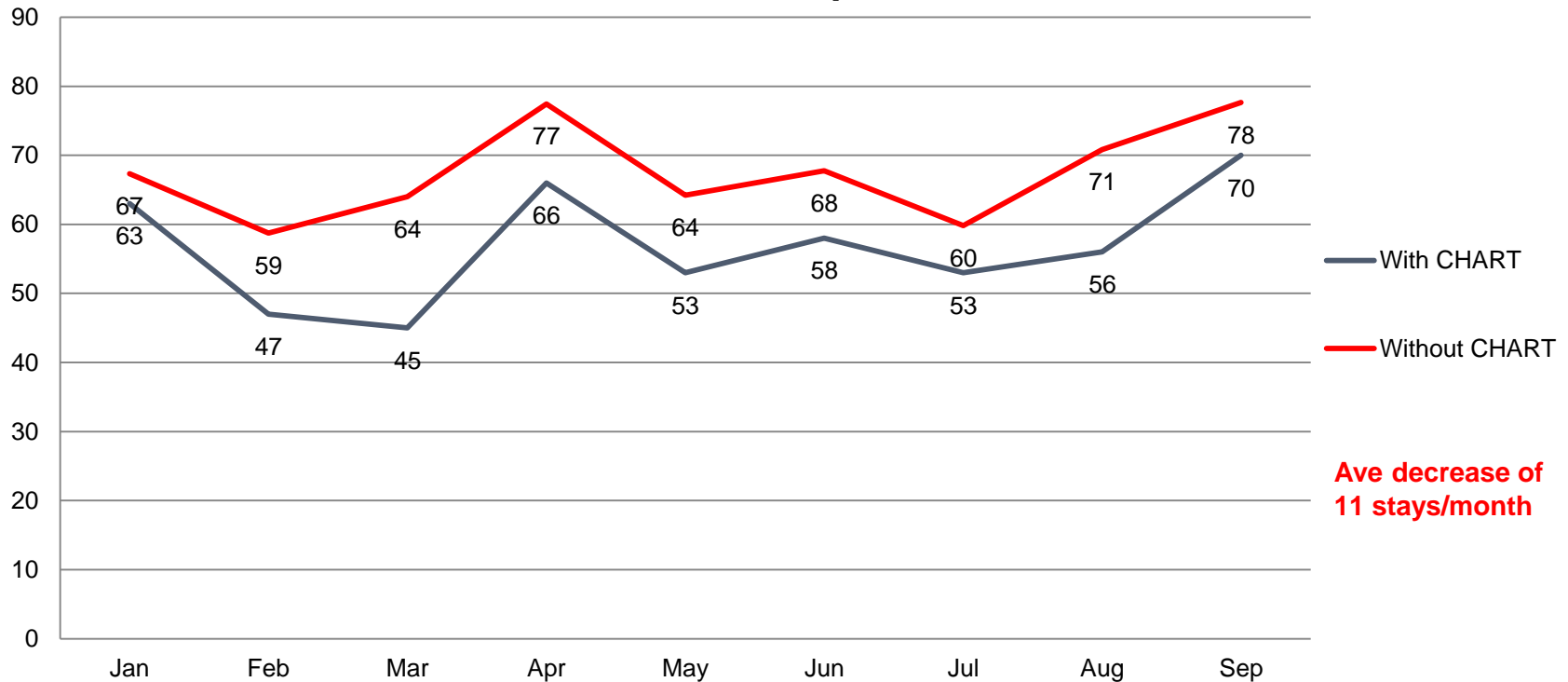


Return on Investment – Who saves?

$\$10,000 \times 11 = \$110,000/\text{month}$

Annualizes to \$1,320,000

Beverly Hospital Readmissions Jan - Sep 2017 Enrolled Population



Readmission Reduction Efforts

What's worked?

- ❑ The TEAM is critical to achieving success. Each member (RN, Social Worker, pharmacist, CHW, recovery coach) potentiates the team. Took almost a year to hire and build an effective team.
- ❑ Guidance and Support from Health Policy Commission was invaluable. (Dr. Boutwell, HPC advisors and financial support)
- ❑ High Risk Intervention Team (HRIT) now visible part of hospital and community. HRIT team now called by Emergency Services, Social Services, Case Management, Pharmacy, SNF's, ACO's and providers
- ❑ Hallmarks of success include home visits, 48 hour calls, SNF rounding, and Emergency Department (ED) action plans.
- ❑ ED Action Plan flags built into EPIC for high utilizers. ED Action plans summarize teams input for readmission prevention with key available resources to assist highlighted.
- ❑ Focus on SNF readmissions – SNF rounding and visits to SNFs discharge planning process has resulted in a 9% (BH) and 37% (AGH) reduction in readmissions. Also direct admissions to SNFs from EDs occurring more regularly.

Lessons Learned

Effectively engaging the target population:

- Don't give up! Takes repeated contact and persistence . Be flexible!
- Passionate clinicians who care - THE TEAM MATTERS
- Use data to drive performance improvement and critically analyze data

Clinical case review for detail analysis of WHY high utilization

- Why are patients coming back to ED? What is the “driver” of utilization?

Develop active collaboration with the ED and Use of ED Action Plans

- Developing relationships with ED staff and ED case management
- Loopback notification of enrolled patient in ED with team responding to ED
- ED Action Plans - tool for communication with ED docs – THEY WORK!
- Involvement of ED Medical Director critical to success of ED action plan roll out
- ED diversion back to SNFs works!

Sustainability Options

Senior Leadership Voted for Option B with Reduced Budget

	Option A	Option B	Option C	Option D
Action	Disband teams 12/31 when funds exhausted	Keep HRIT Teams as is and funds sustained thru NHC budgets	Keep HRIT team as is and establish "Shared Service Payment Model" to be determined with ACO	Transition HRIT team as appropriate to ACOs
Cost	\$0	\$ 984,000 (9 months)	SHARE costs of team with ACOs and NHC	\$0
Who Pays	No One	Hospital	Hospital and ACOs; shared expense across payment models	ACOs
Benefits	No financial cost to NHC	Keeps team Intact and working at BH and AGH; Improves Patient Experience, satisfaction and Safety; readmissions continue to decrease; TME decreases	Decreases cost to NHC; provides transition model for team and ACO; foster improved team work across hospital and ACO; stability of team maintained	ACOs obtains experienced team to hit the ground running for Medicaid and enrolled populations
Risks	Patient Safety; patient experience; colleague dissatisfaction Increased readmissions	Expense to hospital	Shared expense	Hospital loses staff to ACO and loses resource for its patients and departments as currently staffed

Future Directions

- Evaluate and Restructure High Risk Intervention Team
 - Structure team to optimize available resources
 - Focus on Social Work Role & Addiction Recovery Coach Specialist, Pharmacist
 - Utilize RN role as consultant for ED action plans and for clinical case review
- Focus/Develop Addiction Consult Process and Substance Use Disorder Referral Program – Medication Assisted Therapy
- Apply for future HPC Grant monies for future program development
- Transition current Lowell/Lahey Joint Grant staff to Medicaid Lahey Behavioral Health ACO

Questions





AGENDA

- Call to Order
- Approval of Minutes from the November 1, 2017 Meeting
- Executive Director's Report
- Investment Programs
 - Care Transformation and Performance to Date in CHART Phase 2, with Insights from the Addison Gilbert-Beverly Hospital CHART Team
 - **New Care Delivery Investment Opportunity (VOTE)**
- 2017 Health Care Cost Trends Report
- Market Performance
- Performance Improvement Plans
- Schedule of Next Board Meeting (TBD)

The 2017 Cost Trends Hearing reinforced that avoidable acute care utilization is driving costs and poor quality in the Commonwealth.

Growth in health care expenditures is concentrated in complex patients vulnerable to social risks.^{2,3}



69.2% of providers and **54.6%** of payers submitted pre-filed testimony attesting that reducing unnecessary hospital utilization is a critical cost containment strategy.



The ED visit rate for patients with a behavioral health diagnosis increased

22%

between 2011-2016.



The readmission rate for patients with a behavioral health diagnosis was

20.2%

in 2015¹



¹ CHIA Hospital-Wide Adult All Payer Readmissions in Massachusetts, December 2016: <http://www.chiamass.gov/assets/docs/r/pubs/16/Readmissions-Report-2016-12.pdf>

² United States Department of Health and Human Services: Office of the Assistant Secretary for Planning and Evaluation. Report to Congress: Social Risk Factors and Performance Under Medicare's Value-Based Purchasing Programs A Report Required by the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014. December 2016.

³ Presentation by Karen Joynt Maddox.

Proposal: Next round of funding to focus on innovative ways to reduce avoidable acute care use

THEME

Reducing avoidable acute care utilization by investing in innovative care delivery models that are community-based, collaborative, and sustainable.

FUNDING

Proposed total funding of up to **\$10 million**; up to \$750,000 per award. Applicants are responsible for 25% in-kind financial contribution.

OUTCOMES

- Improve the ability of ACOs, CHART hospitals, other providers, and their community-based partners to efficiently care for high-need populations
- Reduce hospital admissions/readmissions
- Reduce ED visits/revisits
- Increase engagement in opioid use disorder treatment
- Improve patient experience

COMPETITIVE FACTORS

- Care model and impact
- Organizational leadership, strategy, and demonstrated need
- Evaluation
- Sustainability and scalability

DURATION

21 months (3 months of preparation and 18 months of implementation)

Proposal: Two funding tracks to reduce avoidable acute care use



FUNDING TRACK 1: Through addressing health-related social needs

- Support for innovative models that **address health-related social needs** (i.e., social determinants of health) of complex patients in order to prevent a future acute care hospital visit or stay (e.g., respite care for patients experiencing housing instability at time of discharge)



FUNDING TRACK 2: Through addressing behavioral health needs

- Support for innovative models that **address the behavioral health care needs** of complex patients in order to prevent a future acute care hospital visit or stay (e.g. expand access to timely behavioral health services using innovative strategies such as telemedicine and/or community paramedicine)



→ OUD FOCUS: Through enhancing opioid use disorder treatment

- Support for innovative models that enhance opioid use disorder treatment by **initiating pharmacologic treatment in the ED** and connecting patients to community based BH services (Section 178 of ch. 133 of the Acts of 2016 directed the HPC to invest not more than \$3 million in this focus area)

Proposal: Applications from ACOs and CHART-eligible hospitals are more competitive, with community partnerships required in all cases

Eligibility for TRACK 1: Addressing health-related social needs

- **Eligible Primary Applicants:** Massachusetts health care provider or provider organization
- **Competitive Factor:** HPC-Certified ACOs and their participants; CHART-eligible hospitals
- **Required Community Collaboration:** Partnership with social service providers / community based organizations required.

Eligibility for TRACK 2: Addressing behavioral health needs

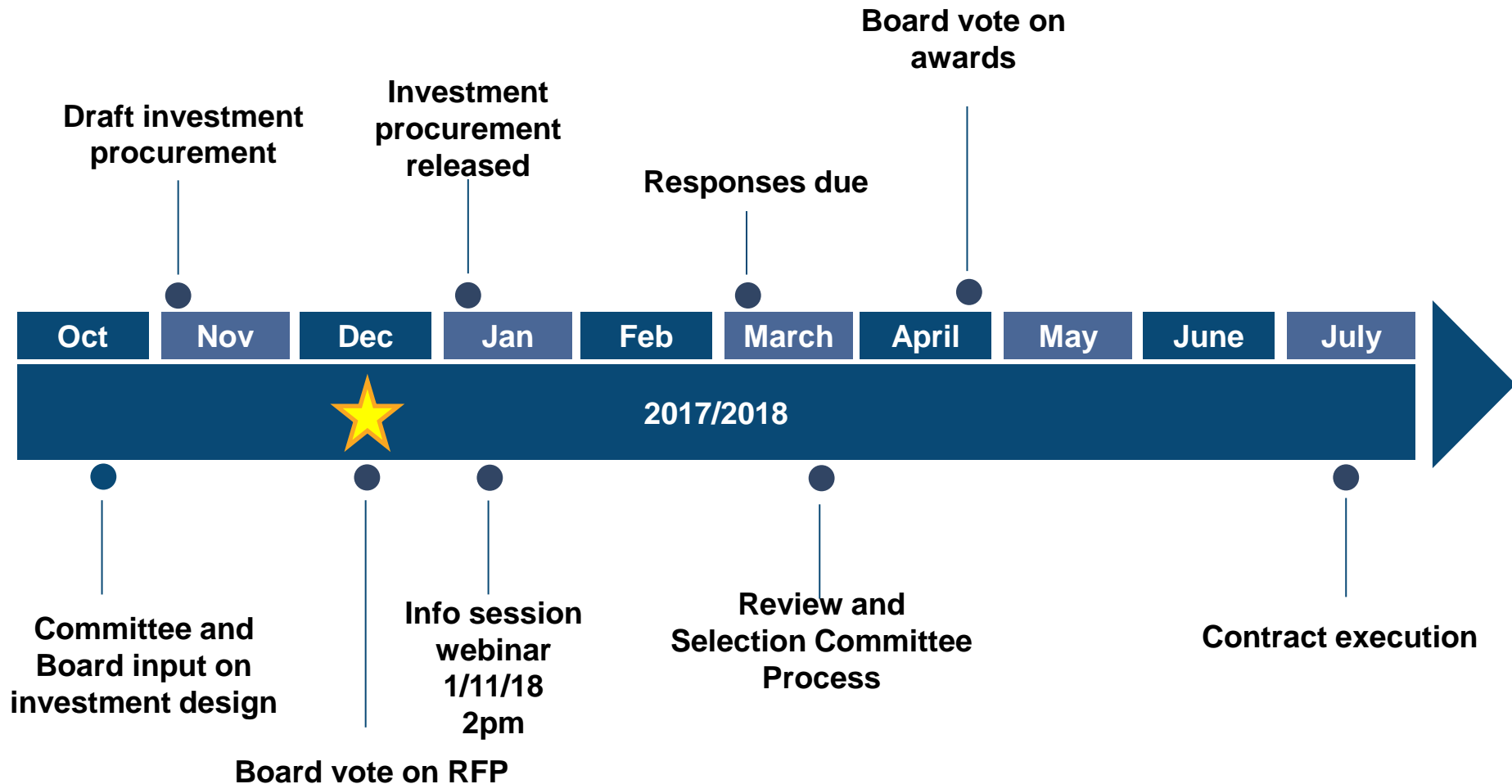
- **Eligible Primary Applicants:** Massachusetts health care provider or provider organization
- **Competitive Factor:** HPC-Certified ACOs and their participants; CHART-eligible hospitals
- **Required Community Collaboration:** Partnership with outpatient behavioral health providers required. If applicant is a BH provider, partnership with a medical care provider is required.



Eligibility for OUD FOCUS: Enhancing opioid use disorder treatment

- **Eligible Primary Applicants:** Massachusetts acute care hospitals with an ED
- **Competitive Factor:** Hospital participants in HPC-Certified ACOs; CHART-eligible hospitals
- **Required Community Collaboration:** Partnership with outpatient BH providers required.

Next steps





VOTE: Approving release of the new investments RFP

MOTION: That the Board hereby endorses the proposal for an investment program to foster innovation in health care delivery to reduce avoidable acute care utilization by addressing health-related social needs and/or increasing access to behavioral health services, and authorizes the Executive Director to issue a Request for Proposals (RFP) to solicit competitive proposals consistent with the framework described to the Board.



AGENDA

- Call to Order
- Approval of Minutes from the November 1, 2017 Meeting
- Executive Director's Report
- Investment Programs
- **2017 Health Care Cost Trends Report**
- Market Performance
- Performance Improvement Plans
- Schedule of Next Board Meeting (TBD)

Cost Trends Research and Reports: Revised Design Approach

Previous Approach

1 ANNUAL REPORT

- ~80-100 pages • Primarily narrative
- 10-12 fully written chapters

1-2 SUPPLEMENTAL PUBLICATIONS

Full written reports

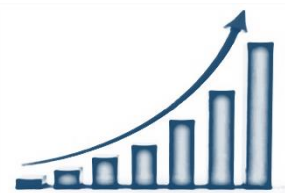
Revised Approach

1 ANNUAL REPORT

- ~50 pages • Narrative and visual
- 3-4 fully written chapters
- 3-4 graphical chart packs
- Online interactive content utilizing data visualization tools (Tableau)

6-8 SUPPLEMENTAL PUBLICATIONS

Varying types
(Policy Briefs, Chart Packs, DataPoints)







Goal

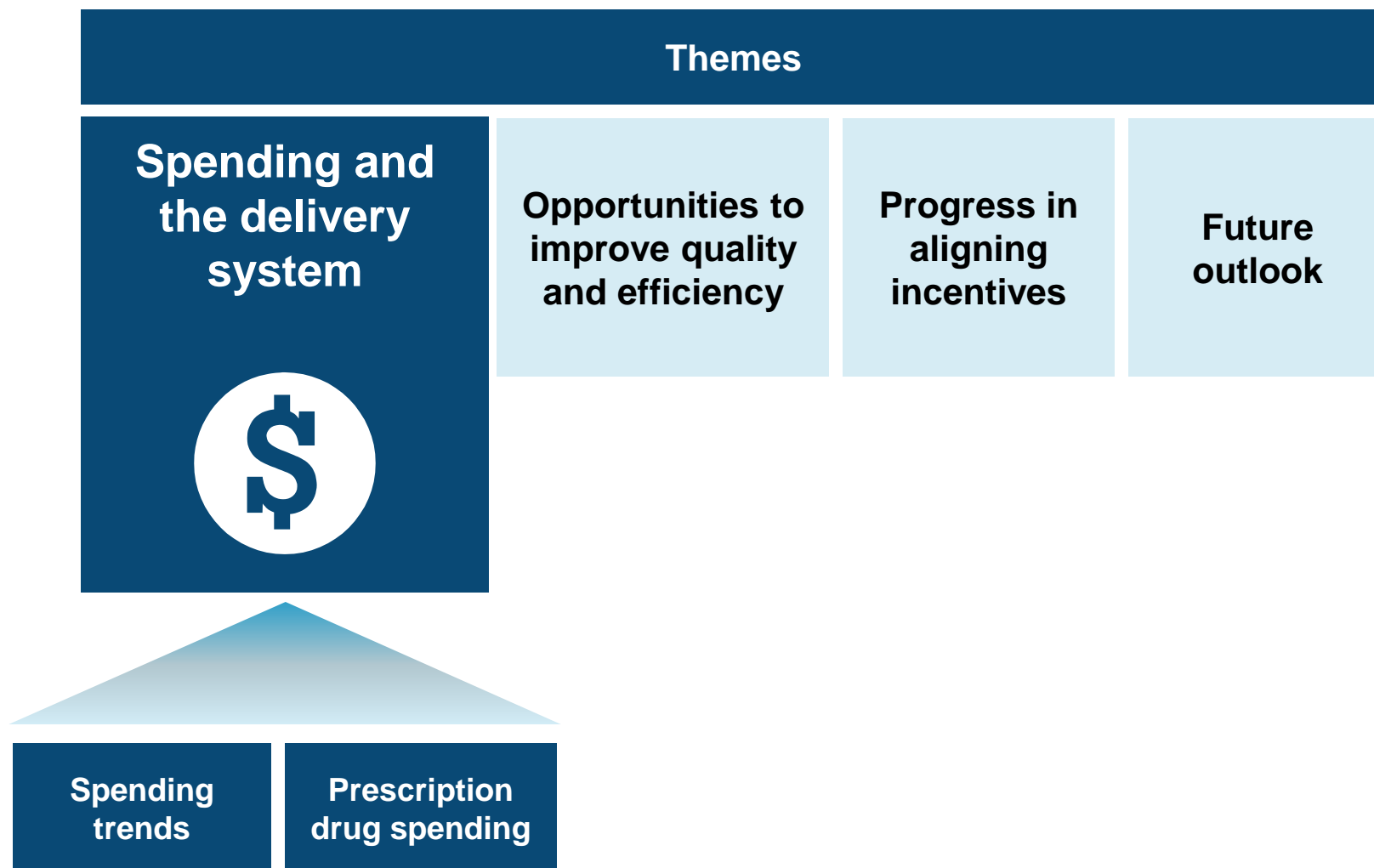
Advance the HPC's mission to publicly report on health care system performance by producing a variety of reports and publications that are visually-appealing, engaging, and accessible to a wide range of audiences.



Presentation themes and potential areas for recommendations

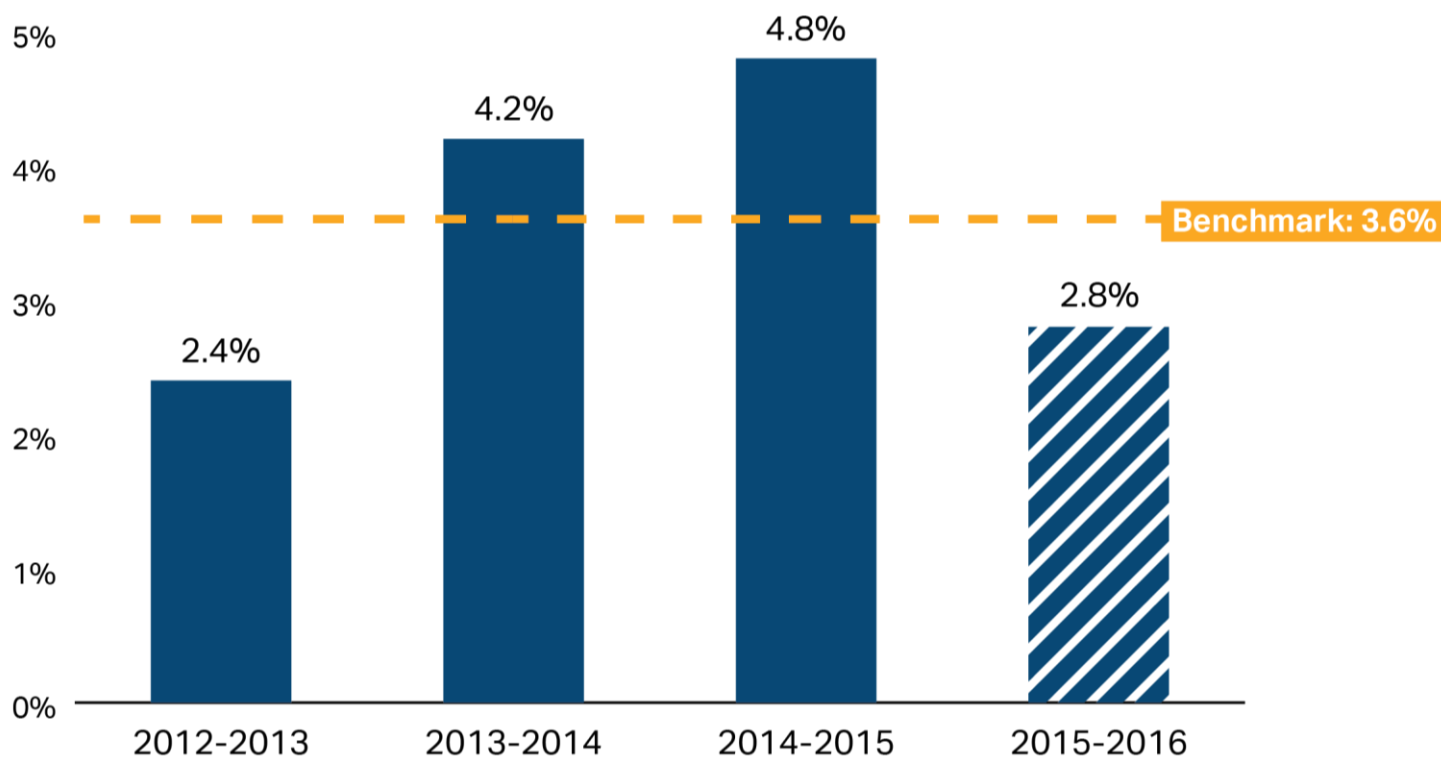
Themes			
Spending and the delivery system	Opportunities to improve quality and efficiency	Progress in aligning incentives	Future outlook
<ul style="list-style-type: none">Spending trendsPrescription drug spending 	<ul style="list-style-type: none">Hospital outpatientAvoidable hospital utilizationPost-acute careProvider organization performance variation 	<ul style="list-style-type: none">Alternative payment methodsDemand-side incentives 	<ul style="list-style-type: none">Future outlook 

Select findings from the 2017 Cost Trends Report



Total health care expenditures (THCE) per capita grew 2.8% in 2016, below the benchmark rate

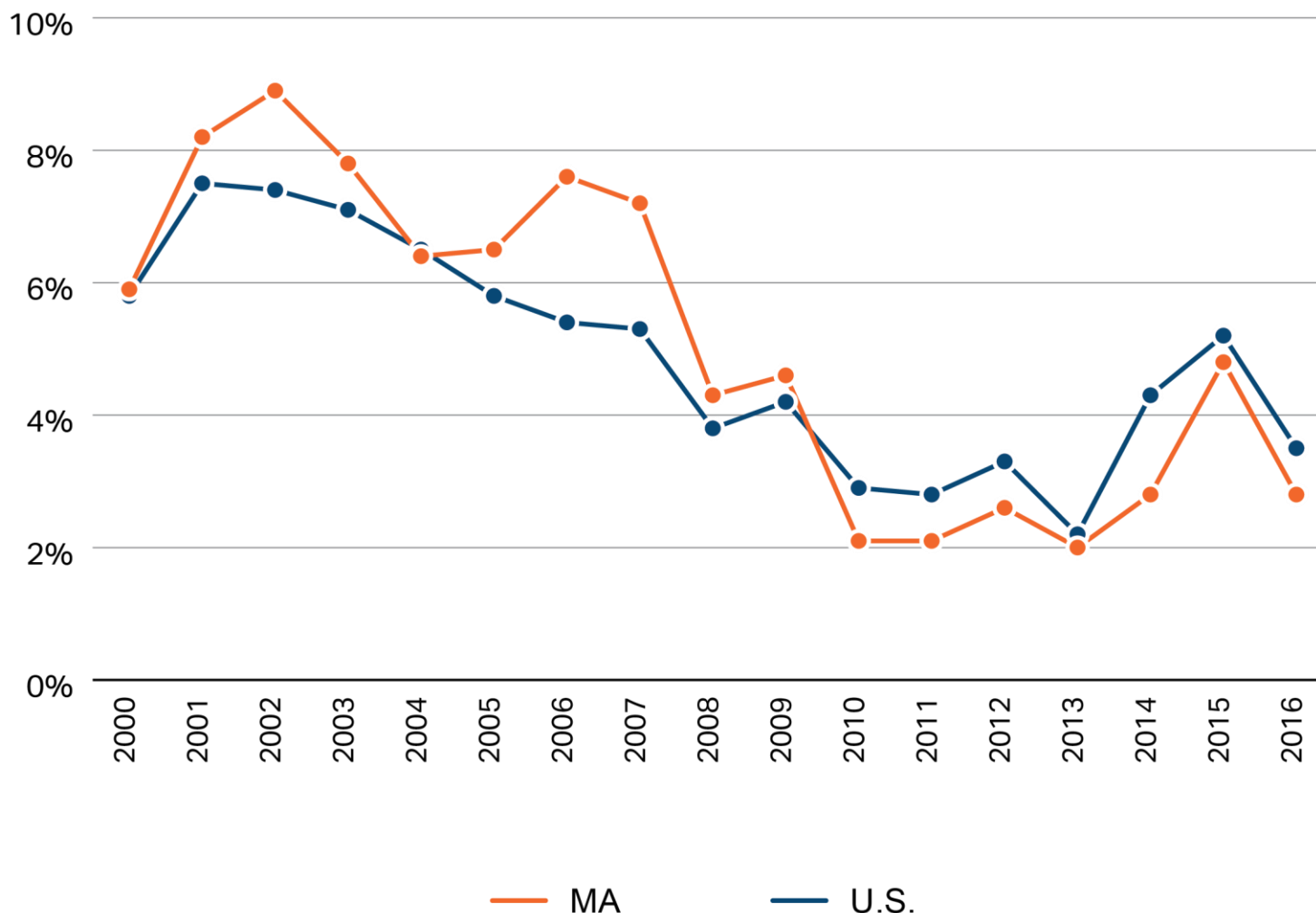
Annual per-capita total health care expenditure growth in Massachusetts, 2012-2016



Average annual spending growth from 2012-2016: 3.55%

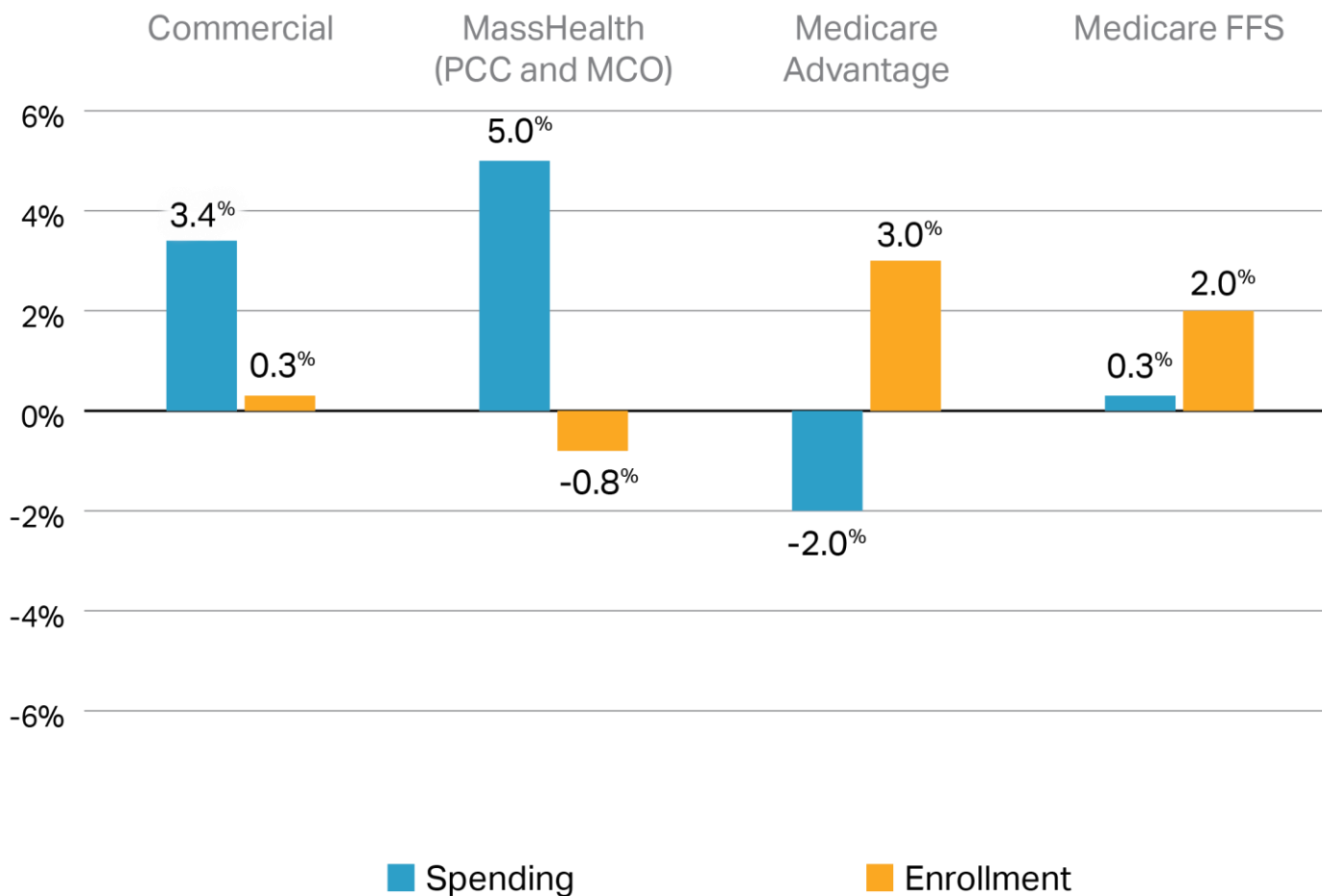
Healthcare spending in Massachusetts grew slower than the nation again in 2016

Annual growth in per capita healthcare spending, MA and the U.S., 2000-2016



Trends in spending and enrollment differed by market segment

Spending growth per enrollee and enrollment growth by market, 2015-2016



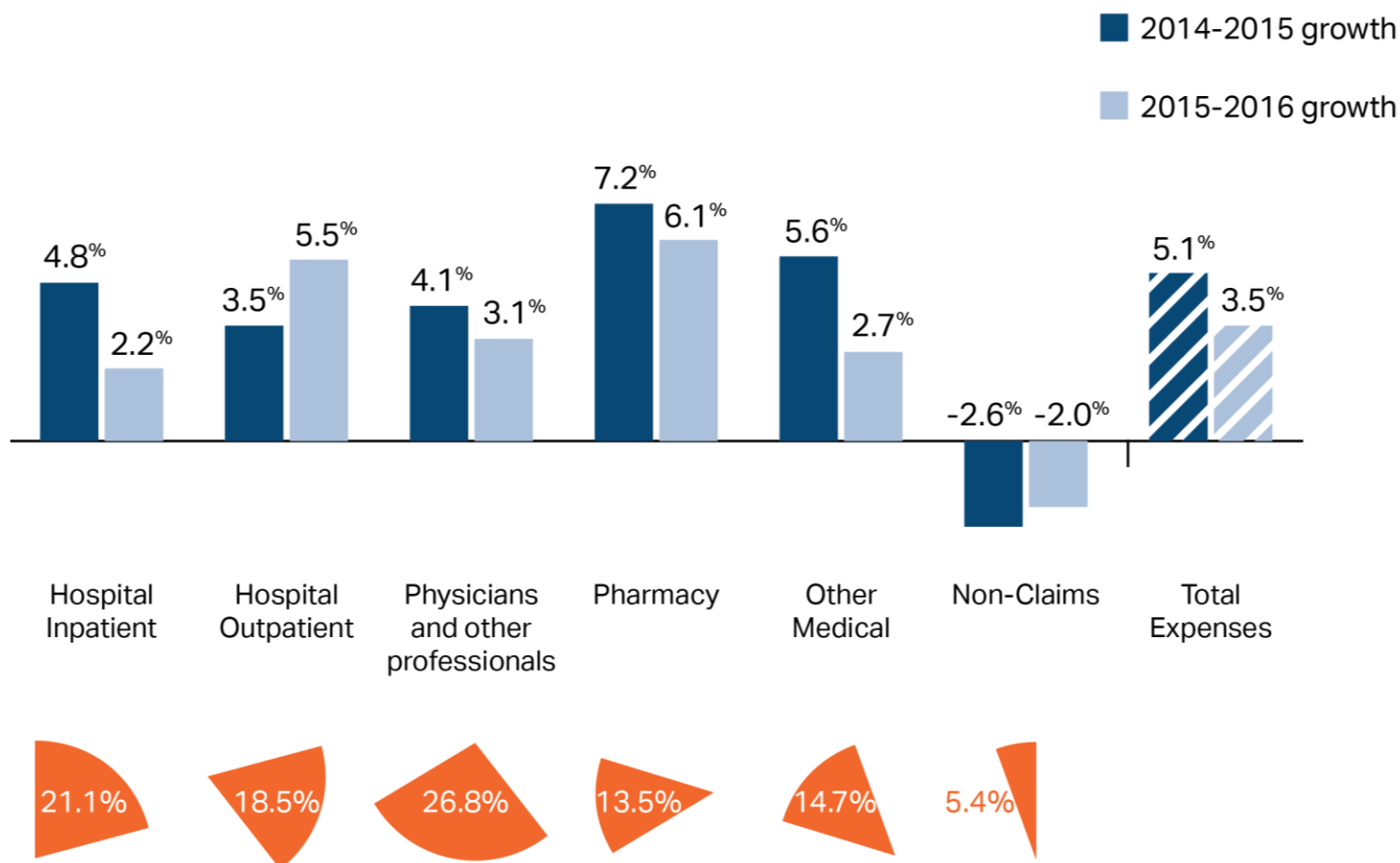
*MassHealth PCC and MCO trend is higher than underlying MassHealth growth trends and reflects restarting eligibility redeterminations after HIX failure**

Notes: Commercial spending growth is for full claims only. Commercial enrollment growth includes enrollees with full and partial claims. MassHealth includes only full coverage enrollees in the PCC and MCO programs. MassHealth redetermination activity and the unwinding of Temporary coverage resulted in a volatile risk pool in 2015, and therefore the growth rate in 2016 does not reflect underlying growth trends at MassHealth.

Sources: Center for Health Information and Analysis, Total Health Care Expenditures

Among categories of care, pharmacy drugs and hospital outpatient spending grew the fastest in 2016

Change in all-payer spending 2014-2015 and 2015-2016 by category of care

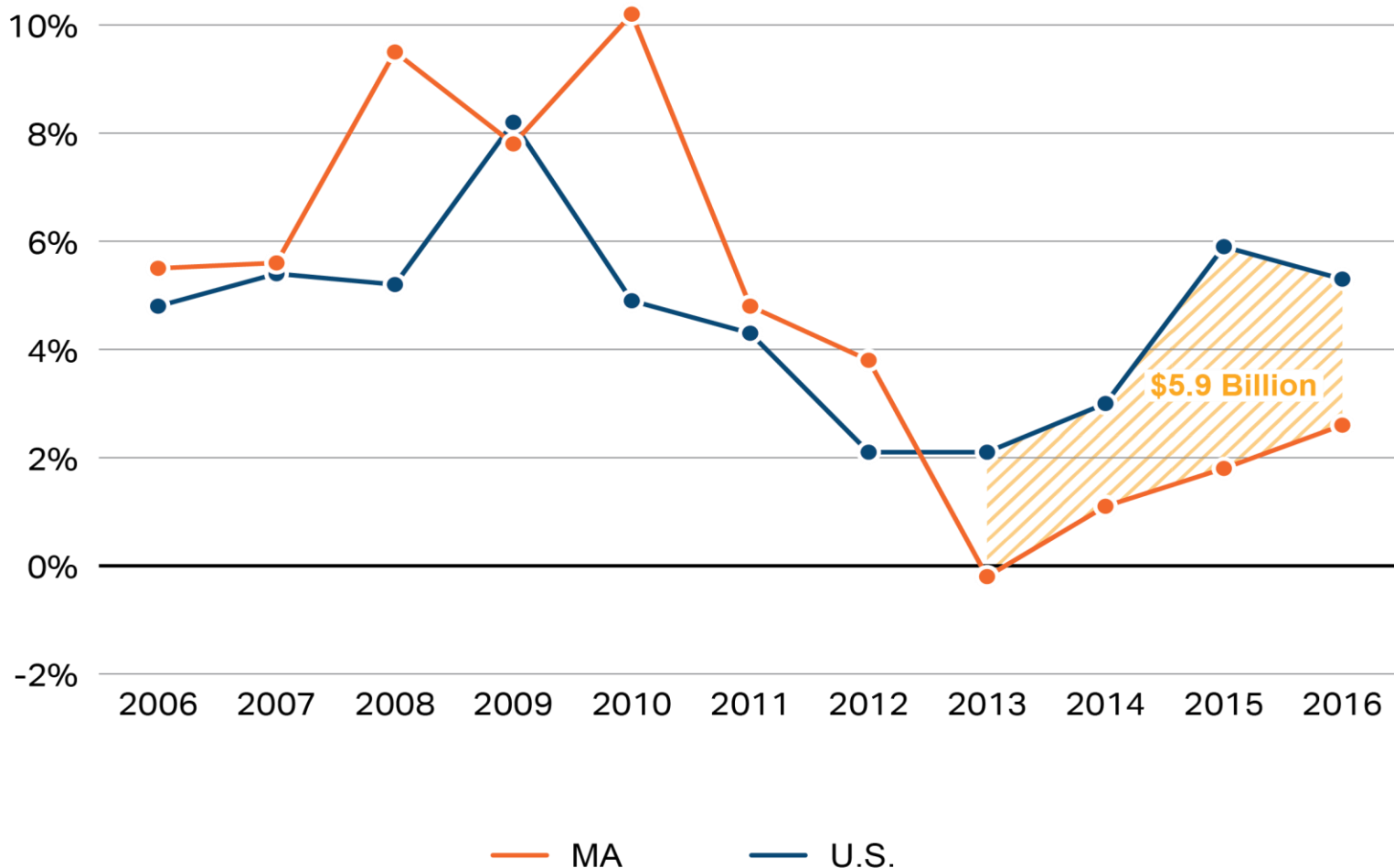


Notes: Pharmacy spending is net of rebates.

Source: Payer reported TME data to CHIA and other public sources; appears in Center for Health Information and Analysis Annual Report, 2017.

In recent years, growth in spending on private health insurance in Massachusetts has been consistently lower than national rates

Annual growth in commercial health insurance spending from previous year, per enrollee, MA and the U.S.

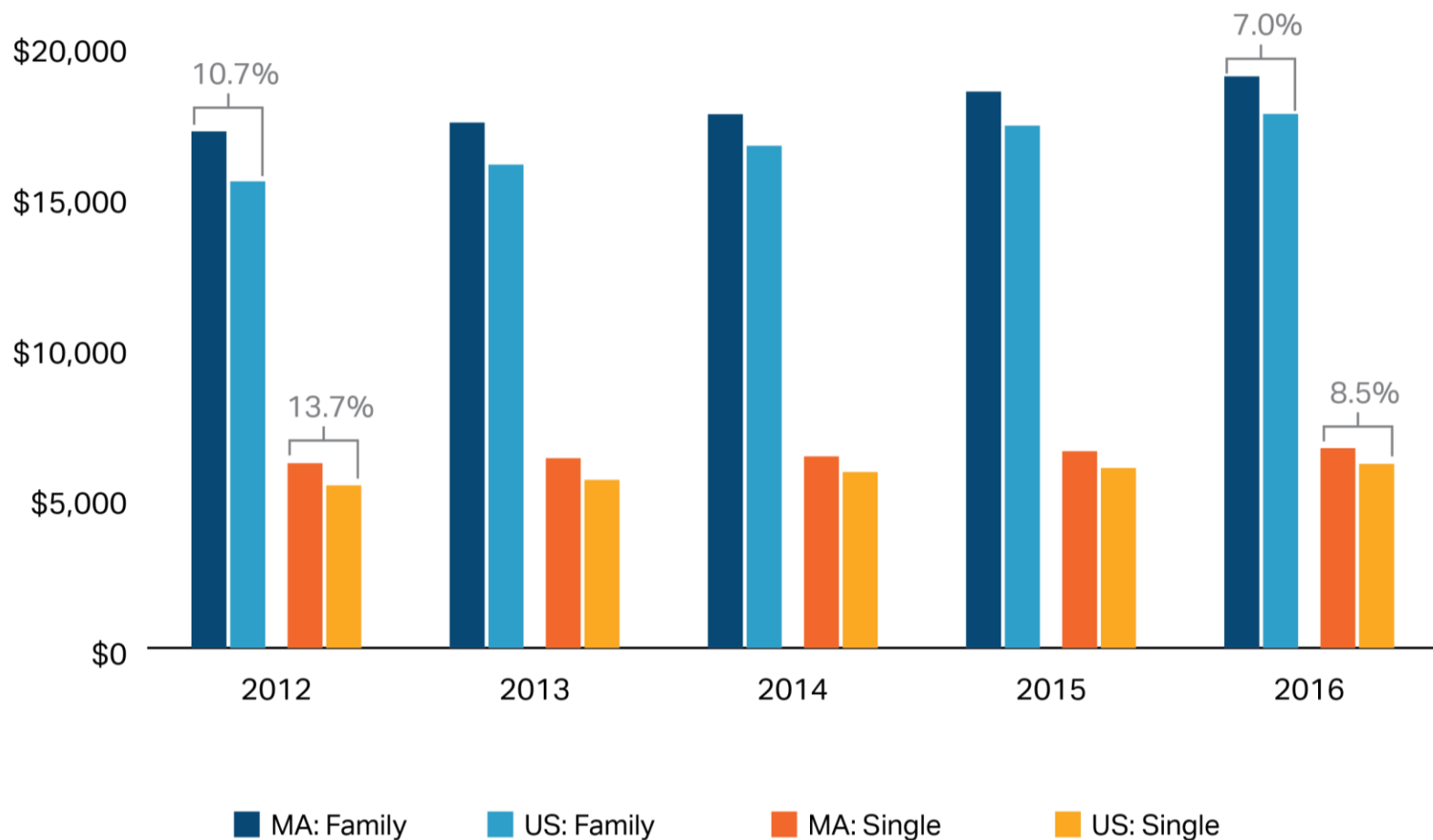


Notes: U.S. data includes Massachusetts. Center for Health Information and Analysis data are for the fully-insured market only. U.S. data for 2016 is partially projected.

Sources: Centers for Medicare and Medicaid Services, State and National Healthcare Expenditure Accounts and Private Health Insurance Expenditures and Enrollment (U.S. and MA 2005-2014); Center for Health Information and Analysis Annual Reports (2015-2016)

For both families and individuals, the difference between MA and the U.S. premiums narrowed between 2012 and 2016

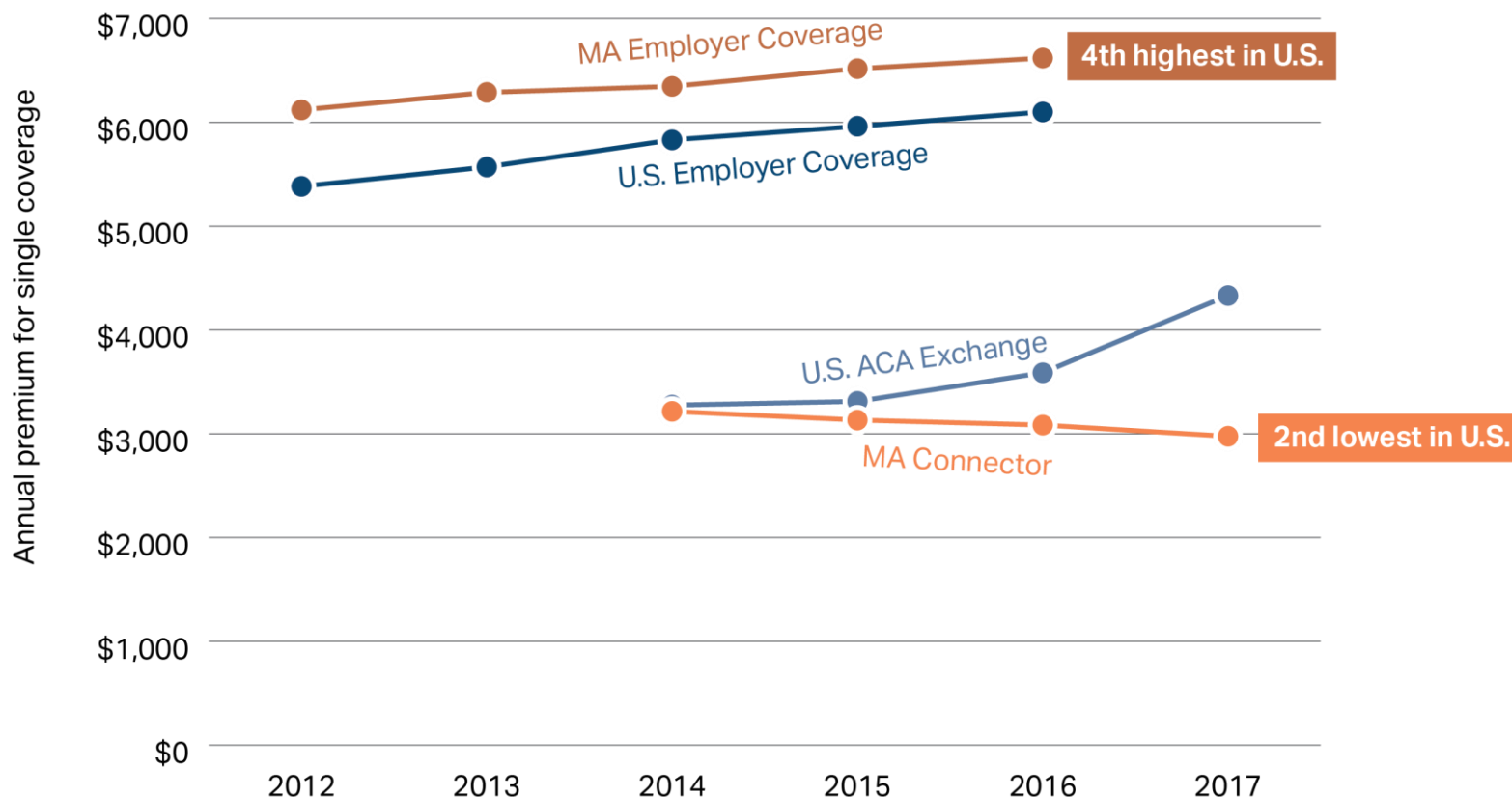
Annual employer sponsored health insurance premiums, single and family coverage



Family premiums in Massachusetts averaged \$19,000 in 2016, \$21,085 including typical cost-sharing

While MA employer premiums are still among the nation's highest, in 2017 Connector benchmark premiums are now second-lowest in the U.S.

Annual premium for single coverage

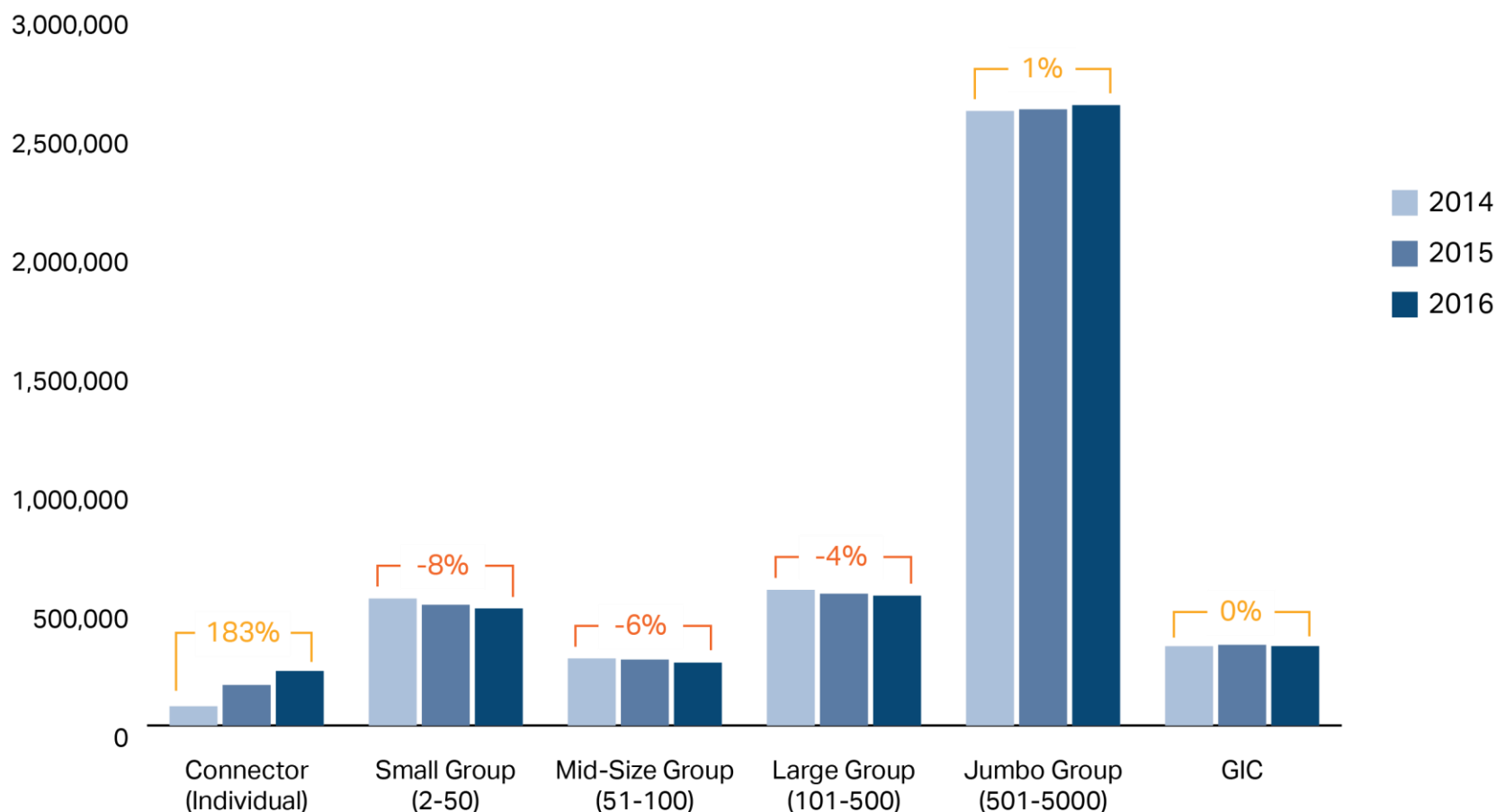


Notes: Exchange premiums represent single coverage in the benchmark second-lowest silver plan for a 40-year old male non-smoker in the main metro area of each state.

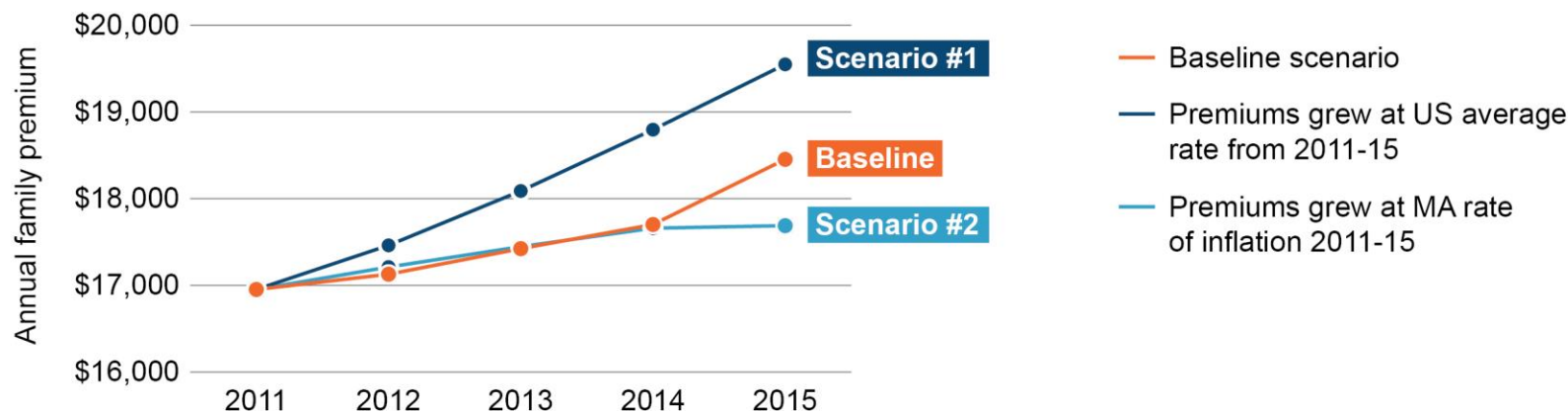
Sources: HPC analysis of Medical Expenditure Panel Survey (employer coverage); Kaiser Family Foundation data (ACA exchanges)

From 2014 to 2016, health insurance enrollment declined mainly for small and mid-sized employer groups, while Connector enrollment grew

Source of commercial coverage, 2014-2016



Despite progress in reducing premium growth, greater progress would yield gains for family and state budgets



	Baseline	Scenario #1		Scenario #2	
	Baseline data	If premiums grew at US average rate from 2011-15	Change in 2015	If premiums grew at MA rate of inflation 2011-15	Change in 2015
State: Health Insurance spending (\$Billion)	\$23.6	\$25.0	\$1.4B	\$22.6	-\$1.0B
State: Income Tax revenue collected (\$Million)	\$14,374	\$14,025	-\$349M	\$14,618	\$244M
Family: Annual raise	2.0%	1.0%	-1.0%	2.7%	0.7%
Family: Annual take-home pay after taxes and health care costs	\$54,785	\$54,050	-\$734	\$55,298	\$513

Notes: Income totals include other compensation paid by employers (health insurance premium contribution and payroll taxes). Survey data used include 843 families with employer-sponsored health insurance between 200% and 500% of the FPL, representing roughly 1.5 million state residents.

Sources: Massachusetts Health Interview Survey, 2014-2015; Agency for Healthcare Research and Quality; US and state government budget data

Trends in prescription drug spending

6.1%	7.2%	Projections
2016 spending growth on prescription pharmacy drugs in MA, net of rebates (6.4% gross)	2015 spending growth on prescription pharmacy drugs in MA, net of rebates (12.1% gross)	Mid-single digit growth expected annually through 2021

Numerous recent state-level efforts to address drug spending

Massachusetts: legislative proposals on drug price transparency; MassHealth waiver request for formulary changes to increase competition

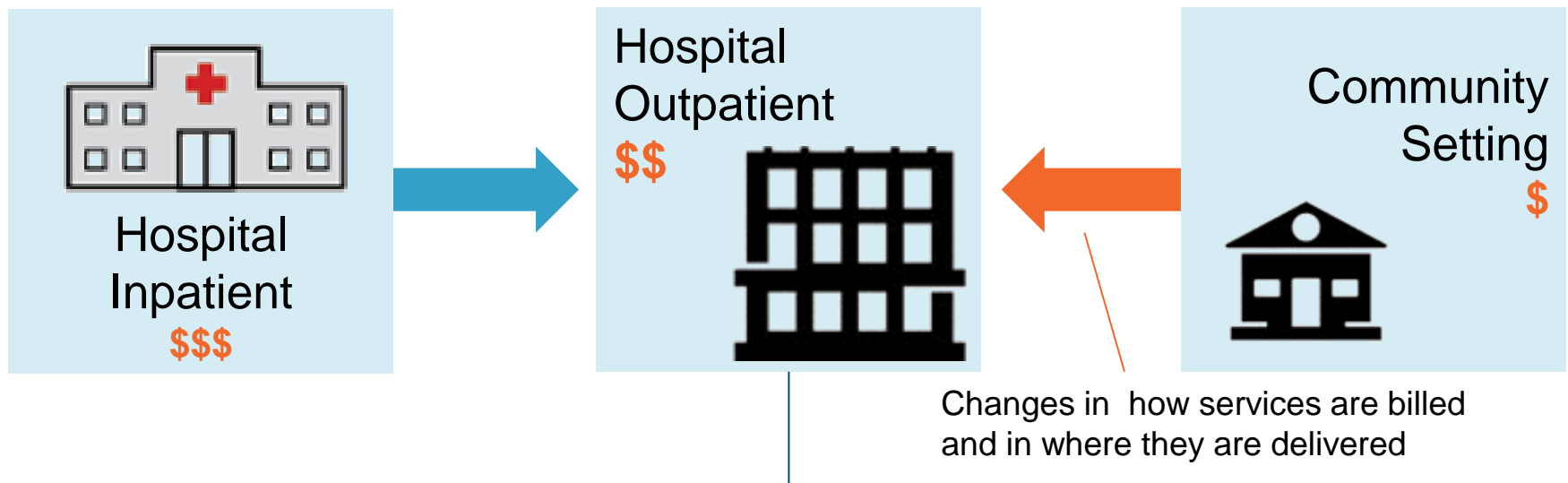
Efforts in multiple states, including passage of price transparency law in Vermont (06/16) and Medicaid drug spending target in New York (04/17)

Select findings from the 2017 Cost Trends Report



Trends in hospital outpatient spending

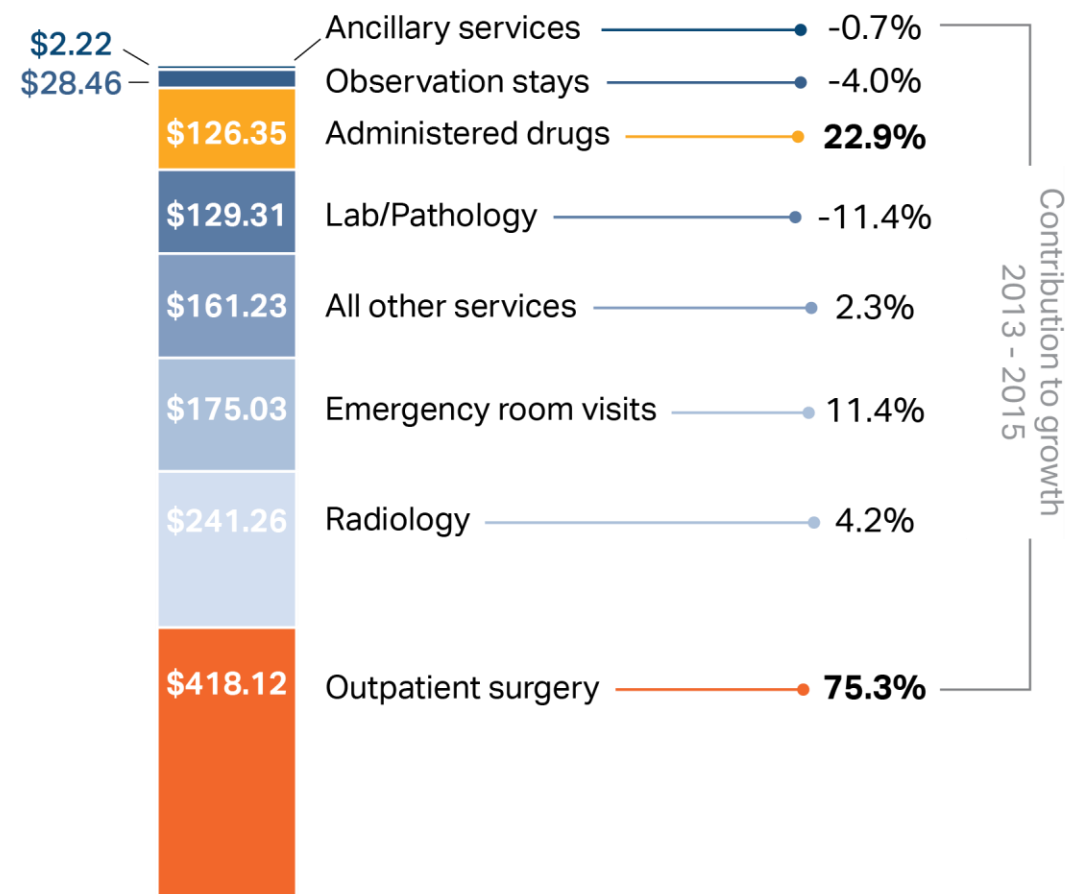
- Hospital outpatient is a high-growth area of spending, with 5.3% growth in 2016
- Shifts in setting of care are an important dynamic in hospital outpatient spending:
 - Services have shifted from inpatient to outpatient, while others have shifted from the community to outpatient



Prices for the same service in hospital outpatient departments are typically higher than in community settings because outpatient services charge both a professional fee and a facility fee

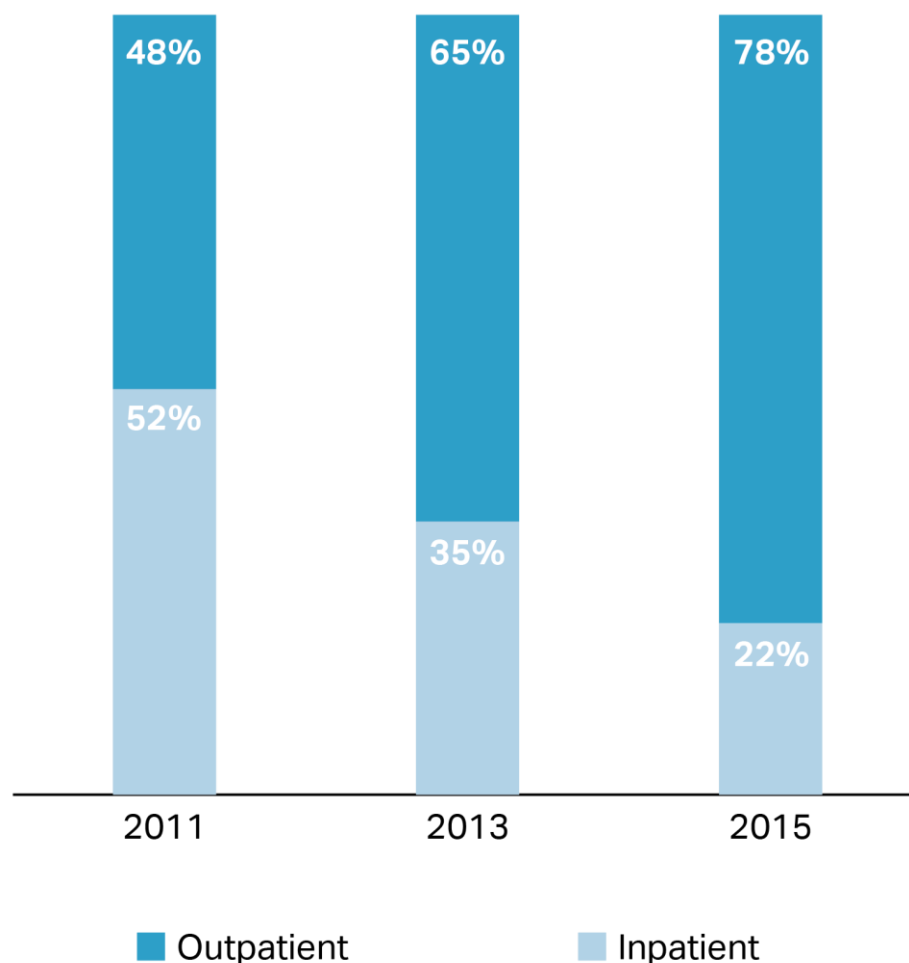
Surgery and administered drugs were high growth areas for commercial hospital outpatient spending from 2013 - 2015

Per member per year spending by hospital outpatient service category, 2015 and contribution to growth 2013-2015



Surgery procedures are shifting from hospital inpatient to hospital outpatient settings for high volume 'crossover' procedures

Share of volume by setting for laparoscopic cholecystectomy, laparoscopic appendectomy, arthrodesis, laparoscopic total hysterectomy, and laparoscopic vaginal hysterectomy, 2011 - 2015

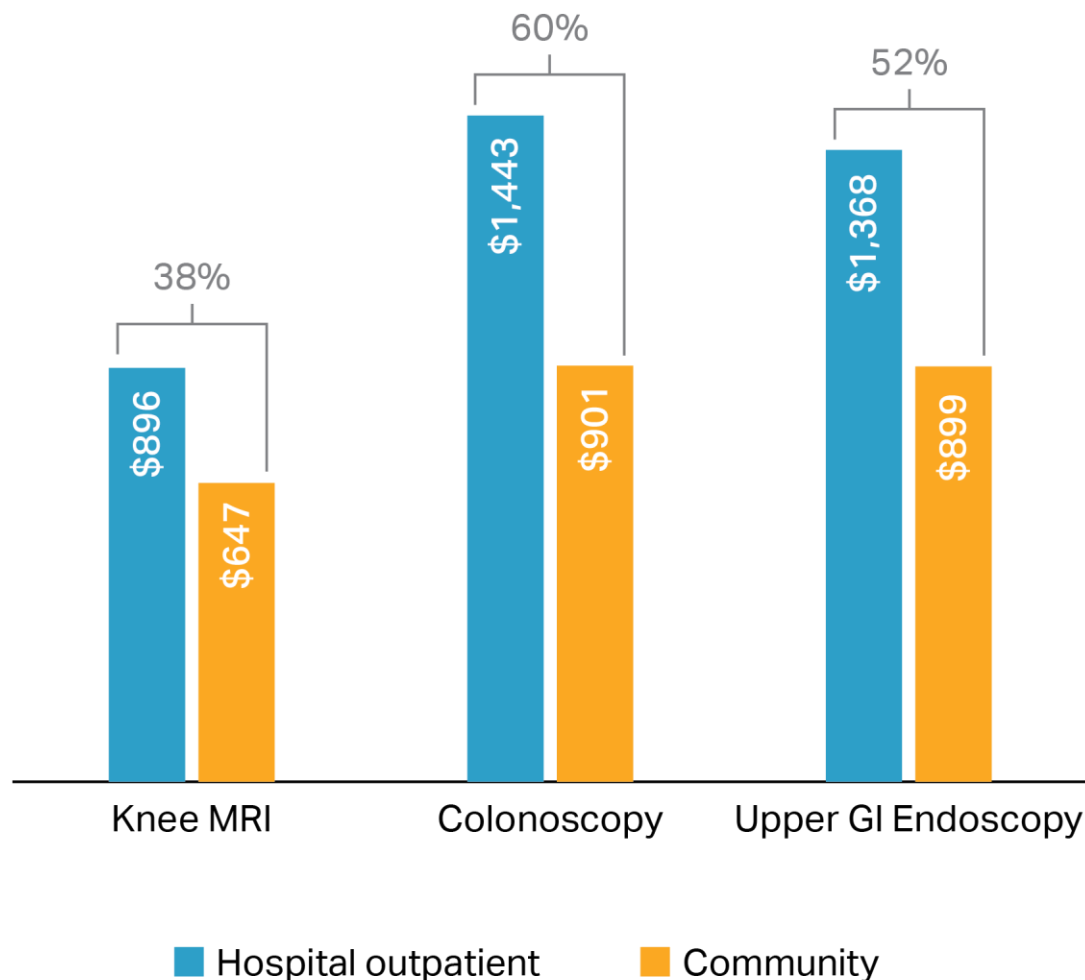


Notes: The five major cross-over procedures were identified as the highest-volume procedures billed by surgeons in 2013 where at least 10 percent of the surgeries occurred at an inpatient hospital and at least 10 percent occurred in an outpatient setting. Spending includes insurer and enrollee payments for the facility portion of the surgical procedure.

Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2011-2015

Commercial prices remain significantly higher in the hospital outpatient setting than in community settings across common procedures in 2015

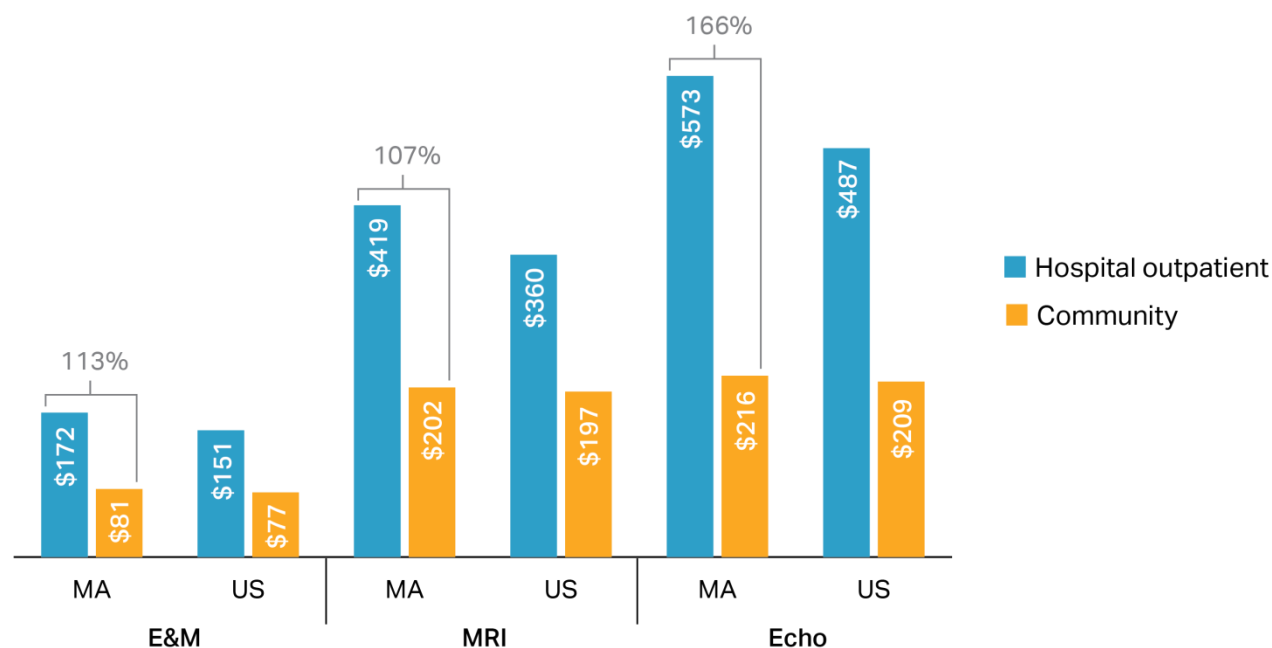
Mean commercial price in hospital outpatient versus community settings, 2015



In both MA and U.S., Medicare prices are substantially higher in the hospital outpatient setting than in community settings

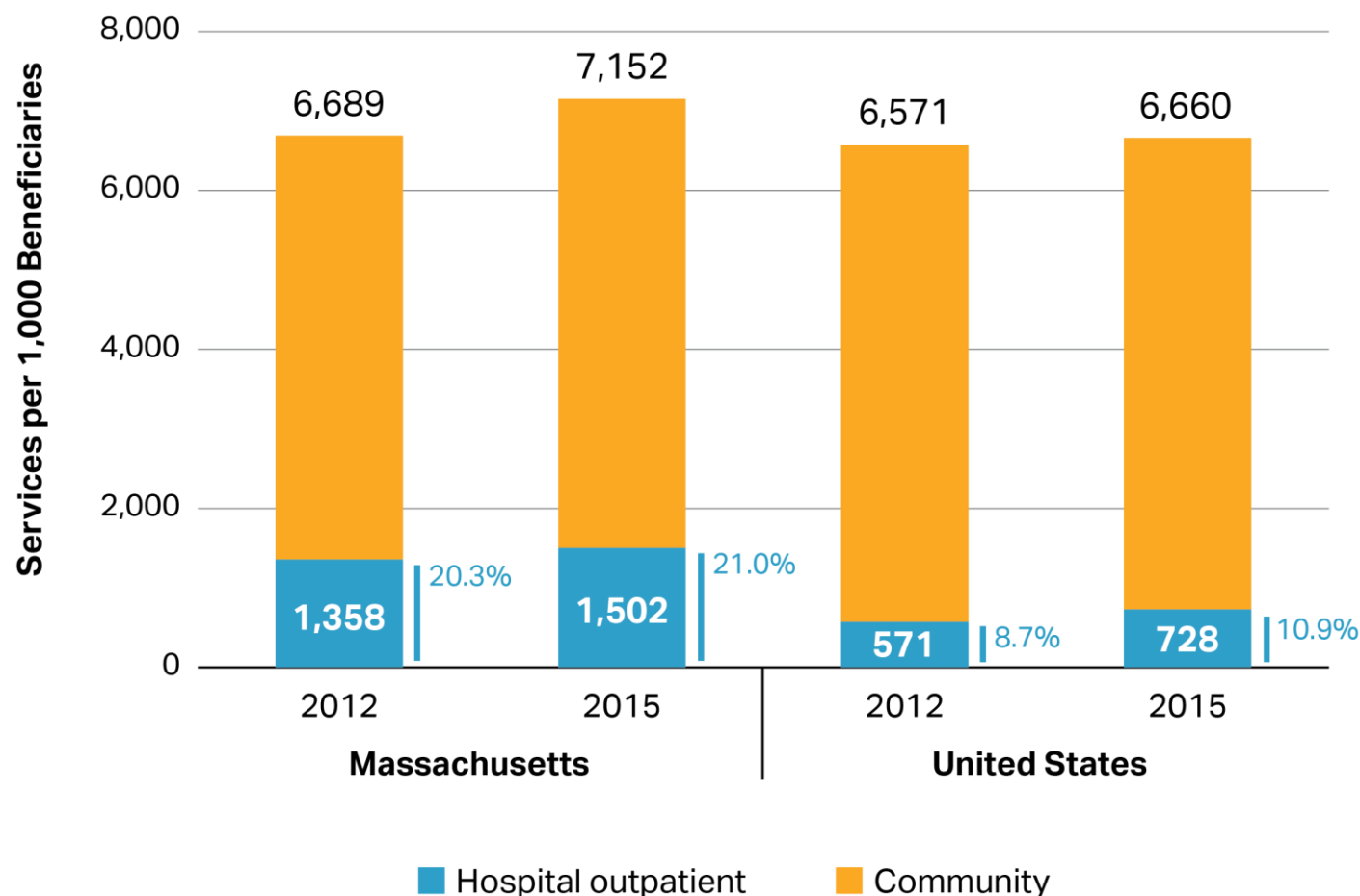
Comparison of Medicare prices for Evaluation & Management visits and other services in hospital outpatient and community settings, 2015

	Community setting	Hospital outpatient setting		
	Professional services Office rate	Professional services Facility rate	Facility fee	Total hospital Based rate
Medicare program payment	\$64.53	\$44.87	\$92.38	\$137.26
Beneficiary cost sharing	\$16.13	\$11.22	\$23.10	\$34.31
Total payment	\$80.66	\$56.09	\$115.48	\$171.57



In Medicare, MA uses hospital outpatient for routine office visits at twice the national rate

Services per 1,000 beneficiaries by setting for Evaluation and Management visits (99211 - 99215), 2012 and 2015



Notes: Prices reflect Medicare allowed amount for services. Professional services paid under the Medicare physician fee schedule (MPFS). Facility fees paid under the Outpatient Prospective Payment System (OPPS). The Current Procedural Terminology codes used for Evaluation and Management visits are 99211-99215. The Healthcare Common Procedure Code Set code for this example under OPPS is G0463. Hospital outpatient category includes settings for which Medicare reimburses professional services at a facility rate.

Sources: Center for Medicare and Medicaid Services, Medicare Physician and Other Supplier Public Use File, 2012-2015

Cost per Medicare beneficiary for routine visits is 25% higher in MA compared to the US average

Evaluation and Management Visits (99211 - 99215)

	Massachusetts	US	Percent difference
Average visit cost: Weighted average of visit prices using the Medicare facility use rate	\$99.76	\$85.47	17%
Visit rate: Mean number of visits per beneficiary	7.15	6.66	7%
Cost per Medicare beneficiary	\$713.49	\$569.22	25%

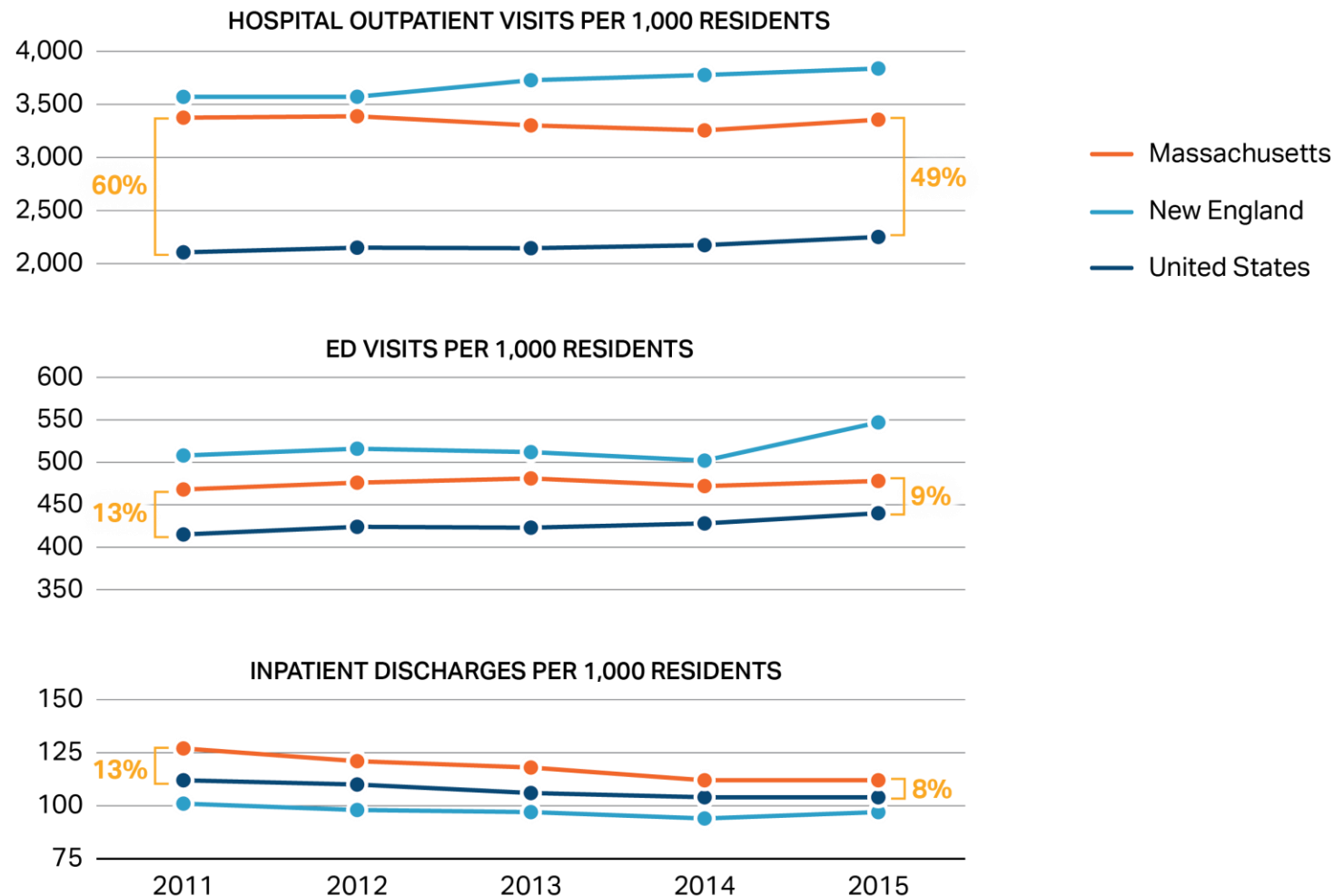
Excess spending in Massachusetts due to higher use of hospital outpatient departments for Medicare E&M visits totals an estimated \$56 million annually

Notes: Prices reflect Medicare allowed amount for services. Professional services paid under the Medicare physician fee schedule (MPFS). Facility fees paid under the Outpatient Prospective Payment System (OPPS). The Current Procedural Terminology codes used for Evaluation and Management visits are 99211-99215. The Healthcare Common Procedure Code Set code for this example under OPPS is G0463.

Sources: Center for Medicare and Medicaid Services, Medicare Physician and Other Supplier Public Use File, 2012-2015

MA hospital utilization is slowly converging with U.S. rates

Hospital use in Massachusetts and the U.S., 2011-2015

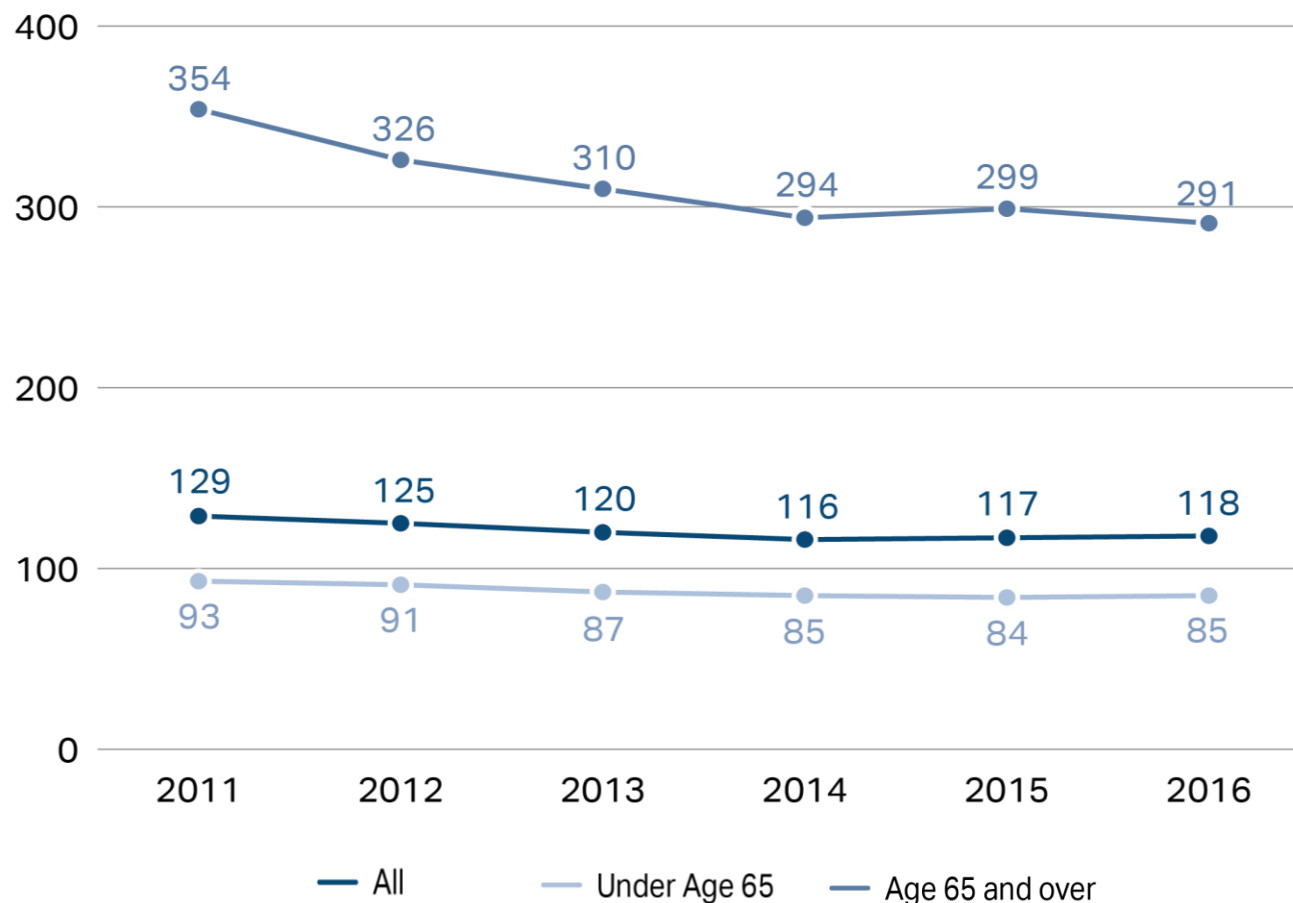


Notes: New England average does not include Massachusetts.

Sources: Kaiser Family Foundation (2017), "Hospital Admissions per 1,000 Population by Ownership Type" (2011 - 2015); "Hospital Emergency Room Visits per 1,000 Population by Ownership Type" (2011-2015); "Hospital Outpatient Visits per 1,000 Population by Ownership Type" (2011-2015).

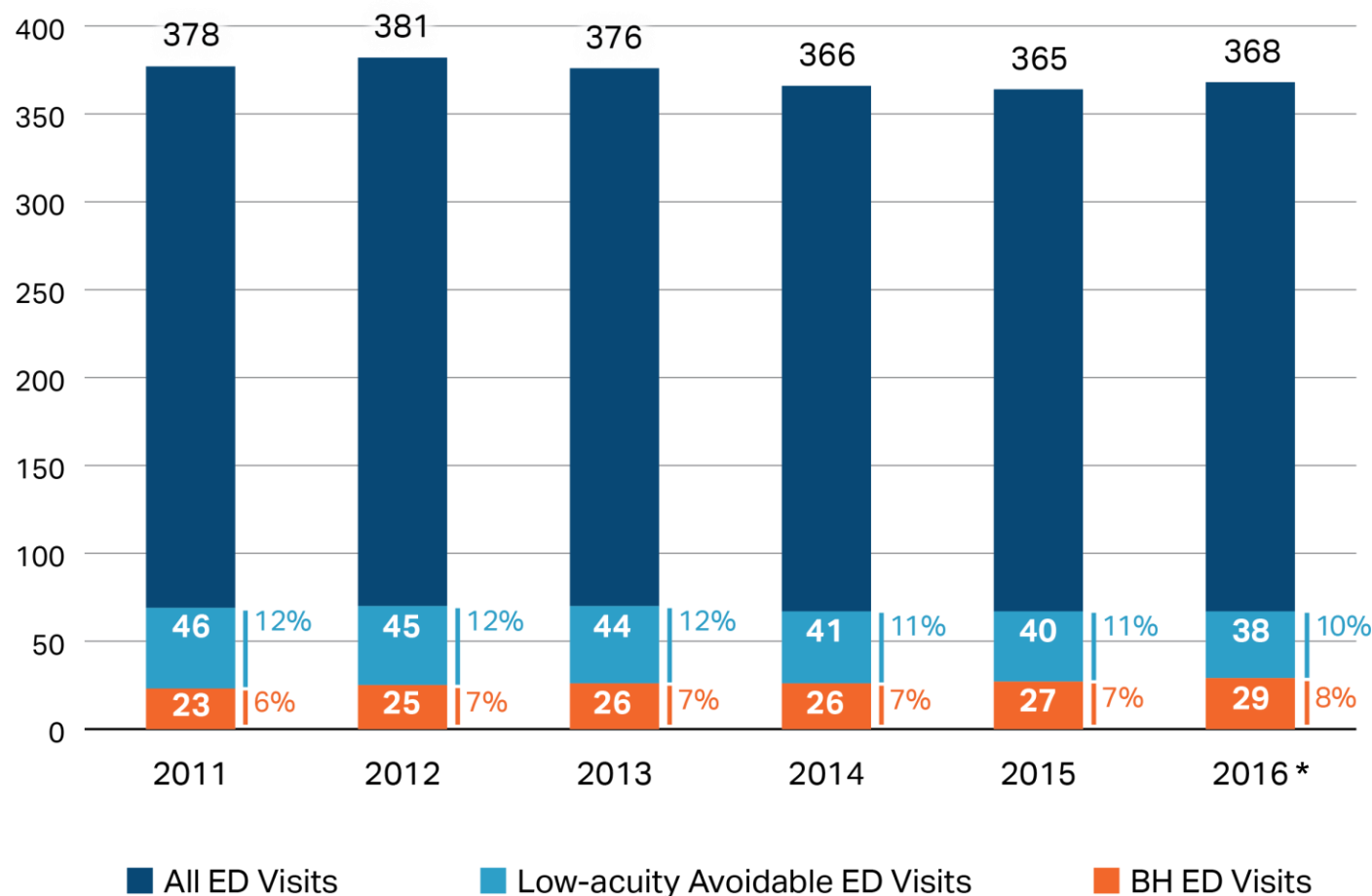
Inpatient hospital utilization stopped declining in MA after 2014

Inpatient discharges per 1,000 residents, by age group, 2011-2016



Behavioral-health related ED visits have steadily increased since 2011 even as total ED visits have remained steady

All ED visits, avoidable ED and behavioral health ED visits per 1,000 residents, 2011-2016

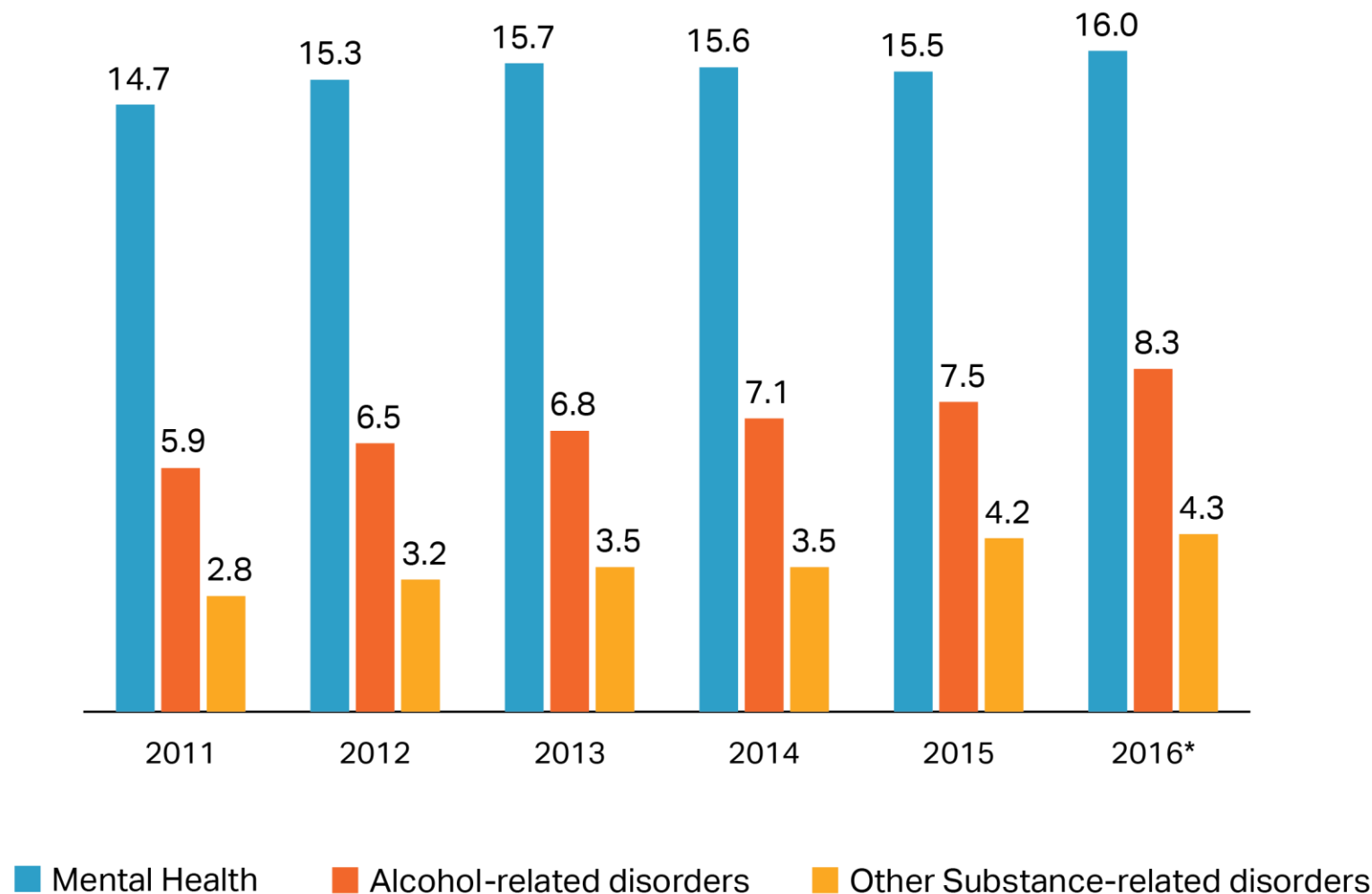


Notes: Low-acuity avoidable ED visits are based on the Medi-Cal avoidable ED visit definition, a conservative definition that may under-report avoidable ED utilization. Behavioral health ED visits were identified based on principal diagnosis using the Clinical Classifications Software (CCS) diagnostic 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 Emergency Department Database, 2011-2016

Since 2011, behavioral health ED visits involving alcohol and SUD diagnoses increased 40% and 54% respectively

Behavioral health-related ED visits per 1000 residents, 2011 - 2016

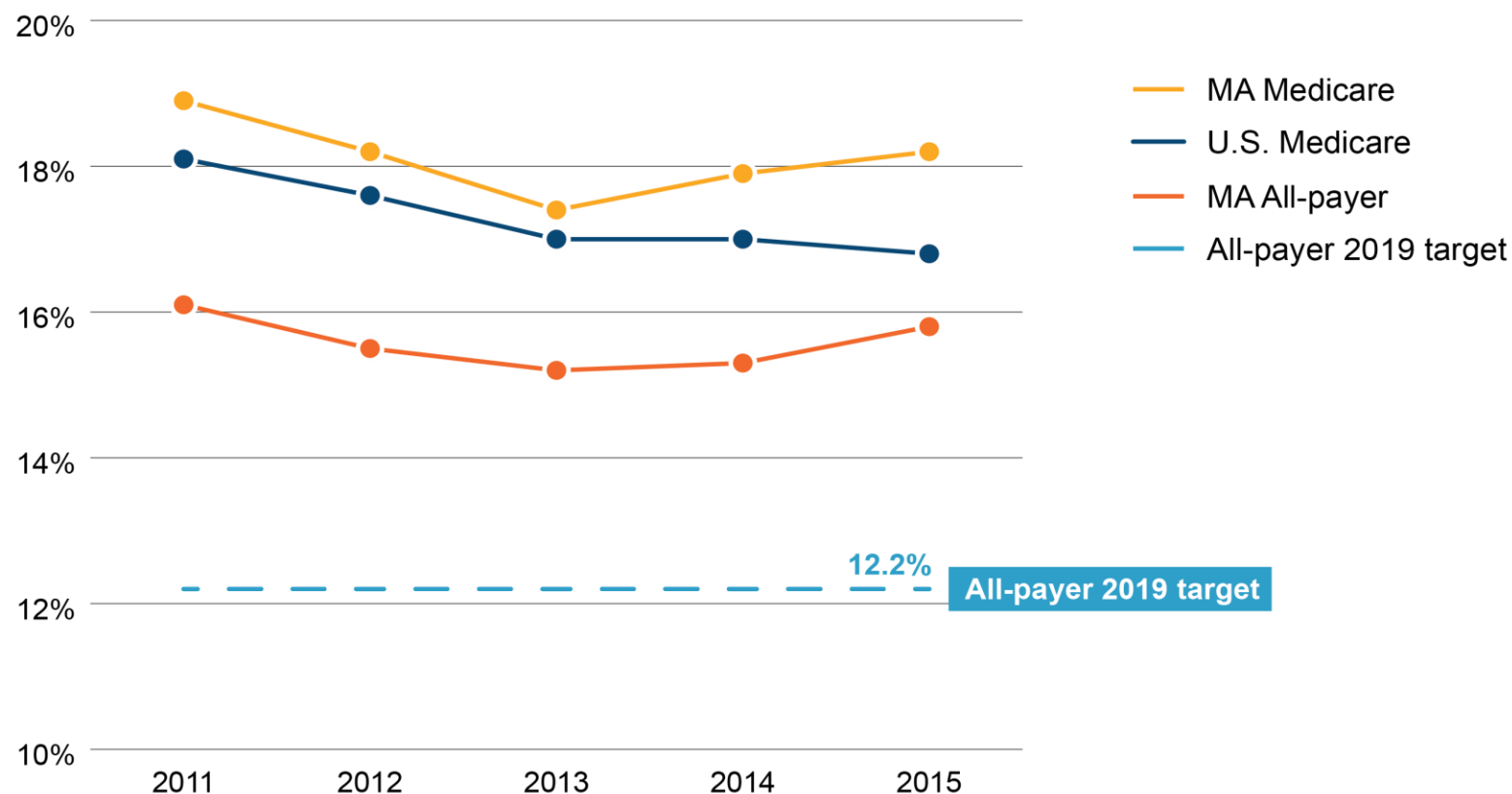


Notes: Behavioral health ED visits were identified based on principal diagnosis using the Clinical Classifications Software (CCS) diagnostic classifications. 2016 BH ED visits were identified using Beta-CCS diagnostic classifications, based on ICD-10 codes. Some discontinuity in trends by diagnosis may 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 Emergency Department Database, 2011 - 2016

As of 2015, readmission rates in MA increased, diverging from national trends

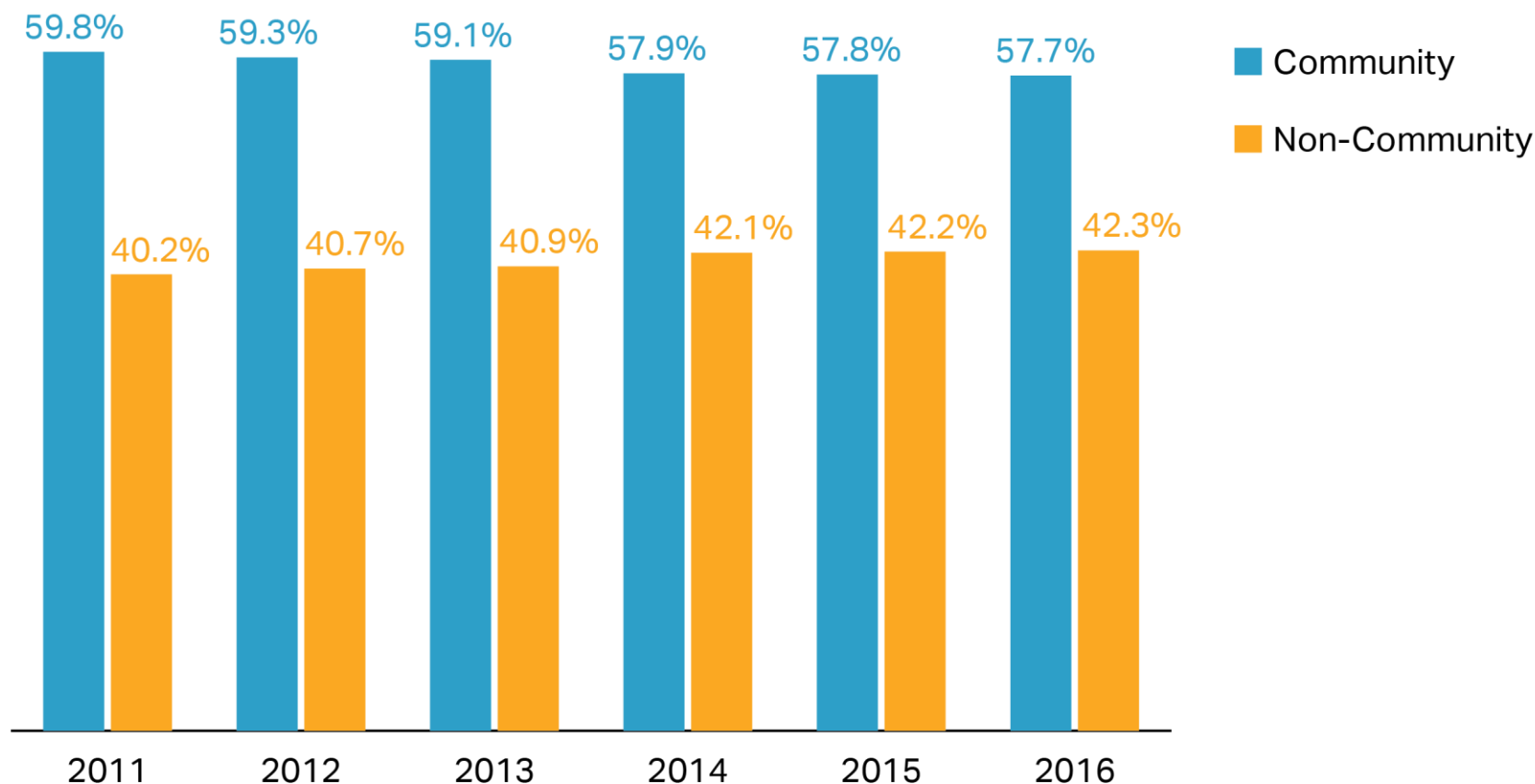
Thirty-day readmission rates, Massachusetts and the U.S., 2011-2015



Based on pre-filed testimony, payers are starting to adopt a range of strategies to reduce readmissions, including non-payment for avoidable readmissions.

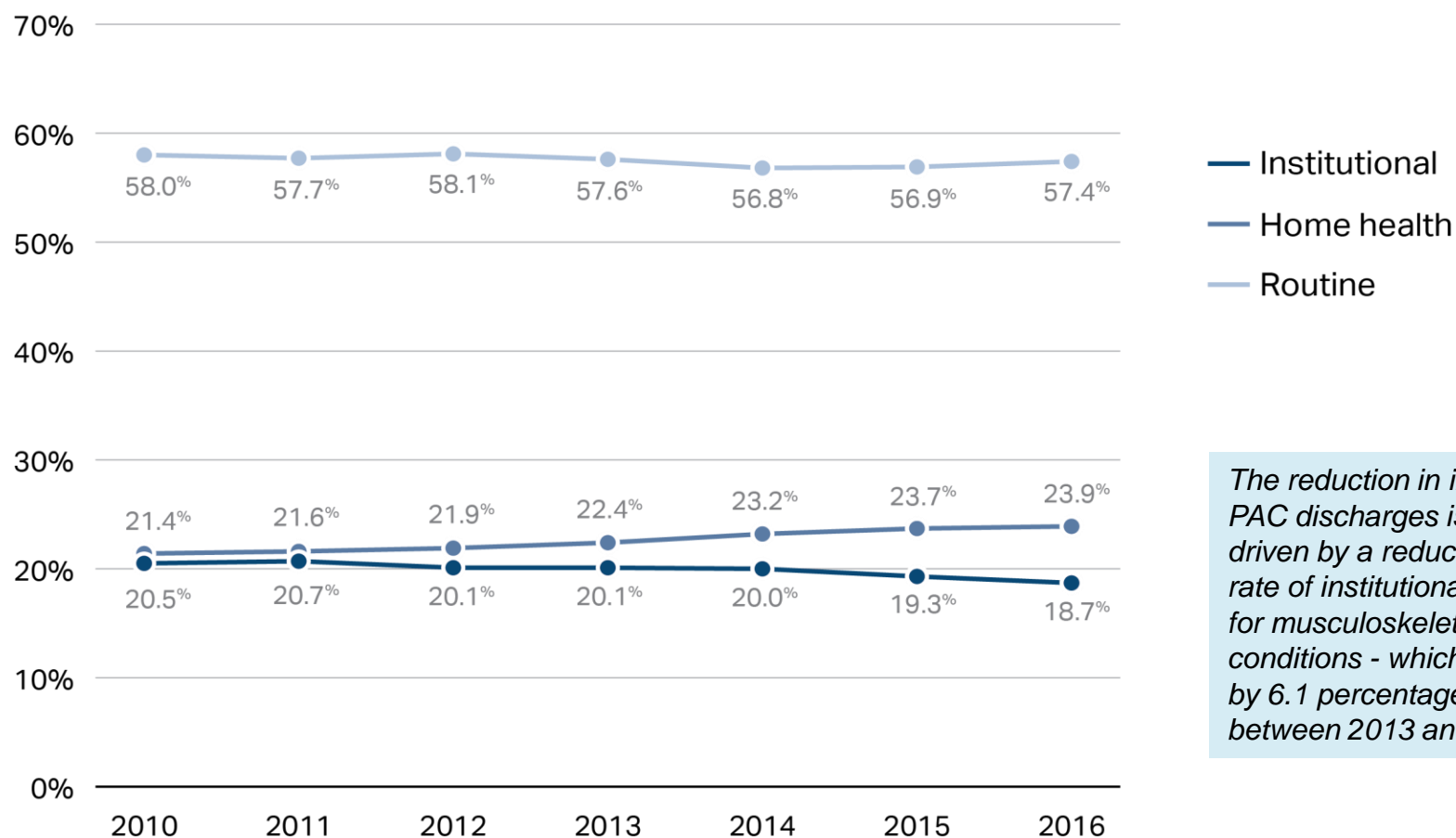
From 2011 to 2016, the share of community appropriate hospital stays in community hospitals has steadily declined

Inpatient hospital discharges by hospital type, 2011-2016



Hospital discharges to institutional post-acute care declined in 2015 and 2016

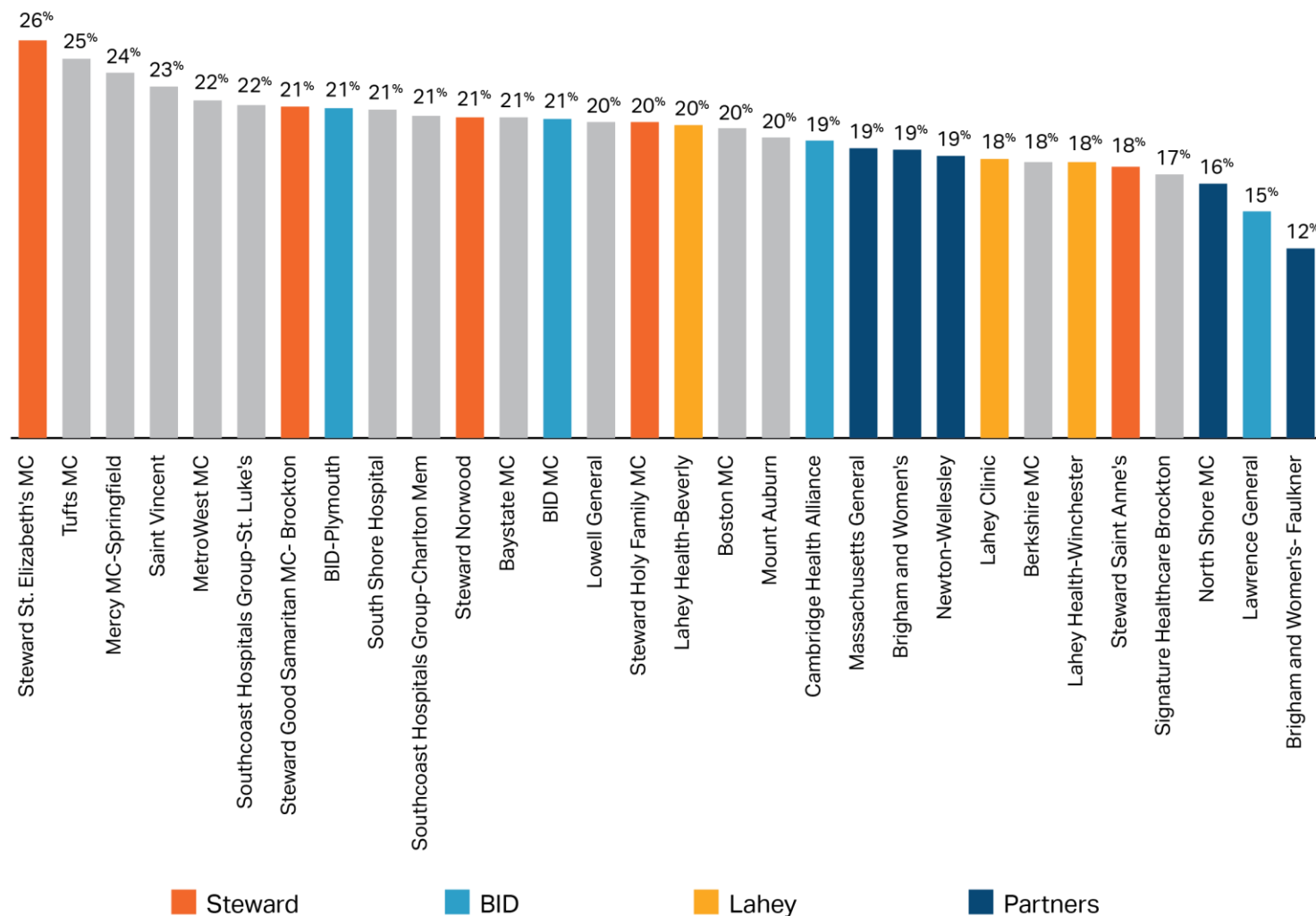
Adjusted percentage of discharges by post-acute care setting, all DRGs, 2010-2016



The reduction in institutional PAC discharges is partially driven by a reduction in the rate of institutional discharge for musculoskeletal conditions - which declined by 6.1 percentage points between 2013 and 2016.

Adjusted rates of discharge to institutional PAC vary more than two-fold by hospital

Adjusted rate of discharge to institutional post-acute care by hospital and provider system, 2016

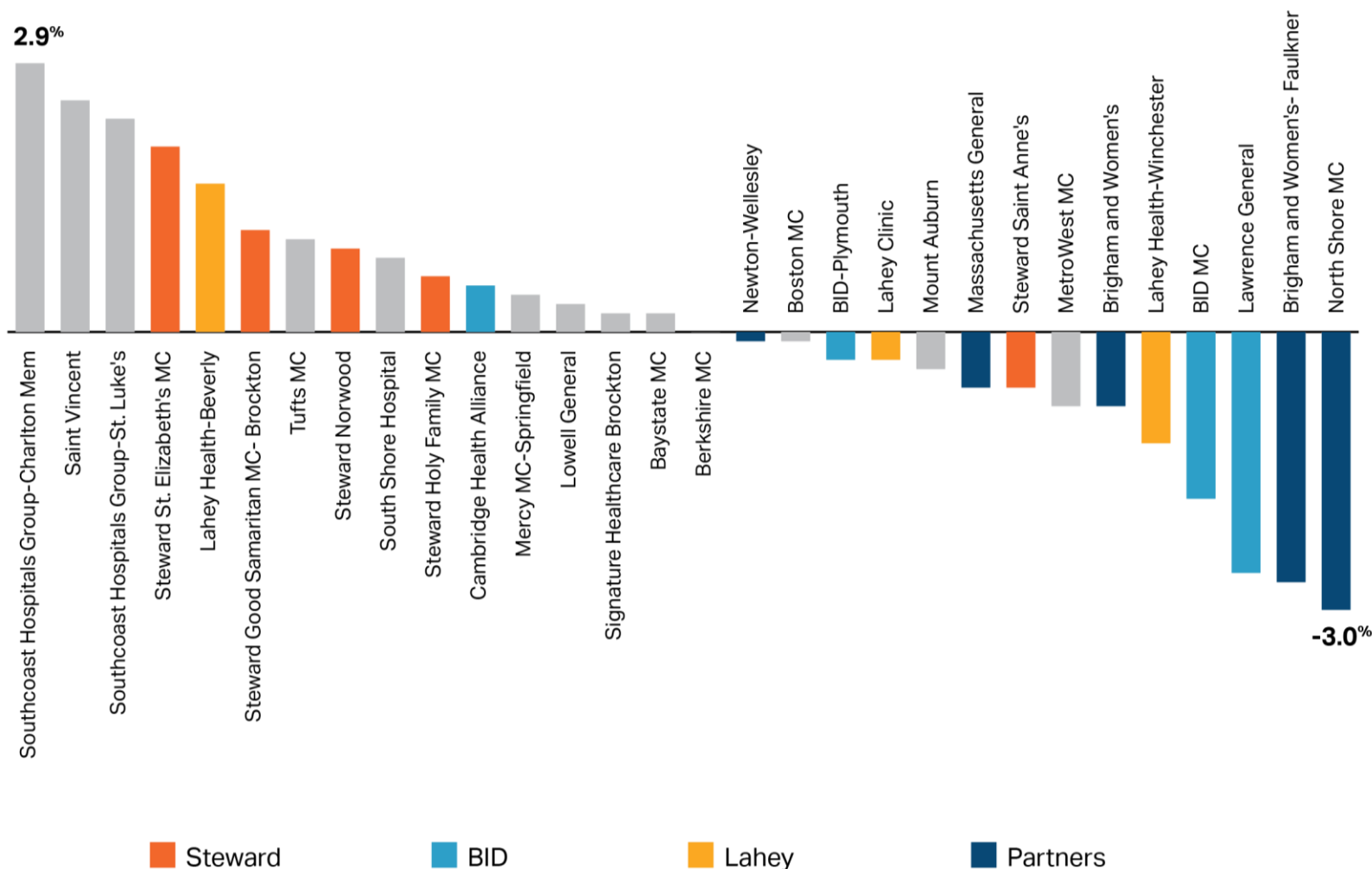


Notes: Top 30 hospitals by volume are included. Hospital rates have been adjusted for MDC, age, sex, admission source and primary payer. Several acute care hospitals (UMass Memorial Medical Center, Clinton Hospital, Cape Cod Hospital, Falmouth Hospital, Marlborough Hospital) were excluded due to coding irregularities in the database.

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

A number of hospitals substantially reduced their rates of discharge to institutional post-acute care settings in 2015 and 2016

Percentage point change in adjusted institutional discharge rate by hospital and provider system, 2013-2016

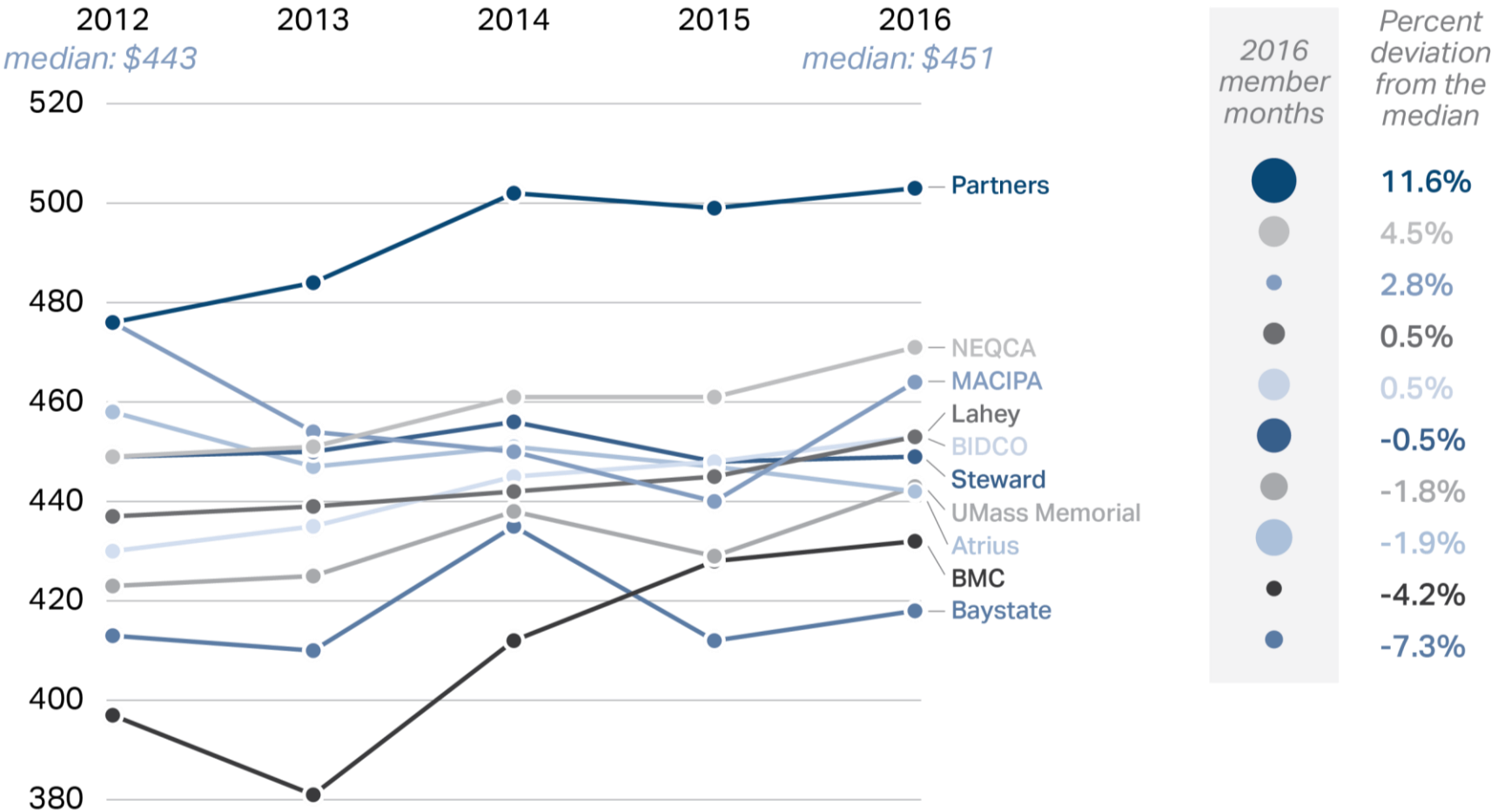


Notes: Top 30 hospitals by volume are included. Hospital rates have been adjusted for MDC, age, sex, admission source and primary payer. The change reflects the difference between the average rate of institutional discharge in 2015-2016 and the average rate of institutional discharge in 2013-2014.

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

Total medical expenses remained highest for patients managed by Partners providers in 2016

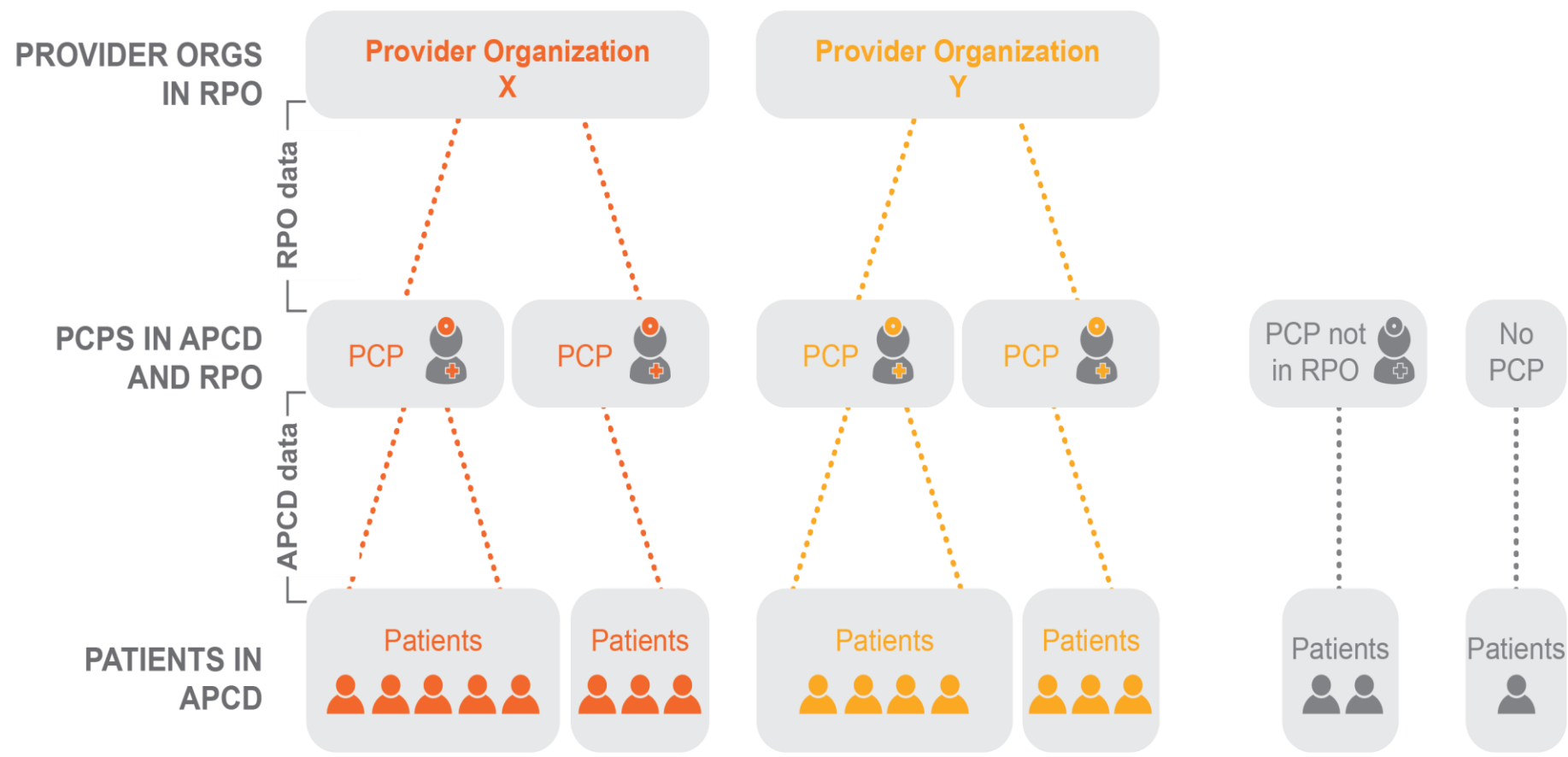
Health status adjusted TME, by provider organization, 2012-2016



Performance Variation Among Provider Organizations: Background and Previous Work

- A chapter in the 2016 Cost Trends Report described variation in spending and provision of some kinds of non-recommended care by provider organization.
 - This work relied on measures pre-aggregated by payers and reported to CHIA.
- HPC has now linked the Massachusetts All Payer Claims Database (APCD) and the state's Registration of Provider Organizations (RPO) database by
 - assigning patients observed in the data to a single primary care provider (PCP)
 - associating PCPs with their larger provider organizations using physician identifiers in the RPO data
- This allows examination of variation across provider groups on an unlimited number of claims-based outcomes of interest, e.g.
 - Spending by category of service
 - Potentially avoidable utilization
 - Referral patterns

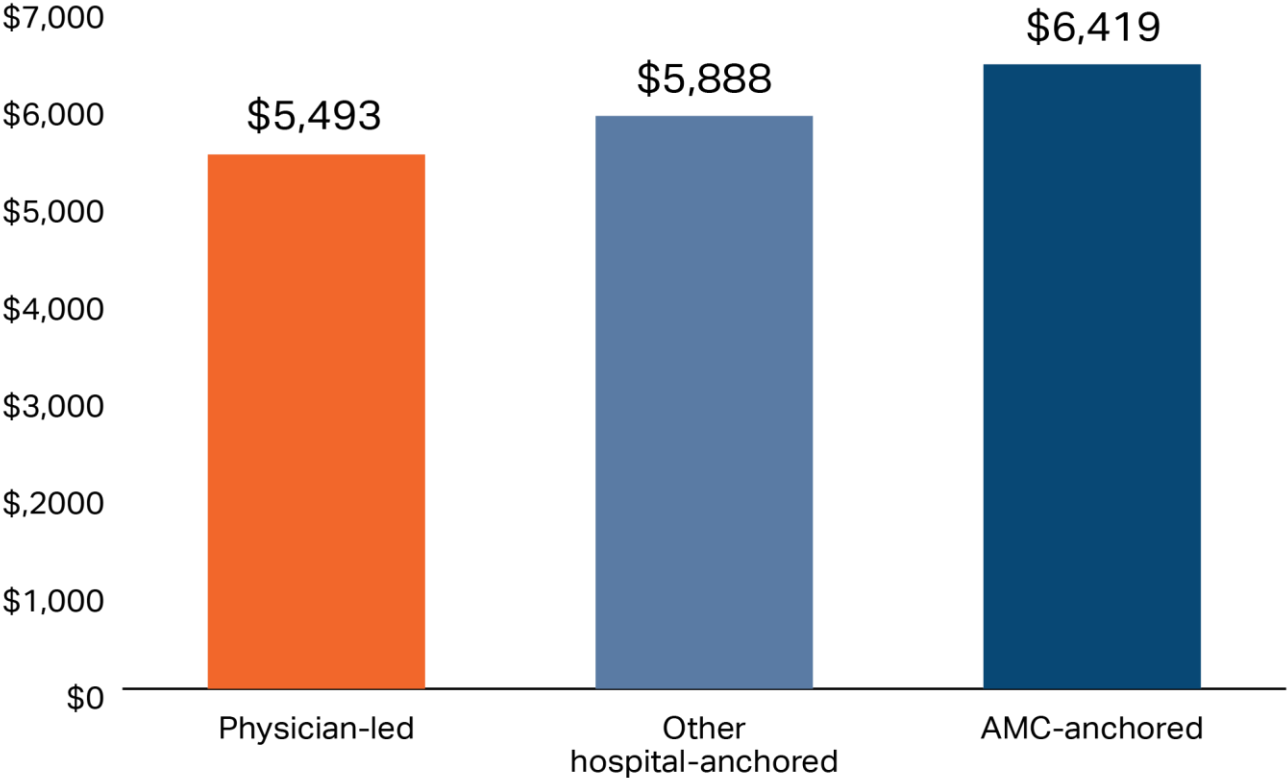
Organizations are compared by averaging spending and utilization among patients assigned or attributed to them



AMC-anchored systems had 17% higher spending than physician-led systems and 8% higher spending than other hospital-anchored systems

Average risk-adjusted commercial PMPY spending, by system composition, 2014

Risk adjusted



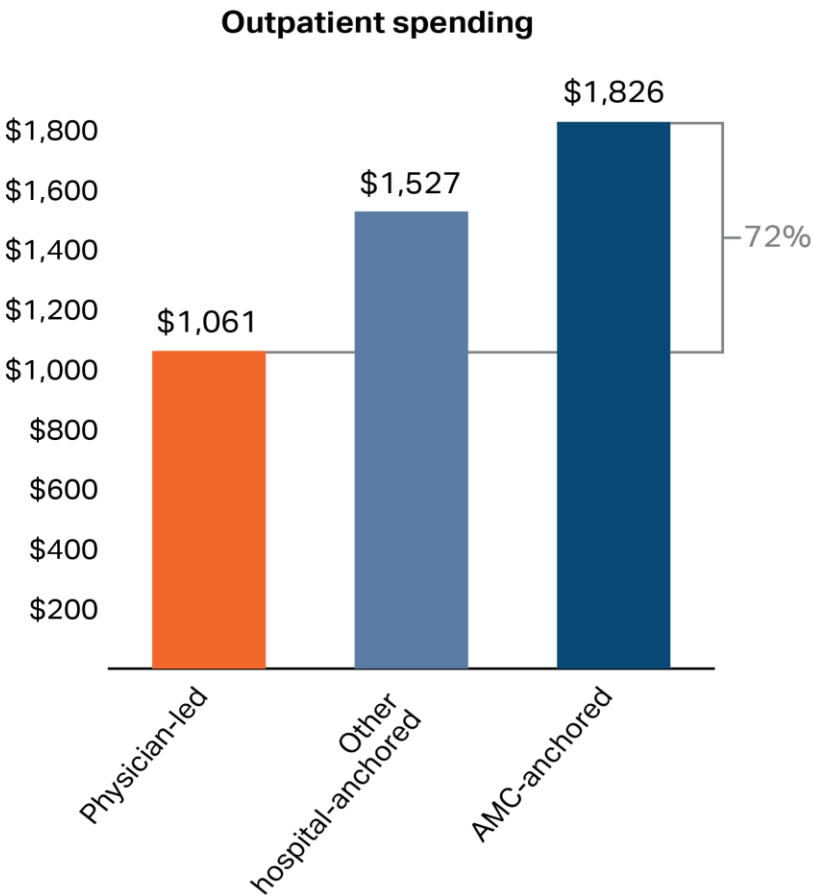
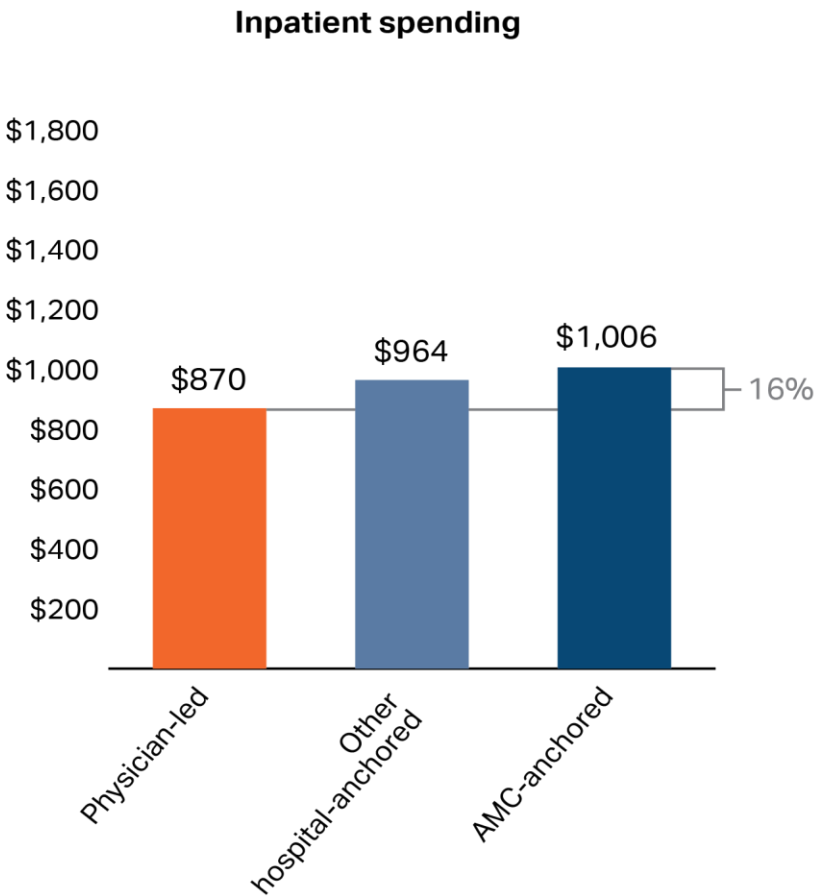
Notes: PMPY= per member per year; PCP= primary care provider; AMC= academic medical center. Other hospital-anchored includes systems anchored by either a teaching or community hospital. Spending adjusted using ACG risk-adjuster applied to claims data. Data include only privately insured adults (ages 18+) covered by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. Only members with a PCP affiliated with one of the 14 largest PCP groups, as identified by number of patients attributed in the All-Payers Claims Database, are included here.

Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2014; Registration of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

Hospital outpatient spending for AMC-anchored systems was 72% higher than physician-led systems, accounting for most of the total spending difference

Average commercial PMPY hospital spending, by system composition, by category of spending, 2014

Risk adjusted

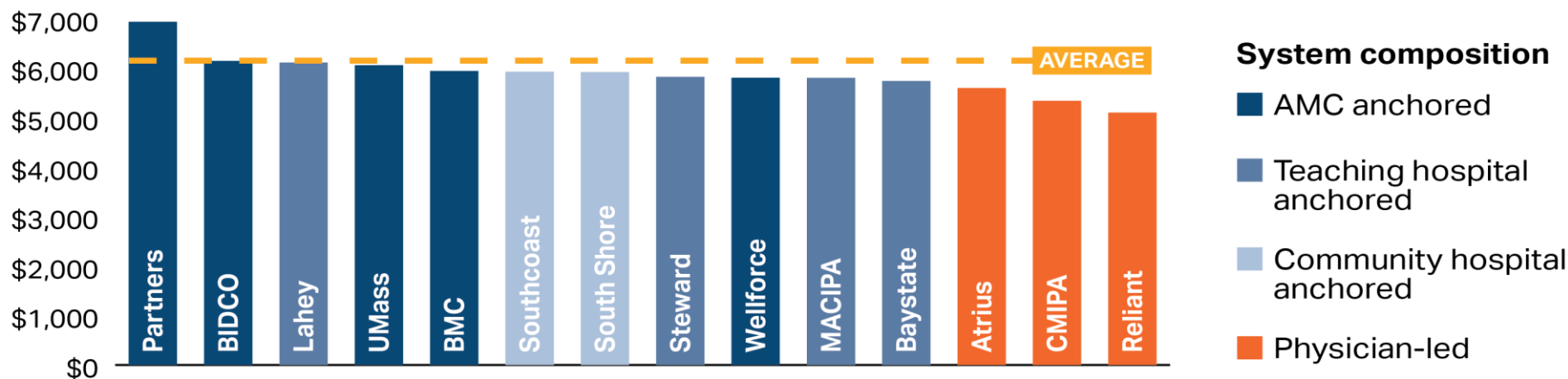


Member spending in the highest-cost organization was 36% higher than in the lowest-cost organization

Average commercial PMPY spending, by provider organization, 2014

Risk adjusted

Commercial members



Notes: PMPY= per member per year, PCP= primary care provider, AMC= academic medical center. Spending adjusted using ACG risk-adjuster applied to claims data. Data includes only adults over the age of 18. Commercial payers include Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. MassHealth includes only MCO enrollees who had coverage through BMC HealthNet, Neighborhood Health Plan, or Network Health/Tufts. Members in the MassHealth Medical Security Program (MSP) were excluded. Shown here are the 14 largest PCP groups as identified by number of patients attributed in the All-Payers Claims Database. Average calculated using all attributed adult members in the sample, not just those with a PCP associated with one of the 14 largest provider groups.

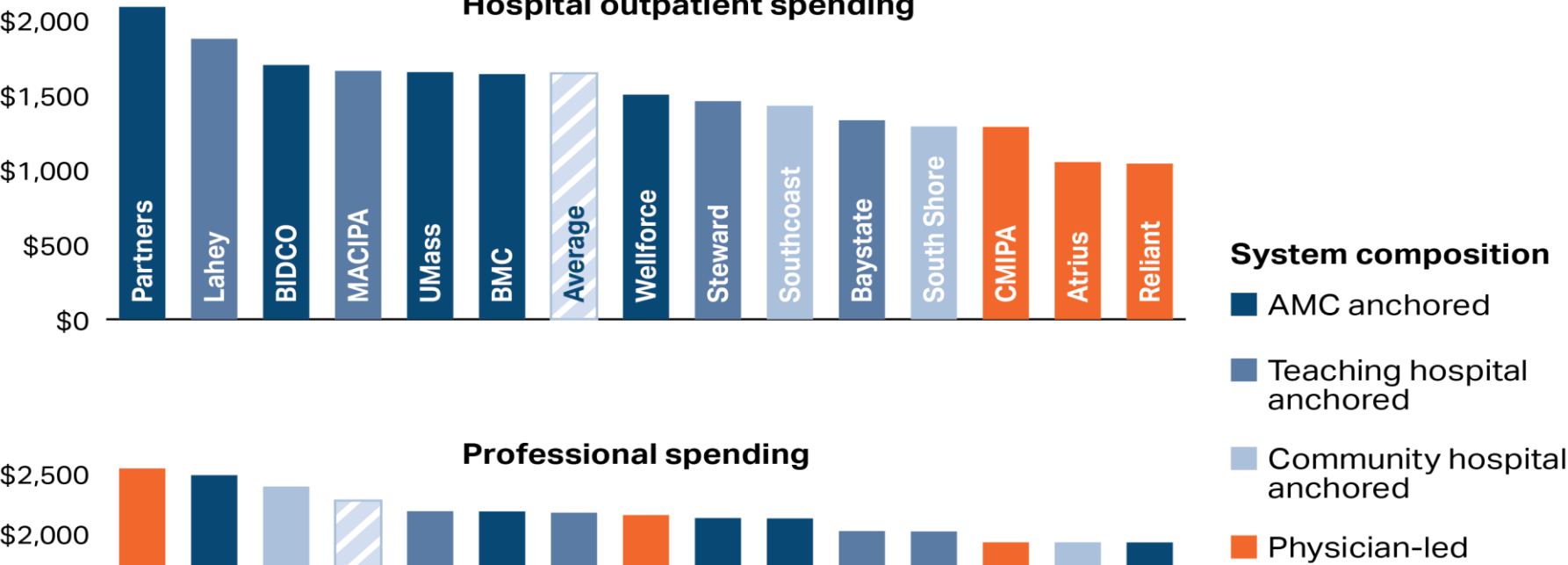
Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2014; Registry of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

Differences in professional and outpatient spending suggest some substitution based on site-of-service

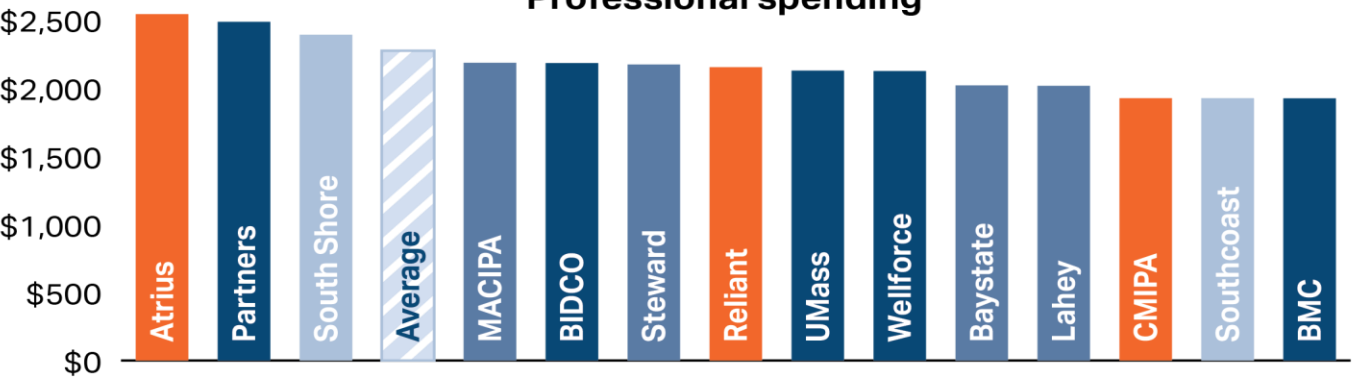
Average commercial PMPY spending, by provider organization, by category of spending, 2014

Risk adjusted

Hospital outpatient spending



Professional spending



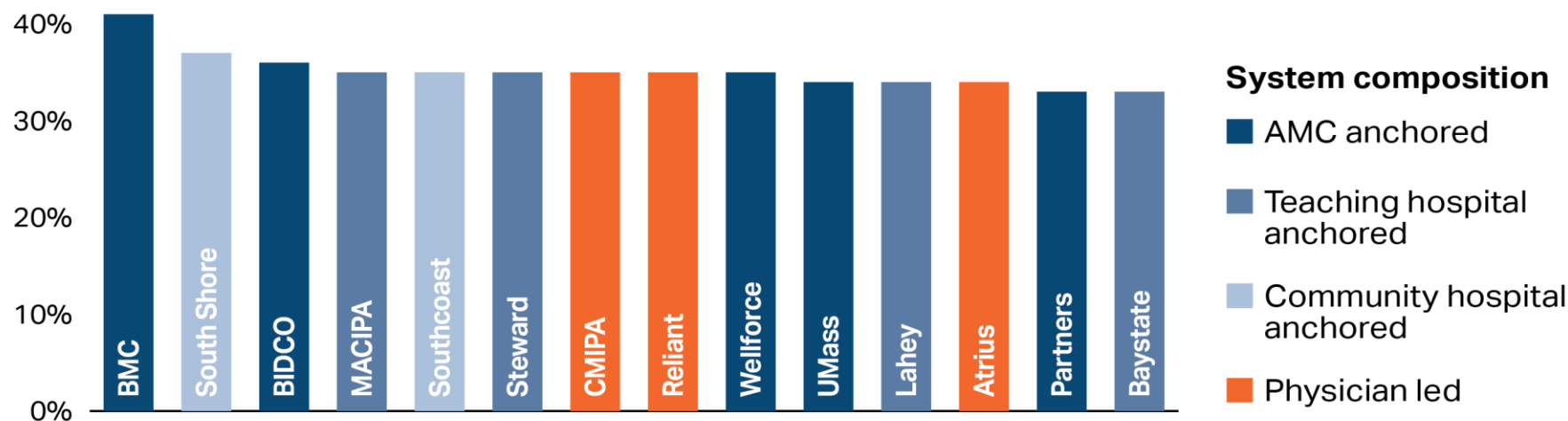
Notes: PMPY= per member per year, PCP= primary care provider, AMC= academic medical center. Spending adjusted using ACG risk-adjuster applied to claims data. Data include only privately insured adults (ages 18+) covered by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. Shown here are the 14 largest PCP groups as identified by number of patients attributed in the All-Payers Claims Database. Average calculated using all attributed adult members in the sample, not just those with a PCP associated with one of the 14 largest provider groups.

Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2014; Registration of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

The percentage of ED visits that were potentially avoidable varied by organization from 41% to 33%

Percent of ED visits that were potentially avoidable, by provider organization, 2014

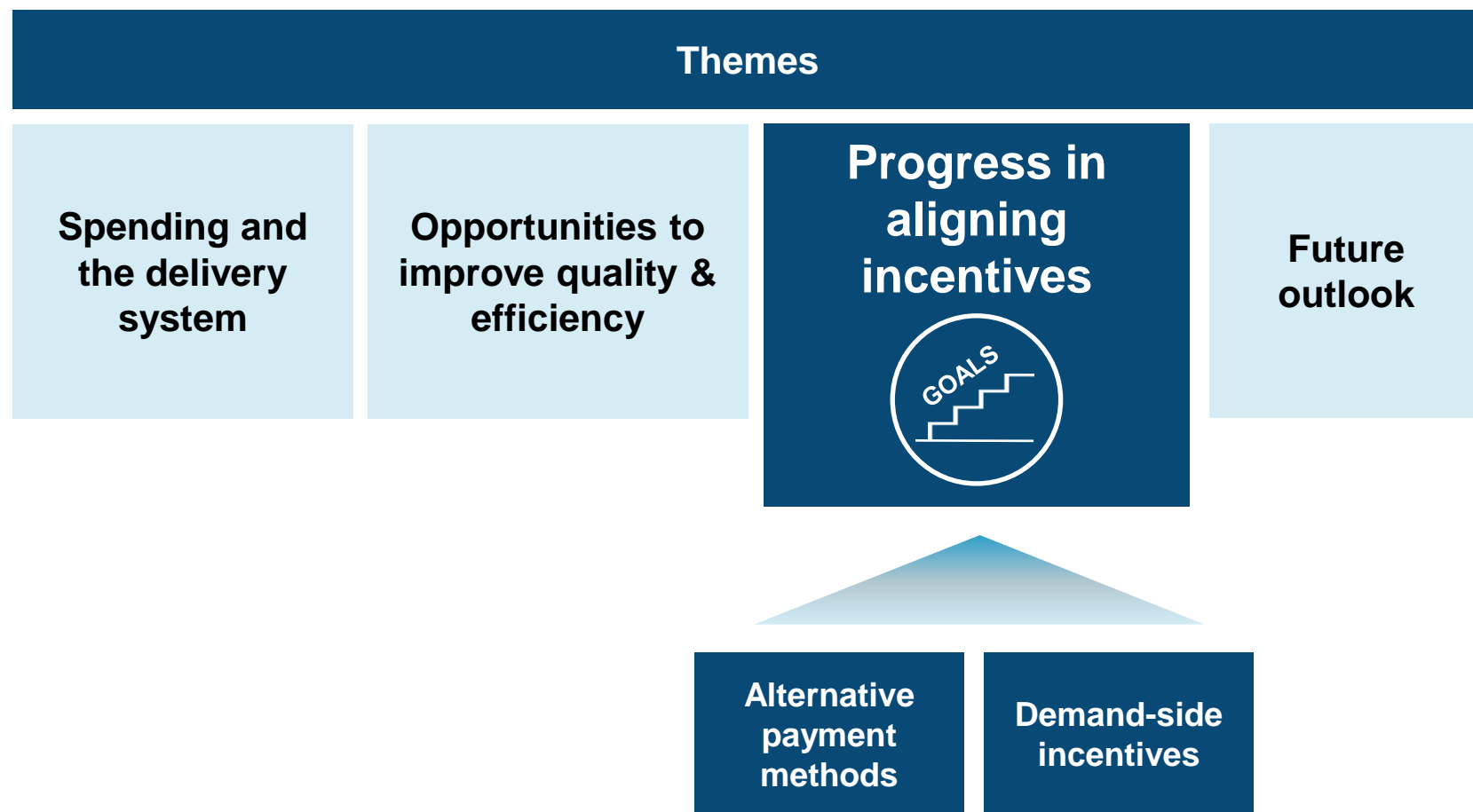
Risk and demographic adjusted



Notes: ED= emergency department; PCP= primary care provider, AMC= academic medical center. Adjusted avoidable ED visits by provider group were defined according to the NYU Billings Algorithm and calculated after adjusting for the following patient characteristics: risk score, median community income, area deprivation index, fully insured (commercial patients only), age, gender, and payer. Data include only privately insured adults (ages 18+) covered by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. Shown here are the 14 largest PCP groups as identified by number of patients attributed in the All-Payers Claims Database. Average calculated using all attributed adult members in the sample, not just those with a PCP associated with one of the 14 largest provider groups.

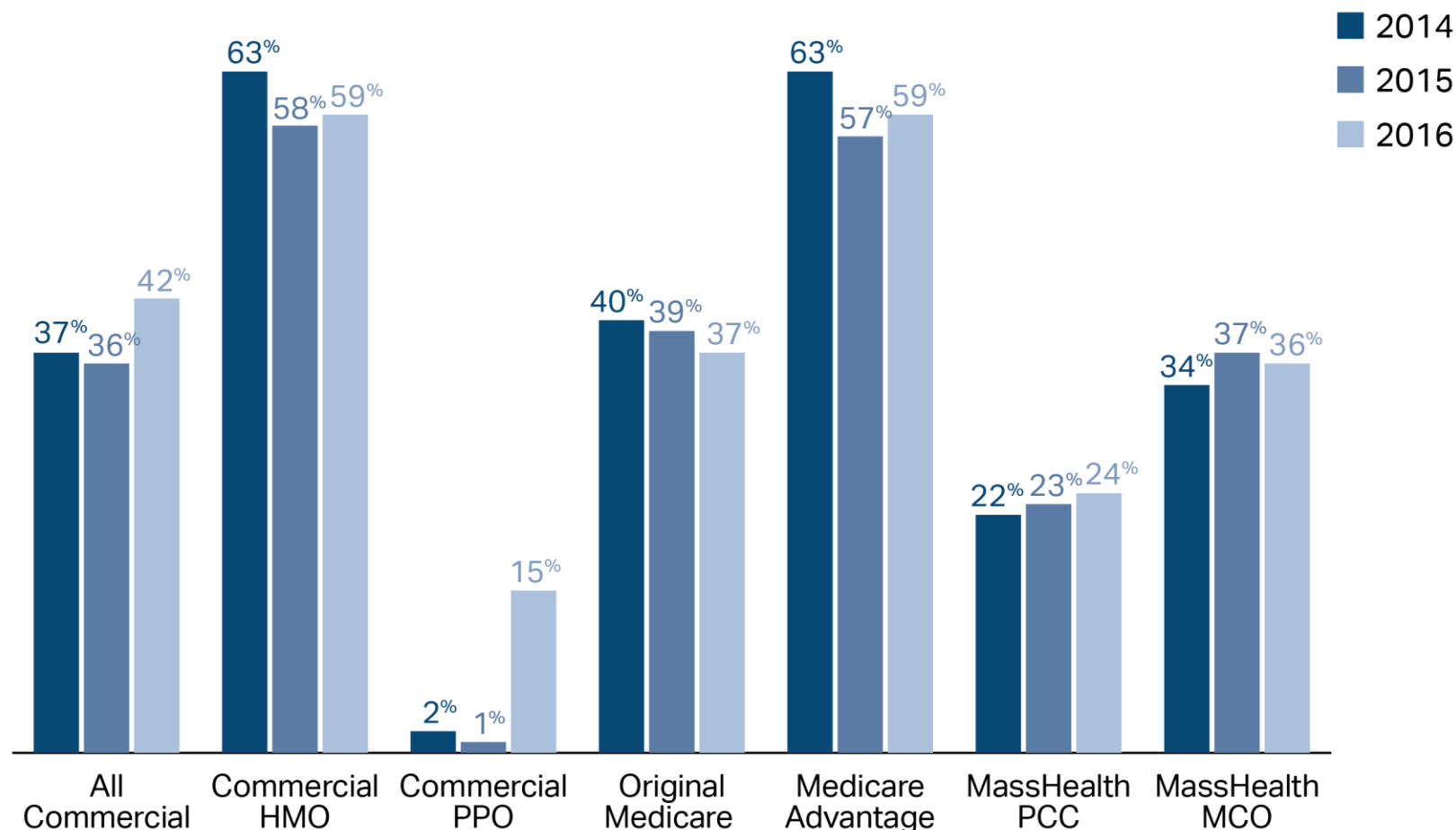
Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2014; Registration of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

Select findings from the 2017 Cost Trends Report



Uptake of alternative payment methods (APMs) increased in 2016, driven by growth in commercial PPO products

Proportion of member months under APM by insurance category, 2014-2016

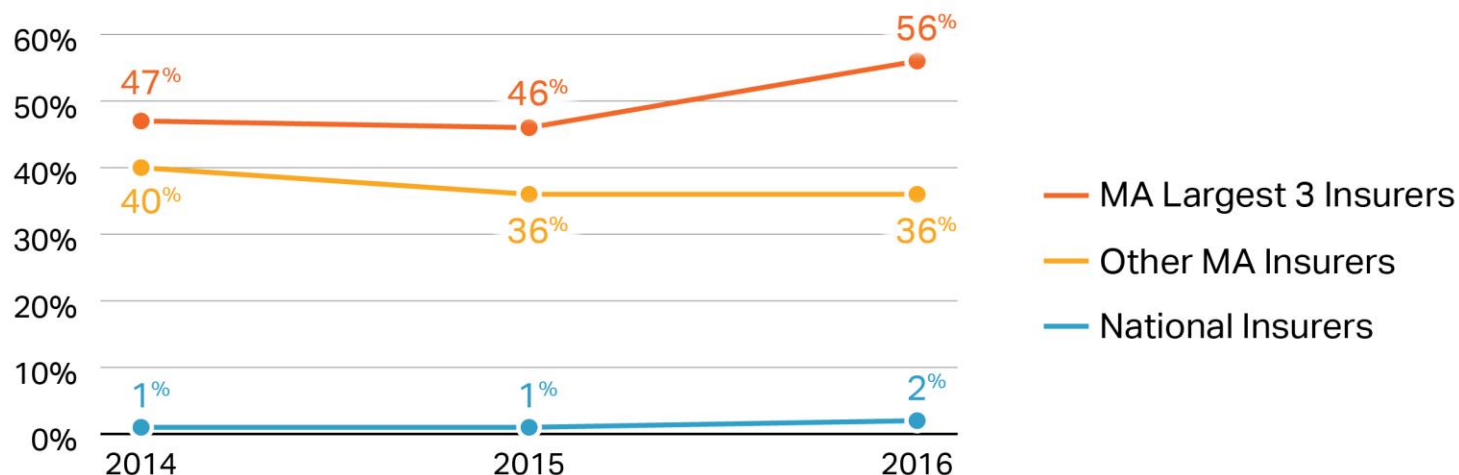


Notes: 2016 results for Original Medicare represent preliminary estimates.

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).

Smaller MA insurers and national insurers have limited growth in APMs

Proportion of commercial member months under APMs by carrier type



Share of Commercial Population

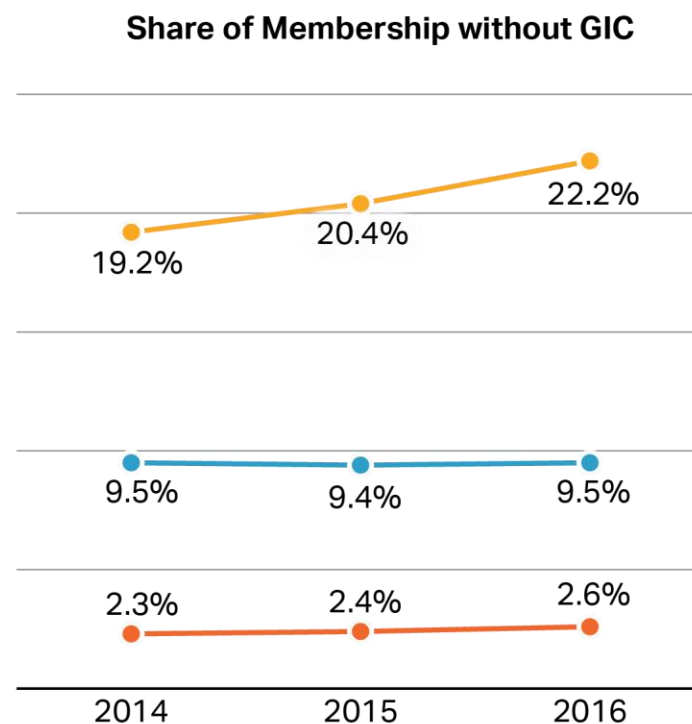
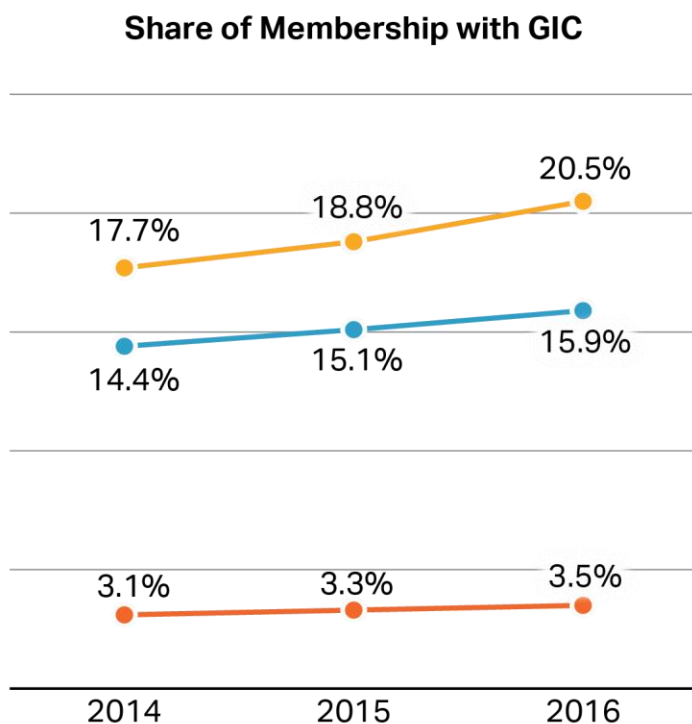
Payer Type	2014	2015	2016
MA Largest 3 Insurers	67%	65%	63%
Other MA Insurers	12%	15%	17%
National Insurers	20%	20%	20%

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, 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.

Use of tiered and limited network products grew slightly in 2016 due to the GIC

Membership by insurance product type including and excluding GIC members



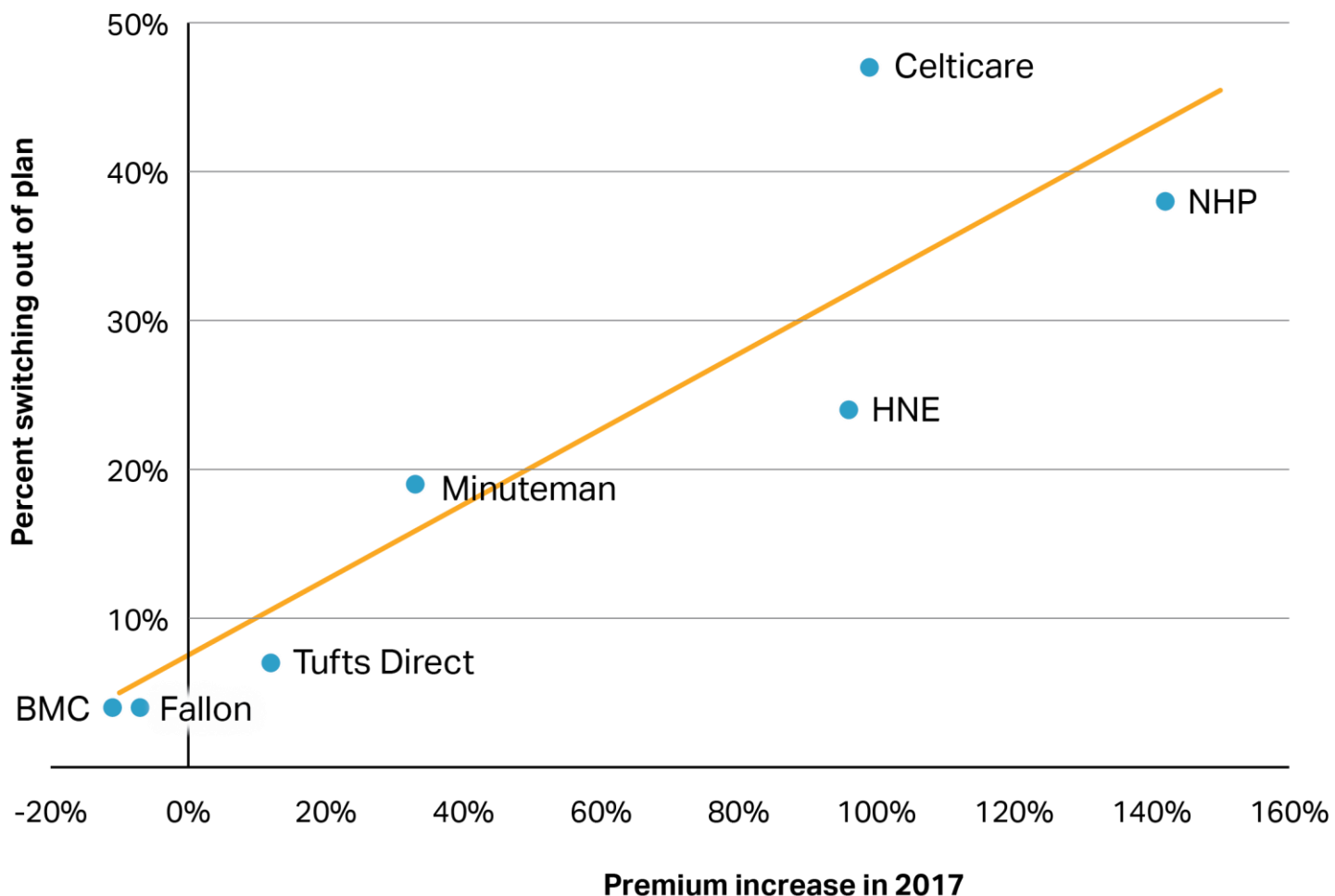
— limited %

— tiered %

— hdhp %

A strong association in the Connector between premium increase and plan switching suggests a value-based marketplace

Percent change in premiums versus percent switching out of plan



Select findings from the 2017 Cost Trends Report

Themes

**Spending and
the delivery
system**

**Opportunities to
improve quality &
efficiency**

**Progress in
aligning
incentives**

Future outlook



Key findings by the numbers

2017 HPC KEY FINDINGS

3.55%

Average annual rate of growth in Total Health Care Expenditures in Massachusetts from 2012-2016

\$21,085

Average annual family premium plus cost-sharing for employer coverage in Massachusetts, 2016

\$5.9 BILLION

Additional commercial health care spending in Massachusetts if costs had grown at the US rate from 2012-2016

X2 HIGHER

The number of routine office visits among Massachusetts Medicare beneficiaries that took place in more expensive hospital outpatient departments in 2015, compared to the U.S.

\$56 MILLION

Additional spending incurred in Massachusetts due to more Medicare office visits taking place in hospital outpatient departments in 2015

31% LOWER

Premium cost for a benchmark plan on the Mass Connector in 2017, compared to those in the ACA exchanges nationwide

22%

The increase in the rate of behavioral-health ED visits among Massachusetts residents from 2011-2016

1.3%

Drop in the likelihood that a hospitalized patient is discharged to institutional post-acute care from 2014-2016

\$1,835

Difference in total annual risk-adjusted spending for patients in the highest-spending organization compared to the lowest in 2014

72%

Difference in risk-adjusted hospital outpatient spending for patients in AMC-anchored provider organizations versus in physician-led organizations in 2014



AGENDA

- Call to Order
- Approval of Minutes from the November 1, 2017 Meeting
- Executive Director's Report
- Investment Programs
- 2017 Health Care Cost Trends Report
- **Market Performance**
 - Notices of Material Change
 - Authorize Initiation of a Cost and Market Impact Review (CMIR) on the proposed transaction including CareGroup, Lahey Health System, Seacoast Regional Health Systems, the Beth Israel Deaconess Care Organization, and Mount Auburn Cambridge Independent Practice Association (VOTE)
- Performance Improvement Plans
- Schedule of Next Board Meeting (TBD)



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Types of Transactions Noticed

April 2013 to Present

Type of Transaction	Number of Transactions	Frequency
Clinical affiliation	20	23%
Physician group merger, acquisition, or network affiliation	19	22%
Acute hospital merger, acquisition, or network affiliation	19	22%
Formation of a contracting entity	15	17%
Merger, acquisition, or network affiliation of other provider type (e.g., post-acute)	9	10%
Change in ownership or merger of corporately affiliated entities	5	6%
Affiliation between a provider and a carrier	1	1%

Notices Currently Under Review

- Proposed acquisition of the non-hospital-based diagnostic laboratory business of **Cape Cod Healthcare** by **Quest Diagnostics Massachusetts**, a subsidiary of a national diagnostic testing provider.
- Proposed acquisition of the non-clinical assets of **Reliant Medical Group** by the **OptumCare business of Collaborative Care Holdings**, a subsidiary of UnitedHealth Group.
- Proposed merger of **CareGroup**, **Lahey Health System**, and **Seacoast Regional Health Systems**, the related acquisition of the **Beth Israel Deaconess Care Organization** by the merged entity, and the contracting affiliation between the merged entity and **Mount Auburn Cambridge Independent Practice Association**.
- Acquisition of eight **Community Health Systems** hospitals in Ohio, Pennsylvania, and Florida by **Steward Health Care**.
- Acquisition of all 18 **IASIS Healthcare Corporation** hospitals by **Steward Health Care**.

Notices Currently Under Review

- Proposed joint venture between **Shields Health Care Group** and **Baystate Health** that would own and operate an urgent care clinic for patients in Baystate's geographic region.
- Proposed clinical affiliation between **Harrington Memorial Hospital** (Harrington), its affiliated physician group, **Harrington Physician Services** (HPS), and **UMass Memorial Health Care** under which several HPS OB/GYN physicians would apply for staff membership and privileges at UMass Memorial Medical Center.
- Proposed acquisition of **AdCare Hospital of Worcester**, a for-profit hospital that provides inpatient and outpatient substance use disorder treatment services in Massachusetts and Rhode Island, by the **AAC Healthcare Network**, a national for-profit provider of substance use disorder treatment services headquartered in Tennessee.

CMIR In Progress

- Proposed acquisition of the Foundation of the Massachusetts Eye and Ear Infirmary and its subsidiaries, including the **Massachusetts Eye and Ear Infirmary** and **Massachusetts Eye and Ear Associates**, by **Partners HealthCare System**.



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Proposed Transaction: Creation of the “NewCo” System

Proposed **corporate affiliation** between the Beth Israel Deaconess and Lahey systems, as well as three hospitals that are currently corporately independent.

Currently BID-owned



Currently Lahey-owned



Currently Independent*



*Though corporately independent, Anna Jaques and Baptist contract through the Beth Israel Deaconess Care Organization (BIDCO). BIDMC, Mt. Auburn, and Baptist also are members of CareGroup, which jointly borrows funds and purchases services, but does not contract with payers or provide centralized operations.

Proposed Transaction: Creation of the “NewCo” System

The new system would own the parties’ current contracting entities, which contract on behalf of owned and non-owned affiliates. They additionally propose a new **contracting affiliation** with the **Mount Auburn Cambridge Independent Practice Association**.

Current Contracting Entities
(would become NewCo corporate affiliates)

Beth Israel Deaconess | CARE ORGANIZATION



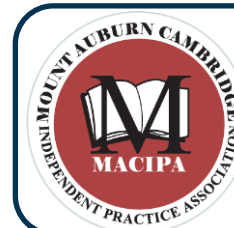
Lahey HealthSM

Lahey Clinical Performance Network
Lahey Clinical Performance ACO

BIDCO Non-Owned Contracting Affiliates
(not included in corporate merger)

- Cambridge Health Alliance (CHA)
- Lawrence General Hospital
- MetroWest Medical Center

New Contracting Affiliate

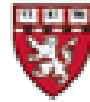


MACIPA

Beth Israel Deaconess Medical Center (BIDMC)



Beth Israel Deaconess
Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL



Beth Israel Deaconess Hospital
Needham



Beth Israel Deaconess Hospital
Plymouth



Beth Israel Deaconess Hospital
Milton

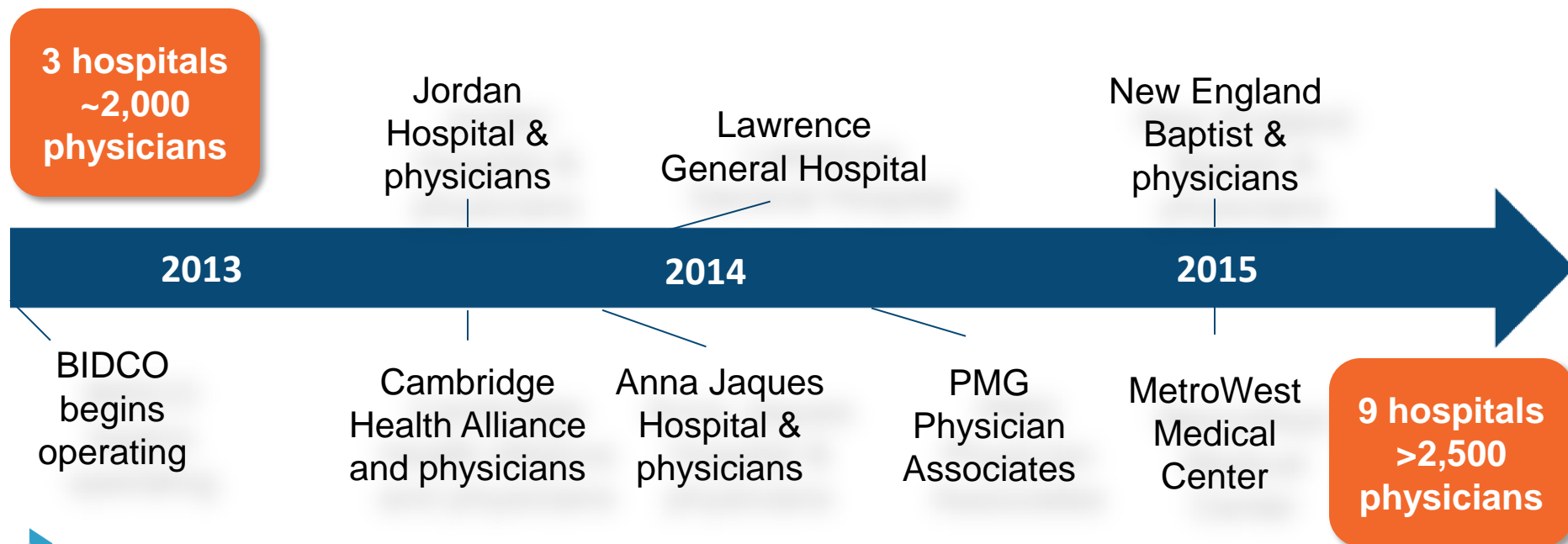
- BIDMC is a 703-bed non-profit academic medical center
- It owns three community hospitals: BID-Milton, BID-Needham, and BID-Plymouth, and two physician practices totaling ~417 physicians
- The BID-owned hospitals, along with New England Baptist Hospital and Mount Auburn Hospital, are part of CareGroup, which jointly borrows funds and purchases services, but does not contract with payers or provide centralized operations
- All of the BID-owned hospitals would become corporate affiliates of NewCo
- The BID-owned hospitals and physicians contract through Beth Israel Deaconess Care Organization (BIDCO)

Beth Israel Deaconess Care Organization (BIDCO)

BIDCO has grown substantially in recent years.

In addition to the BID-owned hospitals and affiliated physicians, BIDCO contracts on behalf of five contracting affiliate hospitals: **New England Baptist Hospital**, **Anna Jaques Hospital**, **Cambridge Health Alliance (CHA)**, **Lawrence General Hospital**, and **MetroWest Medical Center** as well as over 2,500 physicians.

Of these, all but CHA, Lawrence General, and MetroWest would become corporate affiliates of NewCo, and BIDCO itself would become a corporate affiliate of NewCo.



Anna Jaques Hospital and Seacoast Regional Health System (SRHS)



ANNA JAQUES HOSPITAL



Affiliated with

Beth Israel Deaconess
Medical Center



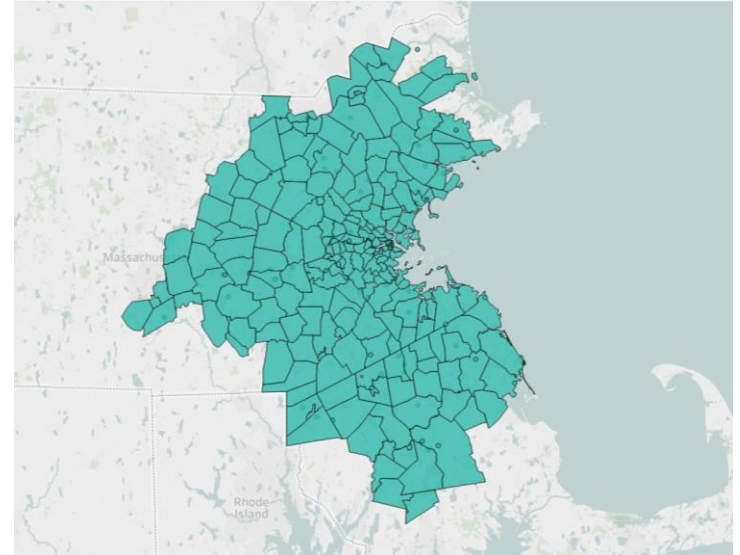
HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

- Seacoast Regional Health System (SRHS) would become a corporate affiliate of NewCo
- SRHS includes:
 - Anna Jaques Hospital (AJH), a 140-bed general acute care hospital located in Newburyport, MA
 - Seacoast Affiliated Group Practice, a 35-physician multi-specialty practice
- Anna Jaques Hospital and its affiliated physicians in the Whittier IPA contract through BIDCO and are clinically affiliated with BIDMC

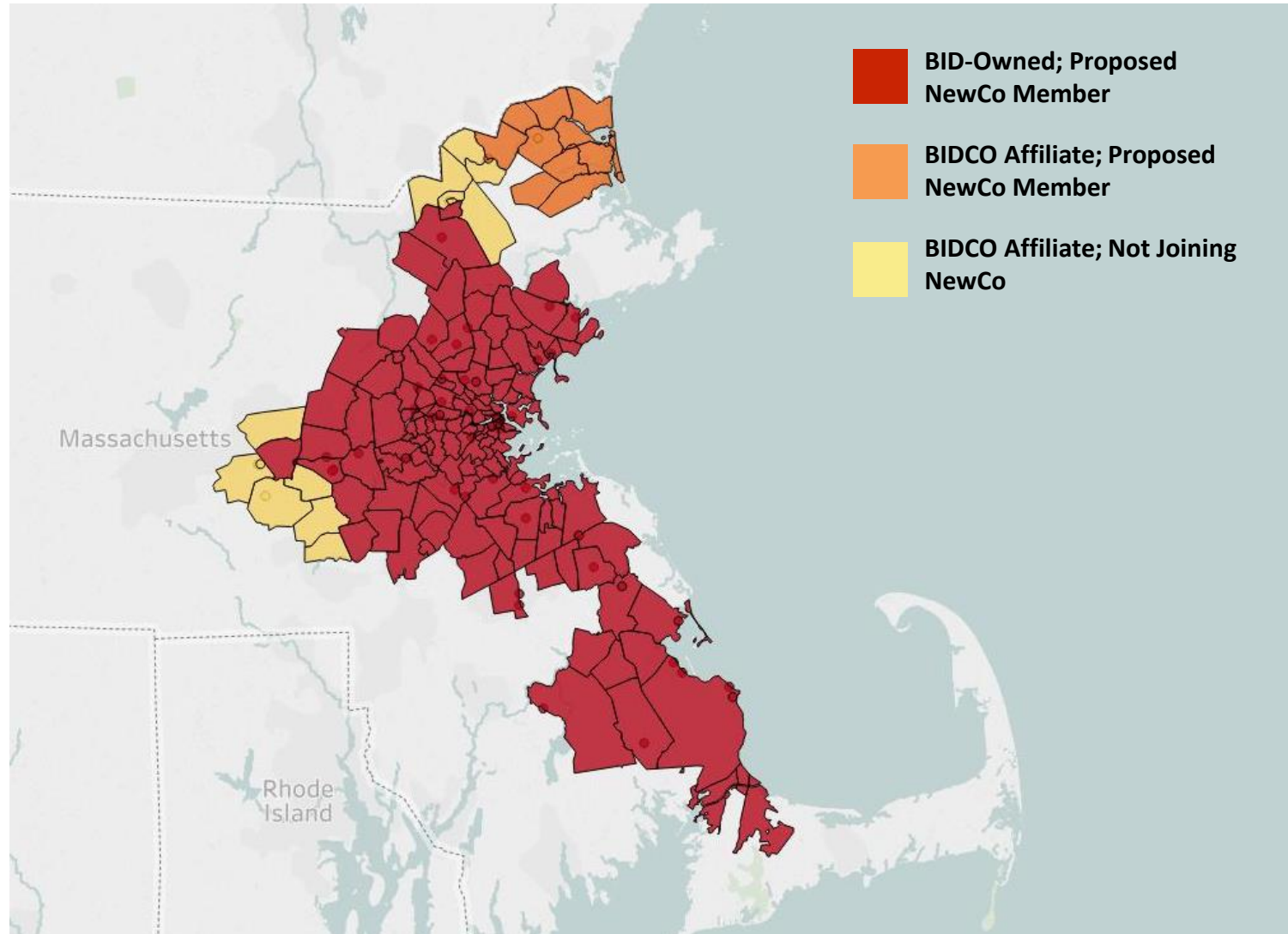
New England Baptist Hospital (NEBH)



- New England Baptist Hospital (NEBH) is a non-profit, 95-bed orthopedic hospital in Boston, and the only specialty orthopedic hospital in Massachusetts
- It has licensed outpatient orthopedic facilities in Brookline, Chestnut Hill, and Dedham
- Its owned physician group, New England Baptist Clinical Integration Organization (NEBCIO), includes ~106 physicians (14 PCPs)
- NEBH is part of CareGroup, currently contracts through BIDCO, and is clinically affiliated with BIDMC
- NEBH would become a corporate affiliate of NewCo

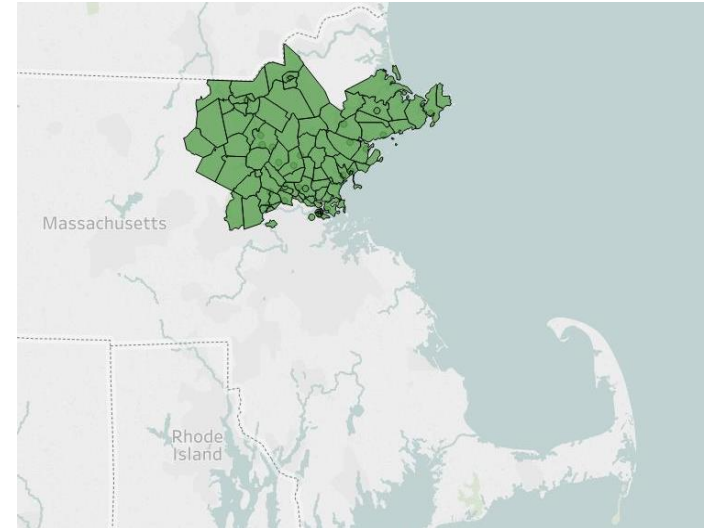


BIDCO Hospital General Acute Care Primary Service Areas





- Lahey Health System was formed in May 2012 by the merger of Northeast Health System and the Lahey Clinic Foundation. Lahey acquired Winchester Hospital in 2014.
- Lahey owns three hospitals:
 - Lahey Hospital and Medical Center (including Lahey's Peabody campus)
 - Northeast Hospital (Beverly and Addison Gilbert campuses, as well as BayRidge Hospital, which provides psychiatric services)
 - Winchester Hospital
- Lahey also owns the Lahey Clinical Performance Network (LCPN), which contracts on behalf of approximately 1,000 physicians (~200 PCPs and ~800 specialists)
- Lahey's hospitals and LCPN would become corporate affiliates of NewCo

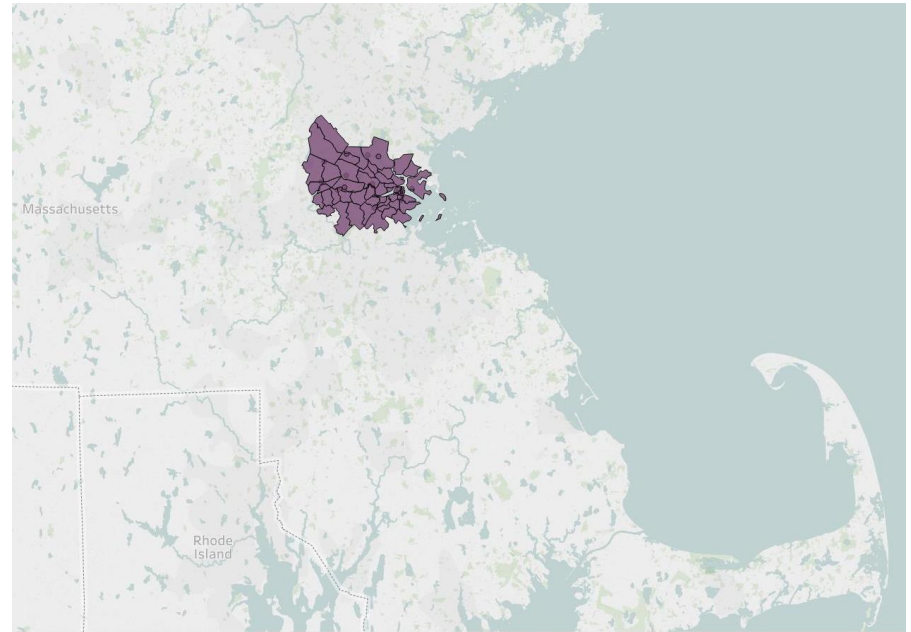


Mount Auburn Hospital and Mount Auburn Cambridge Independent Practice Association (MACIPA)



MOUNT AUBURN HOSPITAL

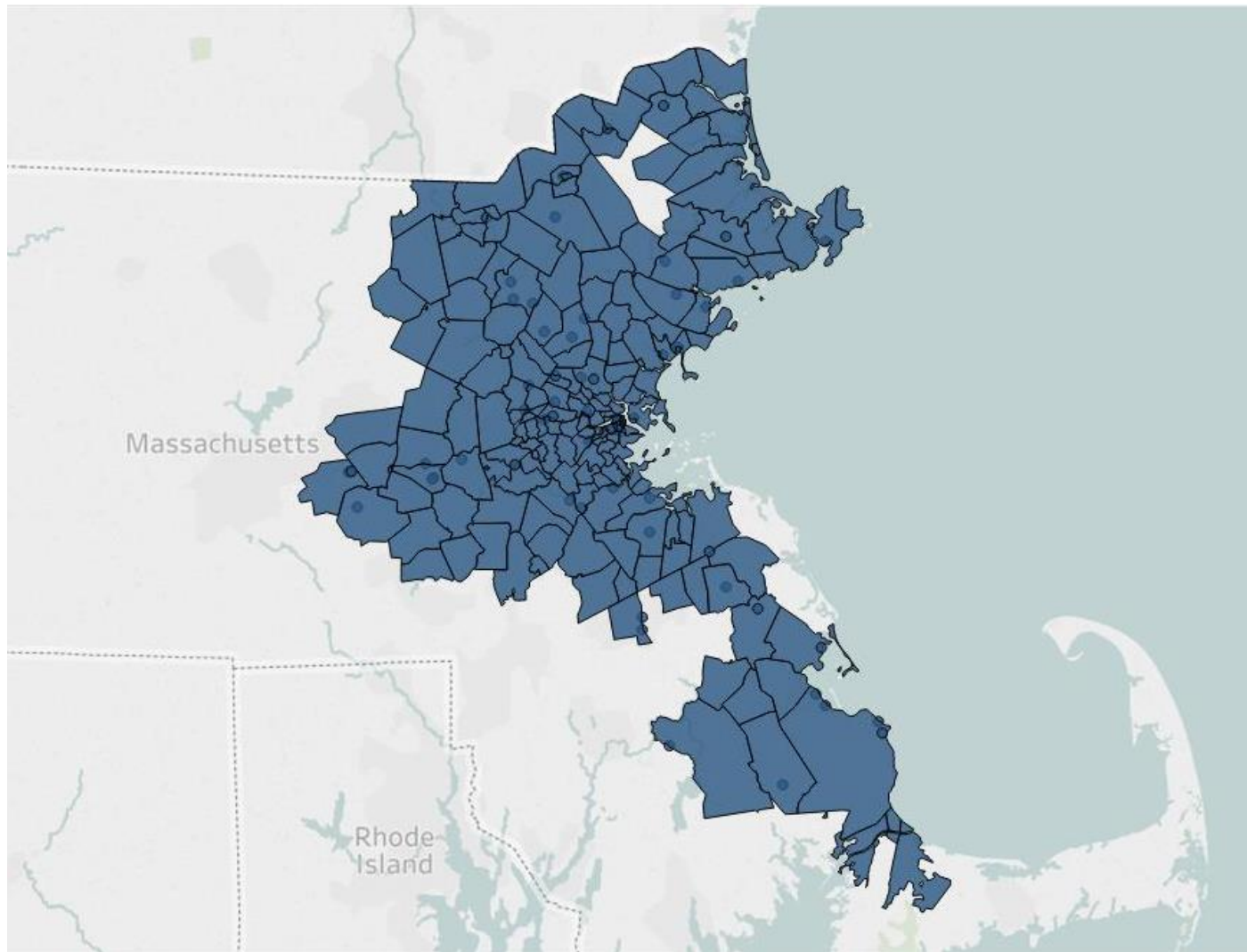
- Mount Auburn Hospital is a 227-bed teaching hospital located in Cambridge that currently contracts independently
- Mount Auburn is part of CareGroup
- Mount Auburn would become a corporate affiliate of NewCo



MACIPA

- MACIPA is an independent practice association comprised of approximately 500 physicians (~100 PCPs and ~400 specialists), including employed doctors at Mount Auburn Hospital, Cambridge Health Alliance, and small private practices
- MACIPA currently establishes physician payer contracts independently
- MACIPA would become a contracting affiliate of NewCo

NewCo Hospital General Acute Care Primary Service Areas



The parties claim that the proposed affiliation would allow NewCo to:

- Attract care away from higher-priced provider systems, lowering total spending
- Work with insurers to create innovative insurance products, including new tiered and limited networks
- Invest in systems to improve performance in APMs and assume increased responsibility for health outcomes
- Spread best practices in quality improvement and care management
- Expand access to needed services, including behavioral health and primary care services

Basis and Goals for Review

The preliminary review raises the potential for significant impacts on health care costs and market functioning:

- The combined entity would have the second largest inpatient, outpatient, and primary care market shares in the Commonwealth (nearly equal to Partners), which would likely impact its leverage to negotiate hospital and physician prices.
- Changes in referral patterns could draw patients away from lower-priced and independent competitors as well as higher-priced competitors.

However, the parties claim that their growth would *improve* market competition and describe plans to attract patients away from higher-priced competitors and to enhance quality and care delivery, which they indicate would lower spending and improve quality.

A CMIR allows the HPC to objectively examine all aspects of the proposed transaction to better understand these potential impacts on costs, market functioning, quality, care delivery, and access.

Factors for Review

The HPC will assess the potential impacts of the transaction based on a range of statutory factors

- A. The impact of the proposed transaction, considered in light of concurrent market developments, on **costs and market functioning** in Massachusetts, including:
 - Prices (e.g., for hospitals, physicians, and other providers, including fee-for-service, capitated, and other prices)
 - Total medical expenses (“TME”)
 - Patient care referral patterns
 - Competing options for care delivery
 - Quality of and access to health care services
- B. **Clinician dynamics**, including any plans related to physician recruitment
- C. The Parties’ **size and market position**, including market shares for relevant services
- D. The Parties’ **role in serving at-risk, underserved, and government payer populations**
- E. The Parties’ **plans for patient care management** and the potential **impact of those plans on quality, costs, and market dynamics**
- F. The impact of the proposed material change in light of **other prior and proposed health care transactions**
- G. Other factors concerning cost and market impact as the HPC may identify

Process for Cost and Market Impact Reviews

Inputs

- Data and documents:
 - Parties' production
 - Publicly available information
 - Data from payers, providers, and other market stakeholders
- Support from expert consultants
- Feedback from Commissioners
- Information gathered is exempted from public records law, but the HPC may engage in a balancing test and disclose information in a CMIR report

Outputs

- Issuance of a preliminary report with factual findings
- Feedback from parties and other market participants
- Final report issued 30 or more days after preliminary report
- Proposed change may be completed 30 or more days after issuance of final report
- Potential referral to Massachusetts Attorney General's Office

CMIR Process Timeline

	30 days	21 Days*	74 Days to 104 Days, plus any time granted to parties for responses to information requests			Up to 30 Days	Up to 30 Days
HPC initial review of completed material change notice							
Any decision to initiate CMIR; notice to parties							
Parties respond to information requests							
Staff conduct CMIR; interchange with parties and stakeholders; regular updates to HPC committees and Board							
Preliminary report issued							
Parties review and may respond							
Review of party responses; Board vote to issue final report, with or without referral**							

*The parties may request extensions to this timeline which may likewise affect the timing of the report

**The parties must wait 30 days following the issuance of the final report to close the transaction

VOTE: Authorizing the Initiation of Cost and Market Impact Review

MOTION: That the Commission hereby authorizes the initiation of the cost and market impact review of the proposed merger of CareGroup, Lahey Health System, and Seacoast Regional Health Systems, the related acquisition of the Beth Israel Deaconess Care Organization by the merged entity, and the contracting affiliation between the merged entity and Mount Auburn Cambridge Independent Practice Association, pursuant to section 13 of chapter 6D of the Massachusetts General Laws and 958 CMR 7.00 et seq.



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- Investment Programs
- 2017 Health Care Cost Trends Report
- Market Performance
- **Performance Improvement Plans**
 - Executive Session (VOTE)
- Schedule of Next Board Meeting (TBD)



AGENDA

- Call to Order
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 - **Executive Session (VOTE)**
- Schedule of Next Board Meeting (TBD)



VOTE: Executive Session

MOTION: That, having first convened in open session at its December 12, 2017 board meeting and pursuant to G.L. c. 30A, § 21(a)(7), the Commission hereby approves going into executive session for the purpose of complying with G.L. c. 6D, § 10 and its associated regulation, 958 CMR 10.00, G.L. c. 6D, § 2A, and G.L. c. 12C, § 18, in discussions about whether to require performance improvement plans by entities confidentially identified to the Commission by the Center for Health Information and Analysis.



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Contact Information

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