

# Consumer Preferences, Hospital Choices, and Demand-side Incentives

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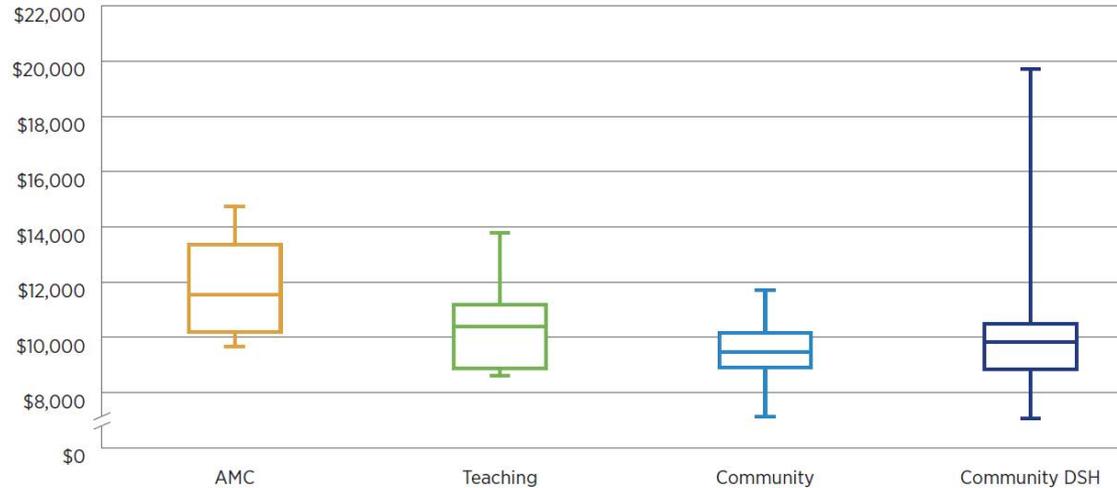
## Background

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- The HPC has consistently found that community hospitals generally provide care of similar quality, at a lower cost, compared to Academic Medical Centers (AMCs) and teaching hospitals
- Yet Massachusetts residents use AMCs and teaching hospitals for a high proportion of routine care
  - In 2014, 42% of Medicare inpatient hospital discharges took place at major teaching hospitals compared to 17% nationwide
- Massachusetts has promoted demand-side and supply-side strategies to steer care to more cost-effective settings
  - Demand-side: e.g., tiered and limited network products
  - Supply-side: e.g., alternative payment models
- Still, the percentage of statewide routine care provided at teaching hospitals continues to rise
- The HPC sought a deeper understanding of consumer preferences and what incentives might lead them to seek care in lower-cost, high-quality settings

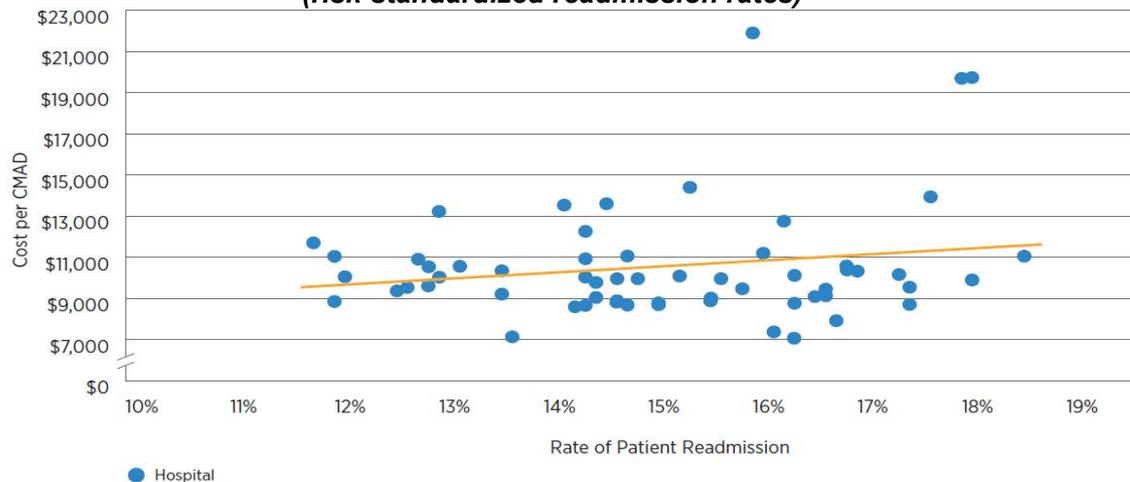
# Most community hospitals provide care at a lower cost per discharge, without significant differences in quality

Hospital costs per case mix adjusted discharge (CMAD), by cohort



Source: HPC analysis of CHIA Hosp. Profiles, 2013

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



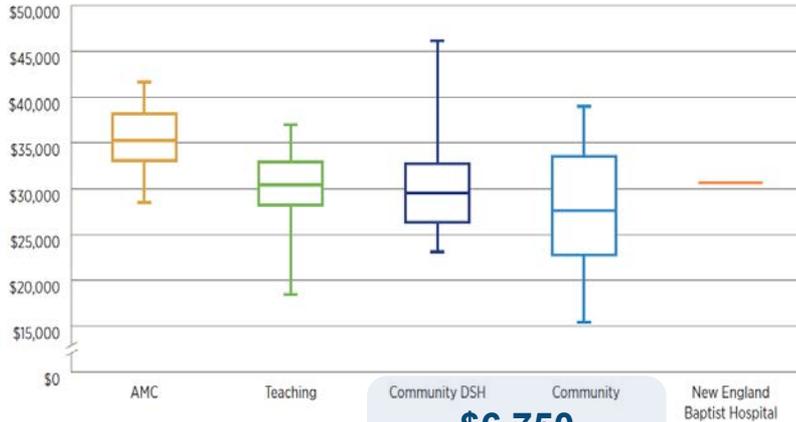
Source: HPC analysis of CHIA Hosp. Profiles, 2013; CHIA Focus on Provider Quality Databook, Jan 2015

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

# Community hospitals spend less for low-acuity orthopedic and maternity care, with no systematic differences in quality

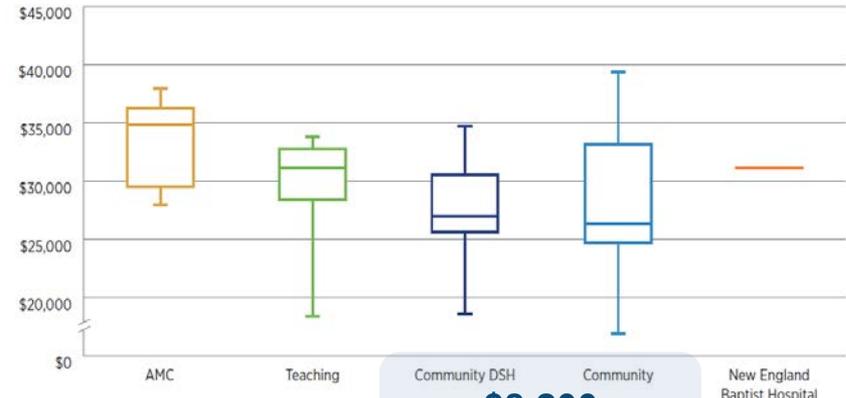
Orthopedics

### Hip Replacement



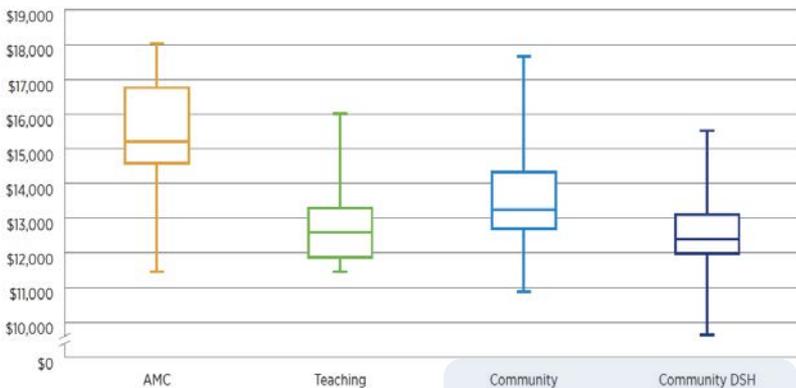
**\$6,750**  
less than AMCs

### Knee Replacement



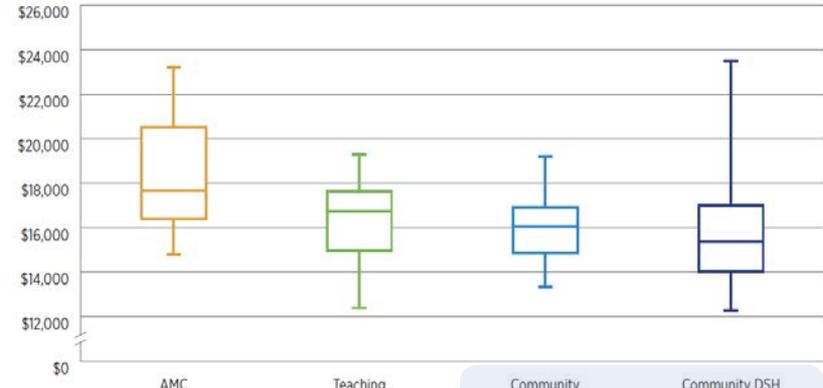
**\$8,200**  
less than AMCs

### Pregnancy - Vaginal Delivery



**\$2,200**  
less than AMCs

### Pregnancy - Caesarian Delivery



**\$2,100**  
less than AMCs

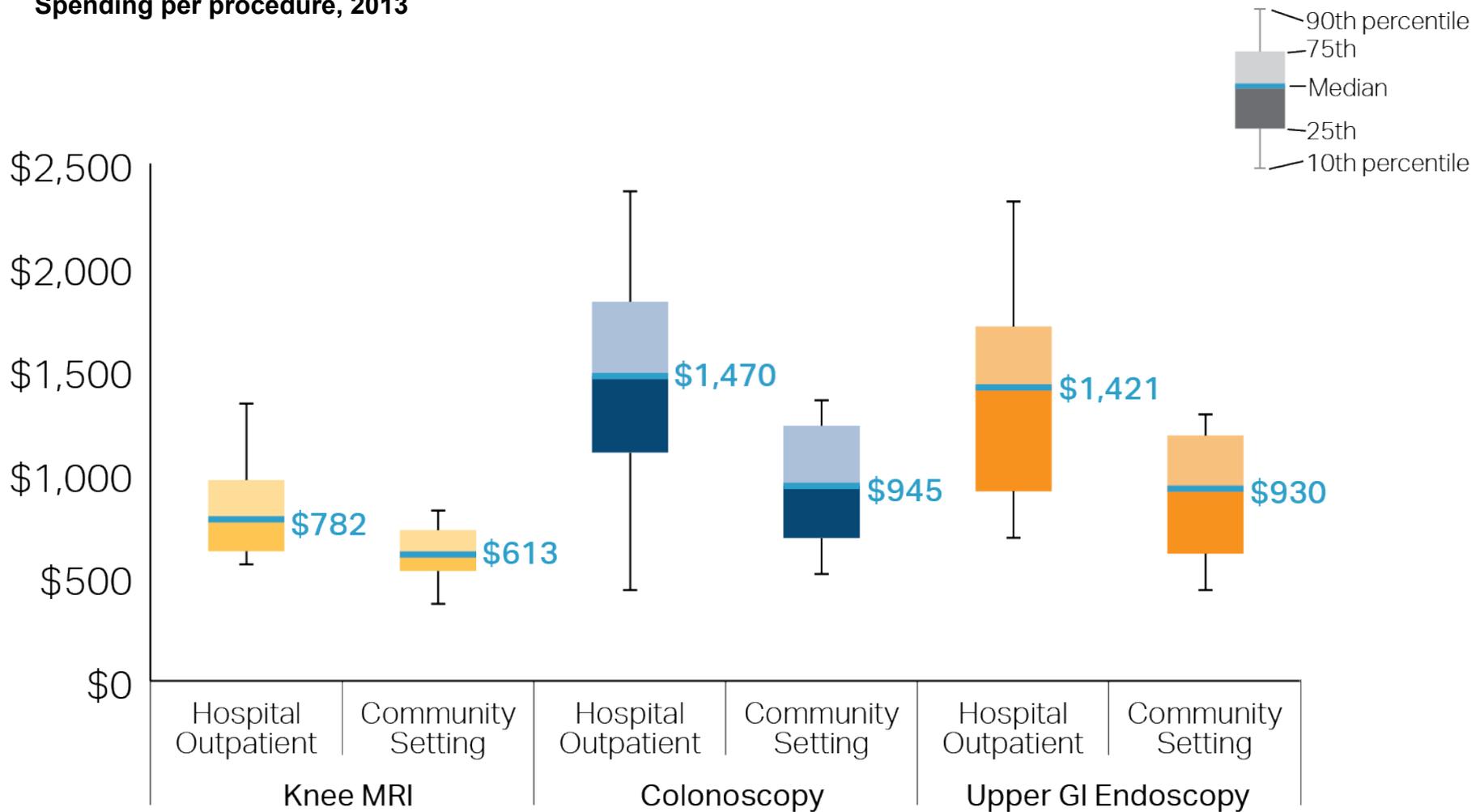
Source: HPC analysis of 2011 and 2012 APCD data for Blue Cross Blue Shield, Tufts Health Plan, and Harvard Pilgrim Health Plan patients



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

# For common standard imaging and diagnostic procedures, hospital outpatient departments are more costly than community settings

Spending per procedure, 2013

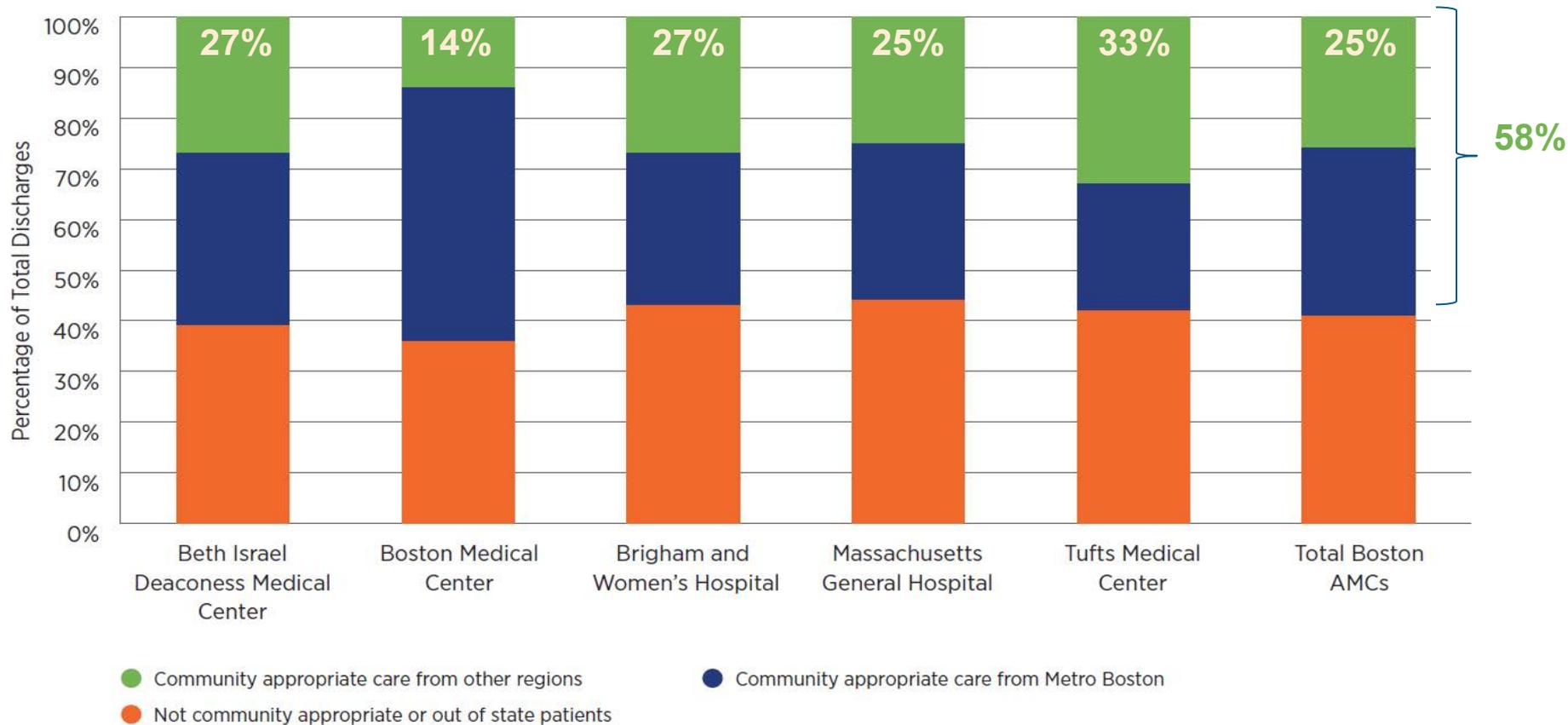


Note: Procedures with a missing site of service or non-community non-hospital outpatient site were excluded. Spending includes insurer and enrollee payments for both the facility and professional portion of the covered medical service, on all claim lines for the same patient on the same date with the same procedure code. Commercial FFS spending does not include capitated payments. See technical appendix

Source: HPC analysis of Massachusetts All Payers Claims Database (payers include Blue Cross Blue Shield, Harvard Pilgrim Health Care, and Tufts Health Plan), 2011-2013

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

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

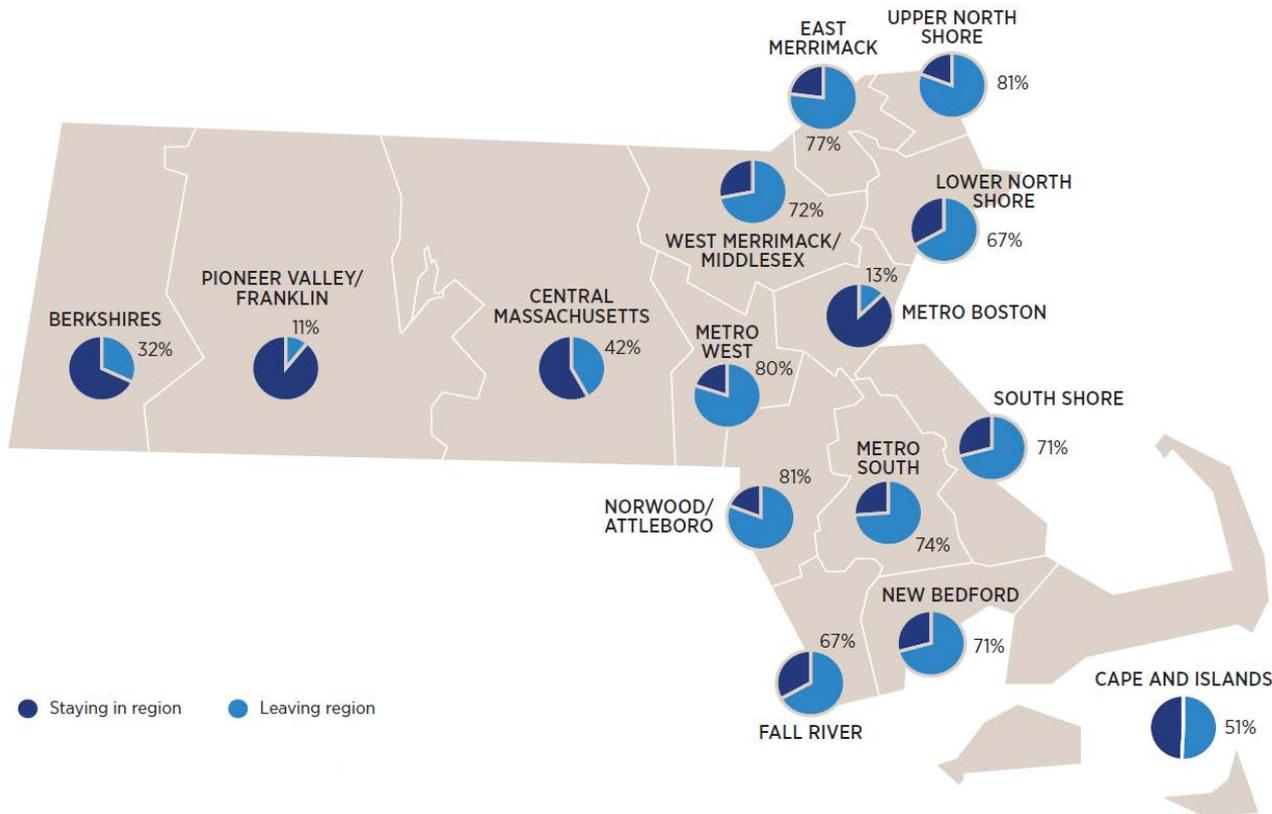


Source: HPC analysis of MHDC 2013 discharge data.

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

# Many Patients Leave Their Home Regions For Deliveries

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



**74% → 50%**

change in proportion of all births in community hospitals from 1992 – 2012<sup>1</sup>

<sup>1</sup>Healthcare Equality and Affordability League, *Healthcare Inequality in Massachusetts: Breaking the Vicious Cycle*

**6** hospitals saw **53%**

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

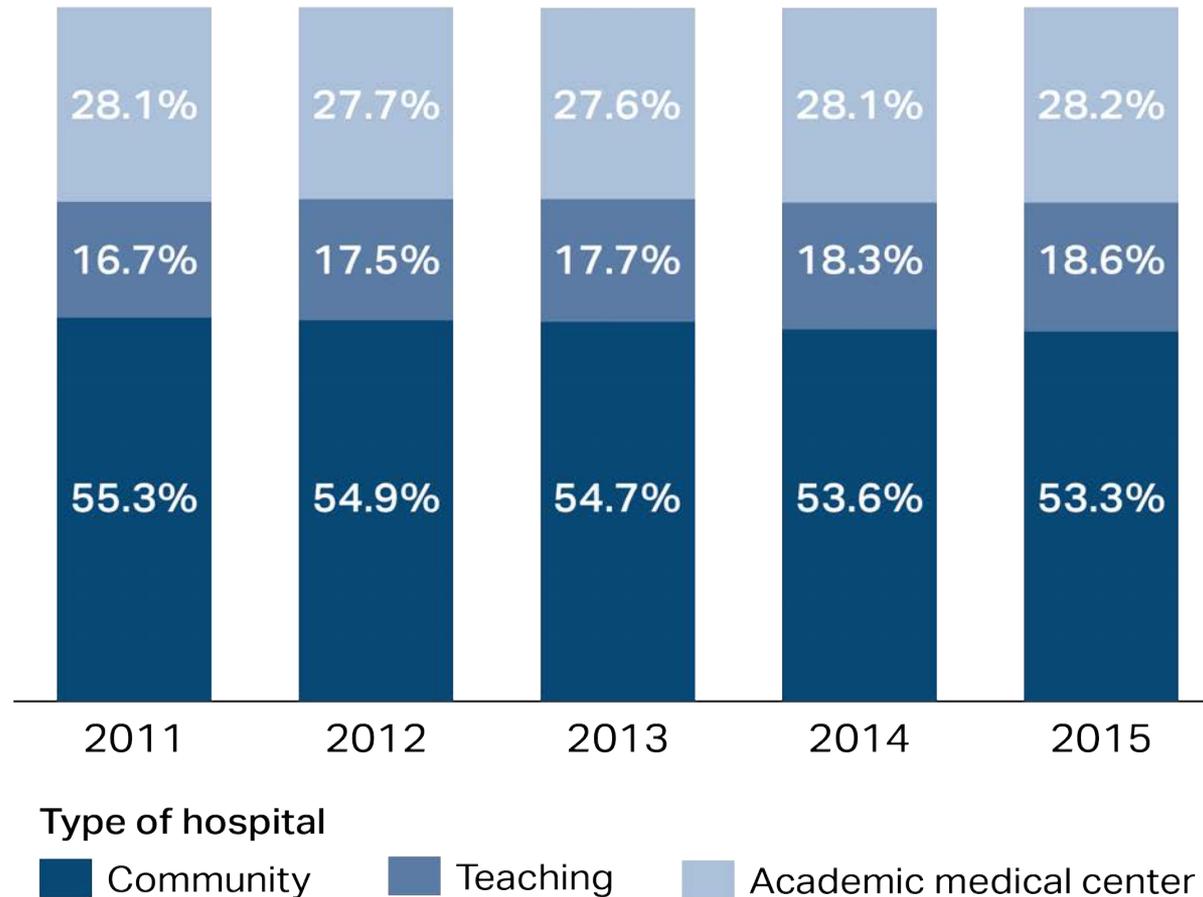
Massachusetts General Hospital and Brigham and Women's Hospital have highest costs statewide for maternity care and saw

**20%**

of all low risk births in the state

# Inpatient Care that Could Safely and Effectively be Provided in Community Hospitals is Increasingly Being Provided by Teaching Hospitals

Share of community appropriate discharges, by hospital type, 2011-2015

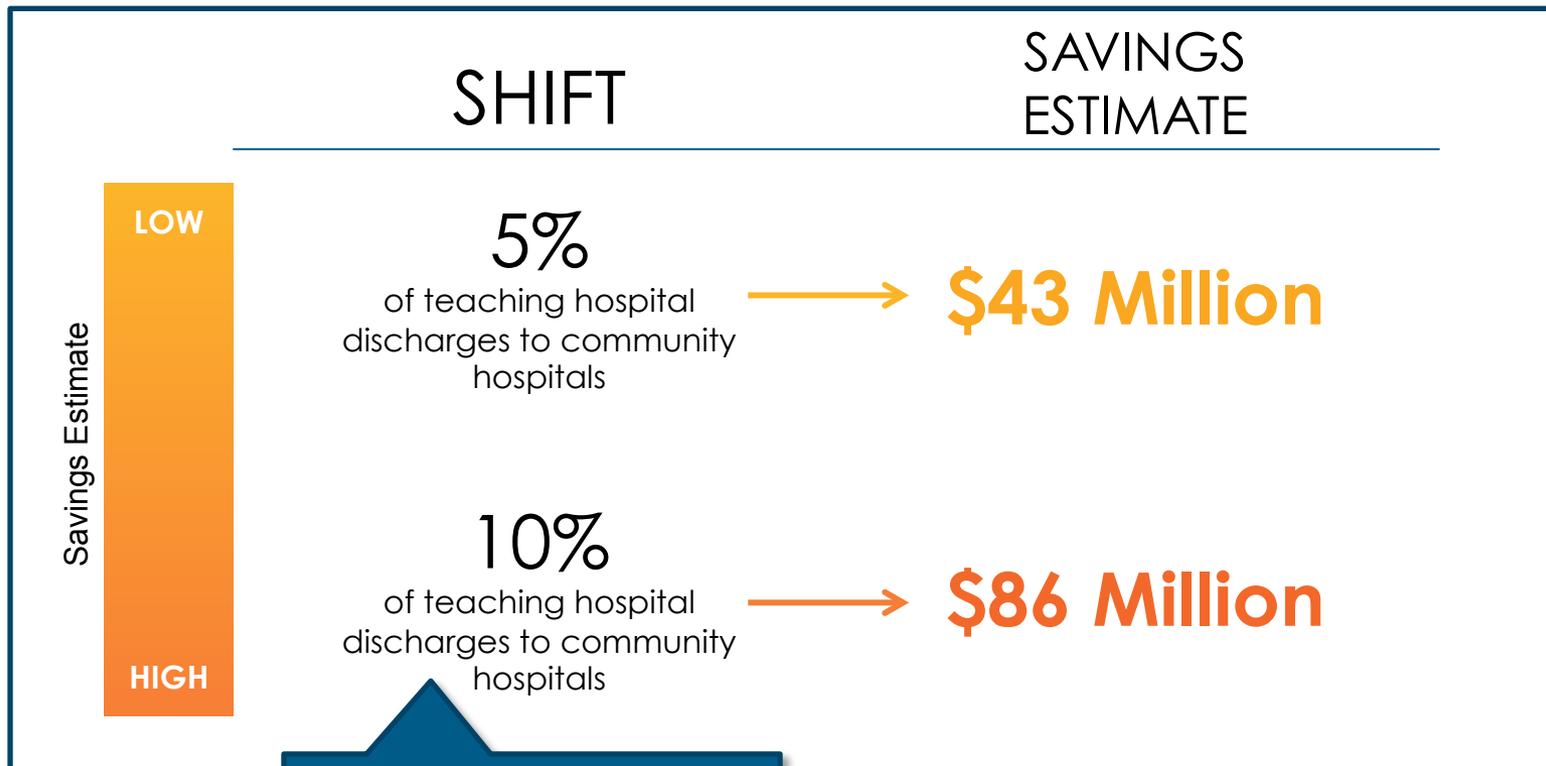


Notes: Discharges that could be appropriately treated in community hospitals were determined based on expert clinician assessment of the acuity of care provided, as reflected by the cases' diagnosis-related groups (DRGs). The Center for Health Information and Analysis (CHIA) defines community hospitals as general acute care hospitals that do not support large teaching and research programs. Teaching hospitals are defined as hospitals that report at least 25 full-time equivalent medical school residents per one hundred inpatient beds in accordance with Medicare Payment Advisory Commission (MedPAC) guidelines. Academic medical centers are a subset of teaching hospitals characterized by (1) extensive research and teaching programs, (2) extensive resources for tertiary and quaternary care, (3) principal teaching hospitals for their respective medical schools, and (4) full service hospitals with case mix intensity greater than 5 percent above the statewide average. Source: HPC analysis of Center for Health Information and Analysis Hospital Inpatient Discharge Database, 2011-2015

# Shifting Some of that Care to Community Hospitals would Result in Significant Savings.

## Cost Trends Report, Recommendation 6:

The Commonwealth, payers, and providers should work to redirect community-appropriate care to high value, community settings.



Currently 53% of community appropriate care is provided at community hospitals. In this scenario, 58% of care would be provided in such a setting.

# HPC Study on Consumer Preferences: Project Scope and Design

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*HPC and Tufts University were awarded a grant in 2015 from the Robert Wood Johnson Foundation, with support from AcademyHealth, to support research on consumer preferences of setting of care, focusing on AMCs and community hospitals.*

## Survey (Discrete Choice Experiment)

Test consumer-stated preferences for AMCs vs. community settings in scenarios with varied cost sharing/cash rewards, physician referral, and quality score/convenience for 4 “shoppable” conditions/procedures.

## Analysis of Claims Data

Analyze all-payer claims database (APCD) to assess revealed choice of hospital for maternity care.

## Focus Groups

Conduct focus groups to help explain survey findings and to get input on suggested levers and communication strategy to influence consumer choices.

## Survey Details (Discrete Choice Experiment)

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### Participants

1,000 Massachusetts adults age 18-64, income > \$25k

### Conditions/ Procedures

Four conditions/procedures of varying 'shoppability':

- MRI
- Maternity: Uncomplicated delivery
- Knee replacement
- Colon cancer surgery and chemotherapy

### Tested

Effects of:

- Out-of-pocket cost
- PCP referral
- Quality rating
- Convenience (MRI only)

Survey included questions about trust, online shopping, other interactions with health care system in addition to basic demographics

## Example of a Discrete Choice Scenario

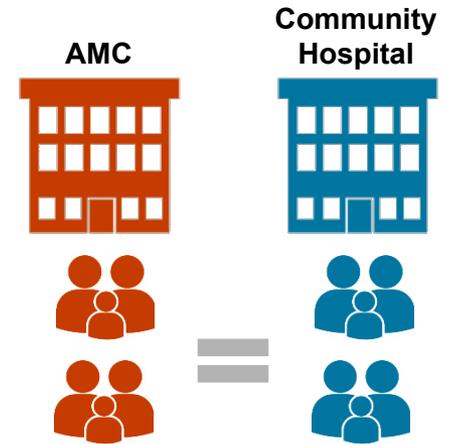
Suppose you need to have knee replacement surgery. This is a procedure to relieve joint pain. You can have the surgery in Massachusetts at a community hospital near your home or at an Academic Medical Center. In Massachusetts, the Academic Medical Centers are...*[all are named on screen]*. The table below shows some factors to consider in making your choice between the two options.

	Community Hospital near your home	Boston Academic Medical Center
Hospital quality rating for patient experience and treatment results for knee replacements:		
Your doctor gave you a referral to a surgeon here:	Yes	Yes
Out of pocket cost to you:	\$0	\$1,500
Considering the two options presented in the table above, which option would you choose? (SELECT ONE)	<input type="checkbox"/> Community Hospital	<input type="checkbox"/> Academic Medical Center

# Understanding the Results from the Consumer Survey

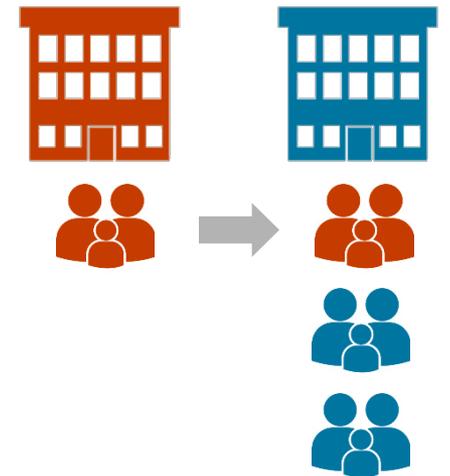
## Starting Point

	Academic Medical Center	Community Hospital
Out of pocket cost	Same	Same
PCP referral	Same	Same
Quality rating	Same	Same
Convenience (MRI only)	Same	Same



## Experiment

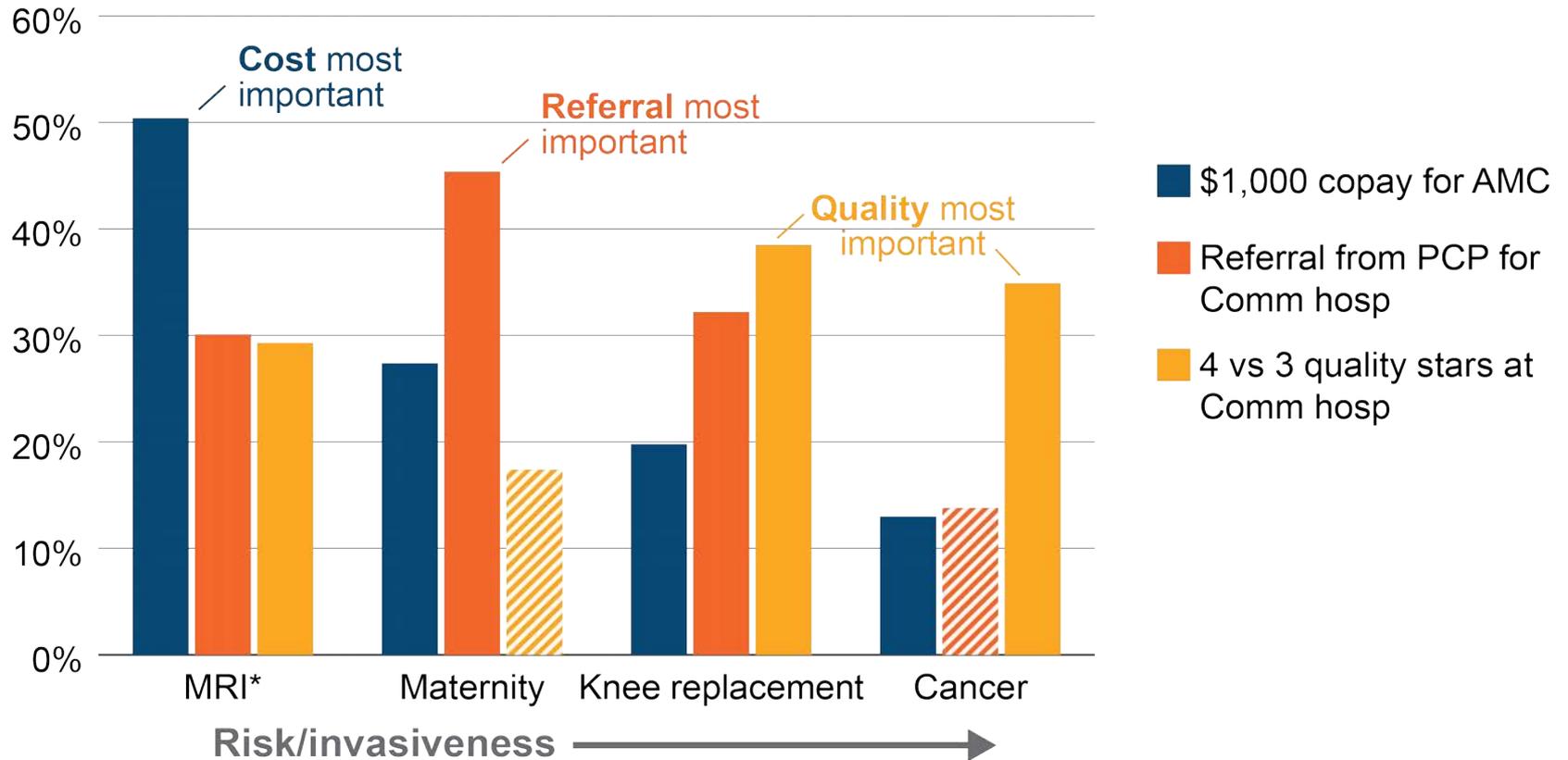
	Academic Medical Center	Community Hospital
Out of pocket cost	\$1500	\$0
PCP referral	Same	Same
Quality rating	Same	Same
Convenience (MRI only)	Same	Same



*For each factor, what is the expected % shift in patient choice of community hospitals?*

# Key Survey Result: Patients are Sensitive to Cost, Quality, and Physician Referrals

Of those initially preferring AMC, % who now prefer Community Hospital under each condition

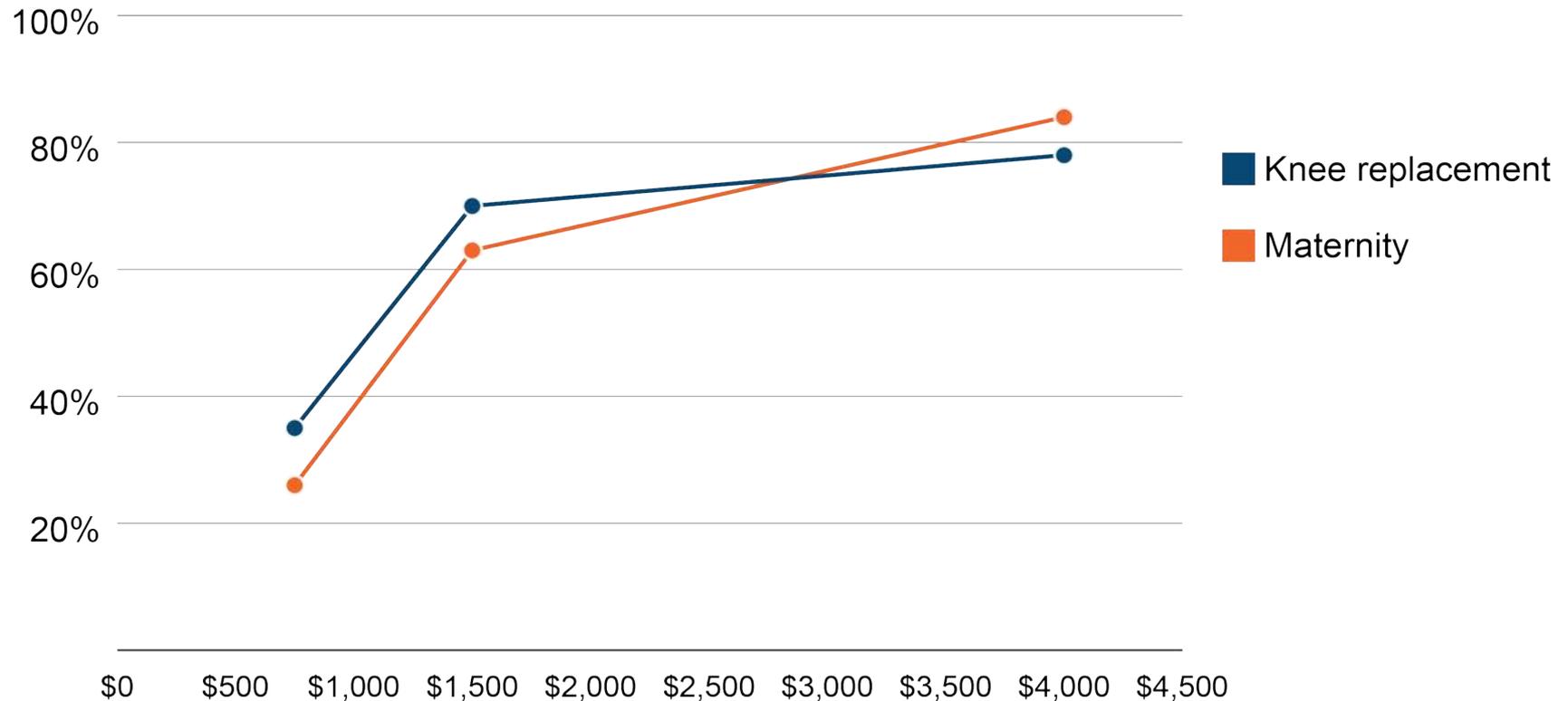


Percentages are relative to a default scenario in which patients face \$0 out of pocket for all hospitals, no PCP referral for either setting, 3 quality stars for either hospital, and where initial choices are 50:50 AMC vs. Community Hospital.

\*For MRI, quality is defined as 24/7 convenience, the copay is \$100, and the choice was presented as between a hospital-based MRI center and a freestanding center.

# For Some Conditions, An Even Greater Shift Away from AMCs when Co-Pays Increase from \$1,000 to \$2,000

% who change preference from AMC to Community Hospital as out of pocket amount increases



## The consumer survey results are generally consistent with empirical (APCD) findings.

**2,812 LOW-RISK BIRTHS**  
analyzed for commercially-insured  
women in Massachusetts in 2011-2012



**18% DELIVERED**  
at Brigham and Women's Hospital  
or Mass General

### LESS LIKELY to go to BWH or MGH

Patient Characteristics	Reduction in % of women delivering at MGH or BWH
Has a deductible	↓ 4 to 7 percentage pts*
Each additional 10 miles from Boston	↓ 6 percentage pts*
In a coordinated care plan (e.g. HMO)	↓ 5 percentage pts*

## Focus Group Details

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### Participants

8 focus groups held with 8-9 participants in each

### Participant Criteria

- ✓ Non-Boston residents  
Focus groups in Woburn, Framingham, and Braintree
- ✓ Commercially insured
- ✓ Mix of income (>\$75k or < \$75k)
- ✓ Mix of gender, education

### Factors That Influence Consumer Choice

- 1 Quality
- 2 Cost
- 3 Referrals

## Factor 1: Quality

### FOCUS GROUP TOPICS INCLUDED



Acceptability of community setting vs. AMCs for a range of condition

Views on potential sources of quality information



Assumptions about what kind of information included in 'star' ratings



### FINDINGS

- Generally do not believe community hospitals can deliver good quality for complex or invasive procedures/illnesses (and their definition of invasive/complex is very broad)

- Generally do not trust insurance companies or employers for the provision of quality information used to inform their network/ tiering decisions

- Focus group results confirmed that quality was more important for conditions and procedures that were non-routine (MRIs are viewed as more routine)

"I'd be a lot less likely to trust quality data if it came from my insurance company."

## Factor 1: Quality and perceived risk

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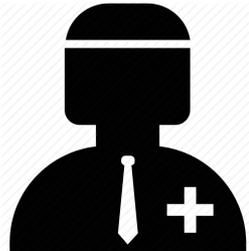
*“...stuff like a broken bone or something, or tonsils, I guess, would be something your local hospital – maybe even a cyst or something...But I think something like a cancer or a heart surgery, you automatically think, “We should go into Boston or a bigger hospital.”*

*“If they have something big, god forbid, thankfully we’re healthy, but if something big comes along, I want them to be able to have their doctor that’s affiliated with a Boston Hospital.”*

# Survey question: “How much do you trust information about hospital quality from...”

FACTORS: 1 2 3

88%



Your Doctor

73%



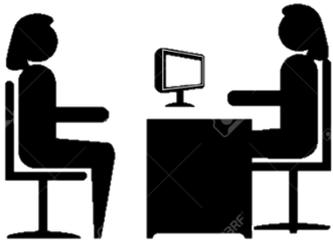
Friends/  
Relatives

54%



Your Health  
Plan

40%



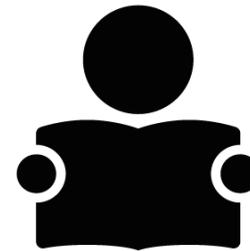
Your Employer

39%



Government  
Website

32%



Newspapers/  
Magazines

## Factor 2: Cost

### FOCUS GROUP TOPICS INCLUDED

Presentation of narrow network and tiered plans

Bonuses and cost-sharing



"You have to make that a drastic cost differential if you want people to bite on that [narrow network plan]."

### FINDINGS

- Participants thought cost was important but the differential between plans or providers needs to be significant
- Participants confirmed survey results: As condition/procedure got more serious, dollars mattered less

"Narrow networks are a good choice for the young and healthy."

## Factor 2: Cost

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“Health care plans that limit provider choice are inherently unfair because high cost = high quality and people with less means may get worse care.”

“Whether you call it efficient, moderate, or high or you call it tier 1, 2, or 3, in this world of less and more—that’s what people look at. It makes it difficult to decide...do I want basic care or do I want the best care? You shouldn’t have to be deciding those types of things.”

## Factor 3: Referrals

### FOCUS GROUP TOPICS INCLUDED

Usual process followed



### FINDINGS

- People trust their PCP and, for routine conditions, simply follow their referral
- The more serious the illness the more likely people are to shop around; people described using reputation and to some extent quality information, but not price
- People were not enthusiastic about physicians having financial incentives to control total patient spending
- Focus group findings confirmed survey results suggesting referral strongest for MRI and maternity and less strong for riskier procedures/conditions

"I think it is a huge conflict of interest for the PCP [to steer patients]. The doctor is going to direct you, via referrals...to a cheaper place in order to get more patients."

## Factor 3: Referrals

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“I like having the choice. It’s like I’ll do the research myself, depending on what it is. If it’s something—my eyes, for example...I’m going to make sure that it’s a reputable place and try to get some research on that doctor. If it’s a physical...then I’m not too worried about that.”

## Policy Implications and Lessons

### PEOPLE WILL RESPOND TO COST DIFFERENTIALS, QUALITY SIGNALS, AND REFERRALS

But they perceive large quality differences and prefer AMCs for perceived invasive or risky procedures, and are skeptical of attempts to steer them to low-cost providers.

### LESSONS FOR EMPLOYERS AND INSURERS

- Clearly **present tradeoffs** to employees and relationship between plans, networks, choice and premium costs
- Present **side-by-side choices** with large, clearly communicated financial differences
  - At point of plan choice (e.g. premium savings for limited/tiered plans)
  - At point of care choice (e.g. out-of-pocket differentials/cash-back incentives)
- Focus more on **financial incentives and convenience** for routine care, and quality measures for specialized and invasive care
- Seek to shift the **boundary of what is considered 'routine' care** with objective and experience-based quality information
- **Align physician referral incentives and provide information** to support high-value care