



COMMONWEALTH OF MASSACHUSETTS
HEALTH POLICY COMMISSION

REVIEW OF PARTNERS HEALTHCARE SYSTEM'S
PROPOSED ACQUISITIONS OF
SOUTH SHORE HOSPITAL (HPC-CMIR-2013-1)
AND HARBOR MEDICAL ASSOCIATES
(HPC-CMIR-2013-2)

PURSUANT TO M.G.L. c. 6D, § 13

FINAL REPORT
FEBRUARY 19, 2014

INTRODUCTION

The Health Policy Commission (HPC) was established in 2012 by the Commonwealth's landmark health care cost containment law, Chapter 224 of the Acts of 2012, "An Act Improving the Quality of Health Care and Reducing Costs through Increased Transparency, Efficiency, and Innovation" (Chapter 224). The HPC is an independent state agency governed by an 11-member board with diverse experience in health care. It is charged with developing health policy to reduce overall cost growth while improving the quality of care, and monitoring the health care delivery and payment systems in Massachusetts.

Recognizing that excessive health care costs are crowding out other economic needs for government, households, and businesses, Chapter 224 set a statewide target for a sustainable rate of growth of total health care expenditures. This benchmark is set at 3.6% for 2013. Achieving this ambitious benchmark will require the continued development of a competitive, value-based health care market and a more efficient, accountable health care delivery system.

Chapter 224 tasks the HPC with many important responsibilities to support the Commonwealth's efforts to meet the health care cost growth benchmark, including to "foster innovative health care delivery and payment models" as well as to "monitor and review the impact of changes within the health care marketplace."¹ These dual values of **innovation** and **accountability** are at the core of that landmark legislation and the HPC's mission, and both are necessary to advance the goal of a more affordable and effective health care system.

The HPC leads a spectrum of initiatives to advance the transformative potential of care delivery reforms. A central focus of the HPC's \$120 million Community Hospital Acceleration, Revitalization, and Transformation Investment Program, as well as the HPC's certification programs for patient centered medical homes (PCMHs) and accountable care organizations (ACOs), is the evidence-based implementation of innovative care delivery models and coordinated, accountable care.² Similarly, the HPC's 2013 Cost Trends Report found there is significant opportunity to enhance the value of health care in Massachusetts by "promoting an efficient, high-quality health care delivery system in which providers efficiently deliver coordinated, patient-centered, high-quality health care."³

Chapter 224 further dedicates the HPC to advancing this transformative potential by requiring that providers proposing to undertake significant changes provide measurable indicators of how those changes are likely to result in improved performance. Provider changes, including consolidations and alignments, have been shown to impact health care market functioning, and thus the performance of our health care system in delivering high quality, cost effective care. Due to confidential payer-provider contracts and limited information about provider organizations, the mechanisms by which market changes impact the cost, quality, and

¹ MASS. GEN. LAWS ch. 6D, § 5 (2012).

² See MASS. GEN. LAWS ch. 6D, §§ 14 - 15 and MASS. GEN. LAWS ch. 29, § 2GGGG.

³ MASS. HEALTH POLICY COMM'N, 2013 COST TRENDS REPORT, PURSUANT TO M.G.L. C. 6D, § 8(G), ANNUAL REPORT, at 51 (Jan. 2014), available at <http://www.mass.gov/anf/docs/hpc/2013-cost-trends-report-full-report.pdf>.

availability of health care services have not been apparent to government, consumers, and businesses who ultimately bear the costs of the health care system.

Chapter 224 directs the HPC to monitor this aspect of the Massachusetts health care system. With the newly required filing of notices of material change by provider organizations,⁴ the HPC now tracks the frequency, type, and nature of changes in our health care market.⁵ The HPC may also engage in a more comprehensive review of particular transactions anticipated to have a significant impact on health care costs or market functioning. The result of such “cost and market impact reviews” (CMIRs) is a public report detailing the HPC’s findings. In order to allow for public assessment of the findings, the transactions may not be finalized until the HPC issues its final report. Where appropriate, such reports may identify areas for further review or monitoring, or be referred to other state agencies in support of their work on behalf of health care consumers.⁶

The HPC begins its work during a period of dynamic change among provider organizations, including accelerating consolidation and new contractual and clinical alignments. In particular, hospital acquisition of physicians and the transition from independent or affiliated practices to employment models are significant trends both in Massachusetts and nationally, as is increased presence of alternative payment models focused on promoting accountable care. Through the CMIR process we seek to improve our understanding of these trends and other market developments affecting short and long term health care spending, quality, and consumer access.

In addition, our reviews will enable us to identify particular factors for market participants to consider in proposing and responding to potential future organizational changes. Through this process, we seek to encourage providers and payers alike to evaluate and take steps to minimize negative impacts and enhance positive outcomes of any given material change.

This document reports on the HPC’s first CMIR, examining the proposed acquisitions of South Shore Hospital (SSH) and Harbor Medical Associates (Harbor) by Partners HealthCare System (Partners). Based on criteria articulated in Chapter 224 and informed by the facts of the transactions, we analyzed the likely impact of these acquisitions, relying on the best available data and information. Our work included review of the parties’ stated goals for the transactions

⁴MASS. GEN. LAWS ch. 6D, § 1 (2012) defines a health care provider organization as “any corporation, partnership, business trust, association or organized group of persons, which is in the business of health care delivery or management, whether incorporated or not that represents 1 or more health care providers in contracting with carriers for the payments of health care services[.]” In this report, we use the terms provider organization and provider system interchangeably.

⁵ See MASS. GEN. LAWS ch. 6D, § 13 (2012) (requiring health care providers to notify the HPC before making material changes to their operations or governance). See also MASS HEALTH POLICY COMM’N, BULLETIN 2013-01: INTERIM GUIDANCE FOR PROVIDERS AND PROVIDER ORGANIZATIONS RELATIVE TO NOTICE OF MATERIAL CHANGE (Mar. 12, 2013), available at <http://www.mass.gov/anf/docs/hpc/material-change-notices/20130312-interim-guidance-on-material-change-and-notice-form.pdf>.

⁶ For example, MASS. GEN. LAWS ch. 6D, §13(f) (2012) requires referral of the CMIR report to the state Attorney General’s Office if the HPC finds that a provider under review (1) has a dominant market share in its service area, (2) charges prices that are materially higher than the median prices in its service area for the same services, and (3) has a health status adjusted total medical expense that is materially higher than the median in its service area.

and the information they provided in support of how and when these alignments would result in efficiencies and care delivery improvements.

To the HPC's knowledge, this is the first time any state has authorized a policy-oriented, prospective review of the impact of health care transactions that is distinct from an administrative determination of need or law enforcement review of antitrust or consumer protection concerns. This public reporting process, a unique opportunity to enhance the transparency of significant changes to our health care system, is of great interest to all stakeholders – payers, providers, purchasers, and government alike – who have demonstrated a shared commitment to sustaining access to high-quality, affordable care. Our work is intended to complement the many important efforts of other state agencies, such as the Center for Health Information and Analysis (CHIA), the Department of Public Health (DPH), the Division of Insurance (DOI), and the Attorney General's Office (AGO) in monitoring and overseeing our health care market. Consistent with the goals of Chapter 224, comprehensive and evidence-based reporting of provider organization performance brings important information to the public dialogue about how to develop a more affordable, effective, and accountable health care system.

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ACRONYMS AND ABBREVIATIONS

ACO	Accountable Care Organization
AGO	Massachusetts Attorney General's Office
AHRQ	Agency for Healthcare Research and Quality
AMC	Academic Medical Center
APCD	All-Payer Claims Database
AQC	Blue Cross Blue Shield of Massachusetts' Alternative Quality Contract
Chapter 224	Chapter 224 of the Acts of 2012
CHIA	Massachusetts Center for Health Information and Analysis
CHIP	Children's Health Insurance Program
CMHCB	CMS Medicare Care Management for High-Cost Beneficiaries
CMIR	Cost and Market Impact Review
CMS	Centers for Medicare and Medicaid Services
CY	Calendar Year
DOI	Massachusetts Division of Insurance
DOJ	United States Department of Justice
DPH	Massachusetts Department of Public Health
DRG	Diagnosis-Related Group
EMR	Electronic Medical Record
FTC	Federal Trade Commission
FY	Fiscal Year
GAC	General Acute Care
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HEDIS	Healthcare Effectiveness Data and Information Set
HHI	Herfindahl-Hirschman Index
HIT	Health Information Technology
HMO	Health Maintenance Organization
HPC	Health Policy Commission
HSN	Health Safety Net
iCMP	Integrated Care Management Program
IP	Inpatient
IT	Information Technology
MassDAC	Massachusetts Data Analysis Center
MedPAC	Medicare Payment Advisory Commission
MHDC	Massachusetts Health Data Consortium
MHQP	Massachusetts Health Quality Partners
MMCO	MassHealth Managed Care Organization
NPSR	Net Patient Service Revenue
OP	Outpatient
PCMH	Patient Centered Medical Home
PCP	Primary Care Physician

PHH	Partners HealthCare at Home
PHM	Population Health Management
PMPM	Per Member Per Month
POS	Point of Service
PPO	Preferred Provider Organization
PSA	Primary Service Area
RPO	Registered Provider Organization
RSO	Regional Service Organization
SCIP	Surgical Care Improvement Project Measures
TME	Total Medical Expenses
WTP	Willingness-to-Pay

NAMING CONVENTIONS

Parties and Related Organizations

BWH	Brigham and Women's Hospital
BWPO	Brigham and Women's Physician Organization
Cooley Dickinson	Cooley Dickinson Hospital
Faulkner	Brigham and Women's Faulkner Hospital
Harbor	Harbor Medical Associates
Martha's Vineyard	Martha's Vineyard Hospital
McLean	McLean Hospital
MGH	Massachusetts General Hospital
MGPO	Massachusetts General Physicians Organization
Nantucket Cottage	Nantucket Cottage Hospital
Newton-Wellesley	Newton-Wellesley Hospital
North Shore MC	North Shore Medical Center
Partners	Partners HealthCare System
PCHI	Partners Community Healthcare Inc.
POSS	Physicians Organization of the South Shore
SSH	South Shore Hospital
SSHEC	South Shore Health and Educational Corporation
SSPHO	South Shore Physician Hospital Organization

Payers

BCBS	Blue Cross Blue Shield of Massachusetts
HPHC	Harvard Pilgrim Health Care
THP	Tufts Health Plan

Other Providers

Atrius	Atrius Health
Baystate MC	Baystate Medical Center
BIDCO	Beth Israel Deaconess Care Organization
BIDMC	Beth Israel Deaconess Medical Center
BID-Milton	Beth Israel Deaconess-Milton
BID-Needham	Beth Israel Deaconess-Needham
BIDPO	Beth Israel Deaconess Physician Organization
BMC	Boston Medical Center
Carney	Steward Carney Hospital
CHA	Cambridge Health Alliance
Children's Hospital	Boston Children's Hospital
Dana Farber	Dana Farber Cancer Institute
Good Samaritan MC	Steward Good Samaritan Medical Center
Holyoke	Holyoke Medical Center
MACIPA	Mount Auburn Cambridge Independent Practice Association
Mercy MC	Mercy Medical Center

Metrowest MC	Metrowest Medical Center
Mount Auburn	Mount Auburn Hospital
NEPHO	Northeast Physician Hospital Organization
NEQCA	New England Quality Care Alliance
Noble	Noble Hospital
Norwood	Steward Norwood Hospital
Quincy MC	Steward Quincy Medical Center
Signature	Signature Healthcare
Signature Brockton	Signature Healthcare Brockton Hospital
St. Elizabeth's	Steward St. Elizabeth's Medical Center
Steward	Steward Health Care System
Tufts MC	Tufts Medical Center

EXECUTIVE SUMMARY

On December 21, 2012, Partners and SSH executed an Affiliation Agreement for Partners to acquire SSH, making it a fully integrated, community-based member of the Partners system. According to the parties, they seek to develop an integrated physician, acute care, and post-acute care system that will support population health management (PHM) and allow the parties to assume greater risk for the quality and cost of care in southeastern Massachusetts. This vision is premised on new models for aligning physicians with SSH and the Partners hospitals, which the parties have stated is “a key component to successful implementation” of PHM and the SSH acquisition.

Subsequently, on July 19, 2013, the Partners subsidiary Brigham and Women’s Physician Organization (BWPO) executed a Memorandum of Understanding to acquire Harbor Medical Associates (Harbor), the largest local practice group within South Shore Physician Hospital Organization (SSPHO). SSPHO is the managed care contracting organization for SSH and approximately 400 physicians in the South Shore region. Partners intends to integrate the Harbor physicians into a community-based, multispecialty unit of BWPO located on the South Shore, with the stated goals of improving PHM and moderating health care cost growth in southeastern Massachusetts.

Following 30-day initial reviews, the HPC determined that the transactions were likely to have a significant impact on costs and market functioning in southeastern Massachusetts and warranted further review.⁷ On December 18, 2013, the HPC issued a Preliminary Report presenting our analysis and the key findings from our review. Following a 30-day opportunity for the parties to respond to these findings, the HPC now issues this Final Report. The parties’ responses to our findings, and the HPC’s analysis of those responses, are attached to this Final Report as Exhibits A and B, respectively.⁸

This report is organized into five parts. Part I outlines our analytic approach to conducting CMIRs. Part II describes the parties to this CMIR and their goals and plans for undertaking the transactions. Parts III and IV then present our findings. Part III reports on the parties’ performance leading up to the transactions, and Part IV reports on the projected impact of the transactions on that baseline. We conclude in Part V. Below is a summary of the findings presented in Parts III and IV:

1. **Cost Profile:** Partners and SSH are financially strong and are the two leading competitors for inpatient services in SSH’s service area. Partners and SSPHO have high

⁷ See MASS. HEALTH POLICY COMM’N, MINUTES OF THE HEALTH POLICY COMM’N (June 19, 2013) (approval to continue the Cost and Market Impact Review of the Partners/South Shore merger); MASS. HEALTH POLICY COMM’N, MINUTES OF THE HEALTH POLICY COMM’N (Nov. 20, 2013) (approval to continue the Cost and Market Impact Review of the Partners/Harbor Medical Associates merger).

⁸ See generally Exh. A-1: Partners HealthCare, Brigham and Women’s Hospital, and South Shore Hospital’s Response to Preliminary Report (Jan. 17, 2014) [hereinafter Partners-SSH Response], Exh. A-2: Response of Harbor Medical Associates, P.C. to Preliminary Report (Jan. 14, 2014) [hereinafter Harbor Response], Exh. B-1: HPC Analysis of Partners HealthCare, Brigham and Women’s Hospital, and South Shore Hospital’s Response to Preliminary Report, and Exh. B-2: HPC Analysis of Harbor Medical Associates’ Response to Preliminary Report.

total medical expenses (TME), due in part to high hospital prices. In each region where the parties operate, their hospitals have higher prices than nearly all other area hospitals, and Partners' physicians have some of the highest prices in the state.

2. **Quality and Care Delivery Profile:** Partners, SSH, and SSPHO (including Harbor) are strong quality performers, consistently exceeding Massachusetts and national averages across a spectrum of measures; there is very little material variation in quality performance between them.
3. **Access Profile:** Partners' hospitals and SSH generally care for higher proportions of commercially insured patients and lower proportions of Medicaid patients than other area hospitals, and SSH generally provides fewer inpatient behavioral health services in its service area than other area hospitals.
4. **Cost Impact:** Over time, for the three major commercial payers studied, these transactions are anticipated to increase total medical spending by \$23 million to \$26 million each year as a result of increases in Harbor/SSPHO physician prices and increased utilization of Partners and SSH facilities. The resulting system is anticipated to have increased ability to leverage higher prices and other favorable contract terms in negotiations with commercial payers. The cost impact of this increased leverage is not included in the above projection, and will be substantial if payers are unable to prevent the exercise of the parties' leverage in future contract negotiations. Overall, based on the evidence the parties provided, increases in spending are anticipated to far exceed potential cost savings from expanding Partners' existing PHM initiatives into the South Shore region.
5. **Care Delivery Impact:** Partners' work on PHM demonstrates potential for improving care delivery and health outcomes. However, the parties have not provided adequate evidence showing how these transactions are likely to drive overall improvements to South Shore providers' performance. Furthermore, given SSH and SSPHO's historically strong quality performance, and their own experience managing populations through risk-based payments, it is unclear how corporate integration of the parties is instrumental to raising quality performance in the South Shore region.
6. **Access Impact:** Partners and SSH have not proposed specific changes in services that would cause the HPC to anticipate changes to their existing hospital service mix and payer mix trends. Combining providers with similar profiles of high commercial payer mix may reinforce the resulting system's financial strength vis-à-vis area competitors.

In summary, based on our review, including our findings on the parties' prices, total medical expenses, and market share, we find that the proposed transactions between Partners, SSH, and Harbor will increase health care spending, likely reduce market competition, and result in increased premiums for employers and consumers. We find the parties have not provided adequate evidence showing how the proposed transactions are likely to drive overall performance improvements of South Shore providers, or how corporate integration of the parties

is instrumental to achieving proposed care delivery reforms. Based on these findings, the HPC concludes that the transactions warrant further review and refers this report to the AGO.

I. ANALYTIC APPROACH AND DATA RELIANCES

A. ANALYTIC APPROACH

In structuring a cost and market impact review, we took the following steps. First, we identified the primary areas of impact for the HPC to study. MASS. GEN. LAWS ch. 6D, § 13 tasks the HPC with examining impact in three interrelated areas:⁹

1. **Costs.** The statute directs the HPC to examine prices, total medical expenses, provider costs and market share, and other measures of health care spending.
2. **Quality.** The statute directs the HPC to examine the quality of services provided, including patient experience.
3. **Access/market structure.** The statute directs the HPC to examine the availability and accessibility of services provided; the provider's role in serving at-risk, underserved, and government payer patient populations; the provider's role in providing low or negative margin services; the provider's methods for attracting patient volume and health care professionals; and the provider's impact on competing options for care delivery.

After identifying the primary areas for the HPC's review, we then gather detailed information in each of these areas. The HPC examines recent data to establish the parties' *baseline performance* in each of these areas prior to the transactions. The HPC then combines the parties' baseline performance with known details of the transactions, as well as the parties' goals and plans, to project the *impact of the transactions on baseline performance*. The analytic sections of this report are divided into two parts mirroring this framework: Part III addresses baseline performance and Part IV addresses impact analysis.

Within this general framework for CMIRs, the specific facts of a transaction, the availability of accurate data, and time constraints will affect the particular analyses included in our review of any given material change. We also seek to focus our work on analyses that complement, rather than duplicate, the work of other agencies. Future CMIRs may encompass new and evolving analyses, depending on the facts of a transaction, recent market developments, areas of public interest, and the availability of new data resources, like the All-Payer Claims Database (APCD) and Registered Provider Organization information (RPO).¹⁰

⁹ The HPC may also examine consumer concerns and any other factors it determines to be in the public interest. MASS. GEN. LAWS ch. 6D, § 13(d) (2012).

¹⁰ See *All-Payer Claims Database*, CTR. FOR HEALTH INFO. & ANALYSIS, www.mass.gov/chia/apcd (last visited Dec. 13, 2013) ("The APCD is comprised of medical, pharmacy, and dental claims, as well as information about member eligibility, benefit design, and providers for all payers covering Massachusetts residents."); MASS. GEN. LAWS ch. 6D, § 11(2012) (requiring provider organizations to register biennially with the HPC and provide information on contractual and operating structures, capacity, and other requested information).

B. DATA RELIANCES

To conduct this review, we relied on the documents and data the parties produced to us in response to HPC information requests, and their own description of the transactions as presented in their material change notices and other filings with the Commonwealth.¹¹ To further inform our review, the HPC obtained data and documents from a number of other sources. These include state agencies such as CHIA and the AGO's Non-Profit Organizations/Public Charities Division, federal agencies such as the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Medicare and Medicaid Services (CMS), private organizations that collect health care data such as the Massachusetts Health Data Consortium (MHDC) and Massachusetts Health Quality Partners (MHQP), payers such as Blue Cross Blue Shield of Massachusetts (BCBS), Harvard Pilgrim Health Care (HPHC), and Tufts Health Plan (THP), and health care providers operating in the same areas of the state as the parties.¹² The HPC appreciates the cooperation of all entities that provided information in support of this review.

Where our analyses rely on nonpublic information produced by the parties or other market participants, MASS. GEN. LAWS ch. 6D, § 13 prohibits the HPC from disclosing such information without the consent of the producing entity, except in a preliminary or final CMIR report where “the commission believes that such disclosure should be made in the public interest after taking into account any privacy, trade secret or anti-competitive considerations.”¹³ Consistent with this statutory requirement, this Final Report and its exhibits contain only limited disclosures of such confidential information where the HPC has determined that the public interest in disclosure outweighs privacy, trade secret, and anti-competitive considerations.

To assist in our review and analysis of information, the HPC engaged consultants with extensive experience evaluating provider systems and their impact on the health care market. Working with these experts, the HPC extensively analyzed the data and other materials provided. For each analysis, the HPC utilized the most recent, reliable data available. Because data—whether publicly reported or privately held—is usually generated on a variable schedule from entity to entity, the most recent and reliable data sometimes reflects 2012 data and sometimes 2011. We have noted the applicable year for the underlying data throughout this report. Wherever possible, the HPC examined multiple years of data to analyze trends and to report on the consistency of findings over time. For data and materials produced by the parties and other market participants, the HPC tested the accuracy and consistency of the data collected to the extent possible, but also had to rely in large part on the producing party for the quality of the information provided.

Several of our analyses focus on anticipated cost impact in the commercially insured market. In the commercially insured market, prices for health care services—whether fee-for-service, global budgets, or other forms of alternative payments—are established through private

¹¹ *E.g.*, Application by South Shore Hospital, Inc. for Determination of Need under 105 C.M.R. 100.600-603 for Change in Ownership of South Shore Hospital (Dec. 28, 2012).

¹² These providers include Atrius Health (Atrius), Beth Israel Deaconess Care Organization (BIDCO), Lahey Health, New England Quality Care Alliance (NEQCA), Signature Healthcare (Signature), and Steward Health Care System (Steward).

¹³ MASS. GEN. LAWS ch. 6D, § 13(c), *amended by* 2013 Mass. Acts 38, § 20.

negotiations between payers and providers. The terms of these payer-provider contracts vary widely, both with regard to price and with regard to other material terms that impact health care costs and market functioning.¹⁴ By contrast, government payers such as Medicare and Medicaid pay for health care services, in large part, according to prices and other material terms established by regulators, which are typically not subject to the same mechanisms that impact total medical spending in the commercial market (e.g. increases to total medical spending as physicians join higher-priced physician groups, or as providers increase their market clout to leverage higher prices and other favorable contractual terms).¹⁵ As time and data have allowed, this report includes analysis of mechanisms that impact total medical spending in the government payer market, such as the potential to add facility fees when hospitals acquire physician groups and their ancillaries (e.g., imaging and laboratory facilities).

Within the commercial market, we focused our review on the three largest commercial payers (BCBS, HPHC, THP) in Massachusetts, which account for about 80% of the commercial market.¹⁶ Our cost projections thus tend to underestimate the total dollar impact to commercial spending. Due to the nature of contract negotiations and bargaining leverage, we would expect to see similar trends in the 20% of the commercial market for which we did not have detailed data. For future reports, we hope to have access to consolidated data on the entire health care market through the APCD, RPO program, and other resources.

Many of our analyses compare the Partners hospitals and SSH to other hospitals operating in the same area. These comparator hospitals, shown below, were identified based on geographic proximity and patient flow patterns:¹⁷

- **Brigham and Women’s Faulkner Hospital (Faulkner):** Steward Carney Hospital (Carney), Steward Norwood Hospital (Norwood), Steward St. Elizabeth’s Medical Center (St. Elizabeth’s);
- **Brigham and Women’s Hospital (BWH) and Massachusetts General Hospital (MGH):** Beth Israel Deaconess Medical Center (BIDMC), Boston Medical Center (BMC), Tufts Medical Center (Tufts MC);

¹⁴ See, e.g., OFFICE OF ATT’Y GEN. MARTHA COAKLEY, EXAMINATION OF HEALTH CARE COST TRENDS AND COST DRIVERS PURSUANT TO G.L. C. 118G, § 6 ½(b): REPORT FOR ANNUAL PUBLIC HEARING, at 40-43 (Mar. 16, 2010) [hereinafter AGO 2010 COST TRENDS REPORT], available at <http://www.mass.gov/ago/docs/healthcare/2010-hcctd-full.pdf> (indicating that contractual provisions governing when and how physician networks may expand vary widely, with implications for costs and market functioning).

¹⁵ Notably, over half of the members of the state’s Medicaid program, MassHealth, are enrolled in a MassHealth Managed Care Organization (MMCO). Like commercial payers, MMCOs negotiate prices with providers and thus are subject to some of the same mechanisms that operate in the commercial market (e.g. bargaining leverage). However, the capitated prices paid to the MMCOs are limited by the state budget, and therefore MMCO price increases are constrained by other forces, and cannot be passed along to employers and consumers through premium increases in the same manner as increases in commercial prices.

¹⁶ CTR. FOR HEALTH INFO. & ANALYSIS, ANNUAL REPORT ON THE MASSACHUSETTS HEALTH CARE MARKET, at 1 (Aug. 2013) [hereinafter CHIA ANNUAL REPORT AUG. 2013], available at <http://www.mass.gov/chia/docs/r/pubs/13/ar-ma-health-care-market-2013.pdf>.

¹⁷ Because this set of comparator hospitals is based on geographic proximity, patient flow patterns, and hospital type (i.e., AMCs are compared to AMCs, not nearby community hospitals), they may not align with municipal boundaries or other fixed regions. The comparator hospitals are intended to reflect a set of local hospitals that a local patient could choose as a substitute for the focal hospital.

- **Cooley Dickinson Hospital (Cooley Dickinson):** Baystate Medical Center (Baystate MC), Holyoke Medical Center (Holyoke), Mercy Medical Center (Mercy MC), Noble Hospital (Noble);
- **Martha’s Vineyard Hospital (Martha’s Vineyard) and Nantucket Cottage Hospital (Nantucket Cottage):** Cape Cod Hospital, Falmouth Hospital;
- **Newton-Wellesley Hospital (Newton-Wellesley):** Beth Israel Deaconess-Needham (BID-Needham), Metrowest Medical Center (Metrowest MC), Mount Auburn Hospital (Mount Auburn);
- **North Shore Medical Center (two campuses) (North Shore MC):** Hallmark-Lawrence Memorial Hospital, Hallmark-Melrose-Wakefield Hospital, Lahey-Addison Gilbert Hospital, Lahey-Beverly Hospital, Lahey Hospital and Medical Center;
- **South Shore Hospital (SSH):** Beth Israel Deaconess-Milton (BID-Milton), Signature Healthcare Brockton Hospital (Signature Brockton), Steward Good Samaritan Medical Center (Good Samaritan), Steward Quincy Medical Center (Quincy MC).

Throughout this report, we seek to present data in the manner that most accurately reflects the current state of the market. Except where explicitly noted, Cooley Dickinson, which was acquired by Partners in July 2013, is included in Partners’ hospital statistics. Cooley Dickinson Physician Hospital Organization, which the HPC understands has not joined Partners’ physician organization, Partners Community Healthcare Inc. (PCHI), is not included in PCHI’s information. Other recent transactions, such as the Lahey Clinic and Northeast Health System merger in 2012, are reflected throughout our data except where explicitly noted.

II. OVERVIEW OF THE PARTIES AND THE TRANSACTIONS

On December 21, 2012, Partners and SSH executed an Affiliation Agreement for Partners to acquire SSH, making it a fully integrated, community-based member of the Partners system.¹⁸ Partners’ proposed acquisition of SSH builds on an eight-year clinical affiliation between BWH and SSH that included development of joint programs in significant service lines such as cardiovascular services, women’s health, and surgery. According to the Affiliation Agreement, the objectives of Partners’ acquisition of SSH are to create an integrated physician, acute care, and post-acute care system that will support PHM and assume greater risk for the quality and cost of health care in southeastern Massachusetts.¹⁹ To accomplish this, the Affiliation Agreement sets out three important initiatives that will be implemented over five years at a cost of approximately \$200 million. Two of the initiatives, the Primary Care Network Development Initiative (PCP Initiative)²⁰ and the Specialty Physician Alignment Initiative (SCP Initiative),²¹

¹⁸ On April 3 and 22, 2013, SSH and Partners filed Notices of Material Change with the HPC pursuant to MASS. GEN. LAWS ch. 6D, §13 (2012).

¹⁹ See generally Application by South Shore Hospital, Inc. for Determination of Need under 105 C.M.R. 100.600-603 for Change in Ownership of South Shore Hospital, Attachment B, Affiliation Agreement, at Art. 1 (Dec. 28, 2012) [hereinafter SSH Determination of Need Application, Attachment B, Affiliation Agreement].

²⁰ Under the PCP Initiative, Partners and SSH will develop a primary care network comprised of current physicians and 42 net new PCPs. SSH Determination of Need Application, Attachment B, Affiliation Agreement, *supra* note 19, at Exh. 4.5.1-A. Partners will contribute approximately \$54 million to identify and develop the practices for the additional PCPs.

encompass recruiting and aligning physicians to support PHM, including implementation of patient centered medical homes (PCMHs). The third initiative is an Information Technology and Infrastructure Initiative (IT Initiative), which aims to develop an integrated information technology and electronic medical record (EMR) infrastructure to facilitate coordination among providers.²² Partners and SSH describe these investments as key to reducing health care cost growth.

In addition to recruiting new physicians, the Affiliation Agreement underscores the importance of new “docking” models for aligning existing SSH and PCHI physicians, stating that “tighter integration” and “alignment” of physicians with SSH and the Partners hospitals is “a key component to successful implementation” of PHM and Partners’ acquisition of SSH.²³ Signaling Partners’ and SSH’s interest in aligning their physicians, the Affiliation Agreement includes an unexecuted affiliation agreement between their respective physician organizations, PCHI and SSPHO.²⁴

Subsequently, on July 19, 2013, Partners’ BWPO executed a Memorandum of Understanding to acquire Harbor Medical Associates, the largest local practice group within SSPHO.²⁵ SSPHO is the managed care contracting organization for SSH and approximately 400 physicians in the South Shore region. Pursuant to the proposed acquisition, BWPO will integrate the Harbor physicians into a community-based, multispecialty physician business unit of BWPO located in Harbor’s existing offices on the South Shore. The remainder of this section describes each of these parties in turn.

A. PARTNERS HEALTHCARE SYSTEM

Partners is the largest provider system in Massachusetts and, like most providers in Massachusetts, operates as a non-profit public charity. It was founded in 1994 by an affiliation between BWH and MGH. Partners owns eight general acute care (GAC) hospitals with a total of 2,793 licensed beds that operate across the following five regions within Massachusetts:

- **Boston:** BWH and MGH (academic medical centers) and Faulkner (community hospital)
- **Metro-West:** Newton-Wellesley
- **North Shore:** North Shore MC
- **Cape and Islands:** Nantucket Cottage and Martha’s Vineyard
- **Pioneer Valley:** Cooley Dickinson

²¹ Partners and SSH will assess the number of SCPs needed to meet the objectives by acquiring existing independent SCPs, redeploying existing Partners SCPs, and recruiting new SCPs. SSH Determination of Need Application, Attachment B, Affiliation Agreement, *supra* note 19, at Exh. 4.5.1-B. Partners will fund about \$55 million of the SCP initiative.

²² Through the IT Initiative, Partners will invest \$88 million in developing an integrated clinical and administrative software system with SSH. Partners has contracted with Epic to develop and implement this software across the Partners system with a capital investment of over \$1 billion. Partners and SSH describe the funding of this IT Initiative as critical for SSH to be able to acquire an Epic system (different from SSH’s current software, Meditech, and IT system).

²³ SSH Determination of Need Application, Attachment B, Affiliation Agreement, *supra* note 19, at Art. 5.9.1.

²⁴ *Id.* at Exh. 4.10.1.

²⁵ On October 23, 2013, Partners and Harbor filed Notices of Material Change with the HPC.

BWH and MGH, Partners' largest hospitals, are academic medical centers (AMCs) that serve as principal teaching hospitals of Harvard Medical School. They are also the largest private hospital recipients of the National Institutes of Health funding in the nation.²⁶ BWH has a long-standing clinical affiliation with SSH.²⁷ BWH is also clinically affiliated with Cape Cod Healthcare, and MGH with Emerson Hospital. Both BWH and MGH have clinical affiliations with Dana Farber Cancer Institute (Dana Farber) and are the preferred tertiary/quaternary providers in Steward Health Care System's limited network products through Fallon Community Health Plan and THP.

In addition to its GAC hospitals, Partners owns a psychiatric hospital (McLean), a network of rehabilitation facilities (Spaulding Rehabilitation Network), and a home care agency (Partners HealthCare at Home).²⁸ Partners' managed care network, PCHI, negotiates contracts on behalf of approximately 6,500 primary care physicians (PCPs) and specialists (SCPs).²⁹ Partners has continued to grow in recent years. In October 2012, Partners acquired Neighborhood Health Plan, a Massachusetts payer with over 260,000 members. This past July, Partners acquired 140-bed Cooley Dickinson Hospital in Northampton, MA. In November 2013, Partners also provided notice to the HPC that it intends to acquire Hallmark Health System, which operates two acute care hospitals north of Boston—Lawrence Memorial Hospital of Medford and Melrose-Wakefield Hospital.

B. SOUTH SHORE HOSPITAL

South Shore Hospital is a non-profit, acute care hospital located in Weymouth, MA. It serves the southeastern Massachusetts community with over 900 medical staff (physicians with admitting privileges) and 378 licensed acute care beds.³⁰ SSH provides inpatient, outpatient, home care, and emergency care services. In addition to its affiliation with BWH noted above, SSH has clinical affiliations with Boston Children's Hospital (Children's Hospital) and Dana Farber.

²⁶ See PARTNERS HEALTHCARE SYSTEM, Series L Bond Statement at A-3 (Dec. 9, 2011), *available at* <http://emma.msrb.org/ER539808-ER417769-ER819686.pdf>.

²⁷ SSH clinically affiliated with BWH in 2005. They agreed to develop joint programs in cardiovascular, women's health, surgery, neurology, bone and muscle, physician engagement, information systems, oncology and physician education, principally for residents of SSH's service area.

²⁸ Partners HealthCare at Home (PHH) has regional branch offices in Beverly, Medford, Newton, and Rockland. PHH employs approximately 1,400 staff members and is one of the largest home health care providers in New England. *See Hospitals and Affiliates*, PARTNERS HEALTHCARE, <http://www.partners.org/services/hospitals-and-affiliates.aspx> (last visited Dec. 9, 2013).

²⁹ PCHI is organized into Regional Service Organizations (RSOs), which vary in size and structure. PCHI's larger RSOs are tied to its AMCs. PCHI includes approximately 1,300 PCPs, 1,700 community-based specialists, and 3,560 academically-based specialists. PARTNERS HEALTHCARE SYSTEM, Series L Bond Statement at A-5 (Dec. 9, 2011); *see also Partners Community Healthcare, Inc.*, PARTNERS HEALTHCARE, <http://www.partners.org/services/general/patient-care/community-based-programs/partners-community-healthcare-inc.aspx> (last visited Dec. 9, 2013).

³⁰ SOUTH SHORE HOSP., NOTICE OF MATERIAL CHANGE TO THE HEALTH POLICY COMM'N (Apr. 3, 2013), AS REQUIRED UNDER MASS. GEN. LAWS CH. 6D § 13 (2012).

SSPHO is the managed care contracting organization for SSH and the members of the Physicians Organization of the South Shore (POSS). It is equally owned by SSH and POSS, and has about 400 participating physicians, of which about 90 are PCPs.³¹ SSPHO negotiates health care contracts on behalf of SSH and these physicians.

C. HARBOR MEDICAL ASSOCIATES

Harbor Medical Associates is a 65-physician independent multispecialty practice and the largest medical group in SSPHO.³² Harbor provides primary care and specialty care services to adult patients in the South Shore region, with practice sites in Braintree, Holbrook, Pembroke, Scituate, and Weymouth.³³ Harbor owns and operates an urgent care center and South Shore Endoscopy Center, an ambulatory surgery center focused on providing colonoscopies and other outpatient gastrointestinal procedures.

Below is a map of the parties' service area. It shows in gray the primary service area (PSA)³⁴ of Partners' eight acute care hospitals and of SSH, as well as the location of those hospitals and Partners' other inpatient facilities (Spaulding Rehabilitation Network and McLean Psychiatric Hospital campuses).³⁵

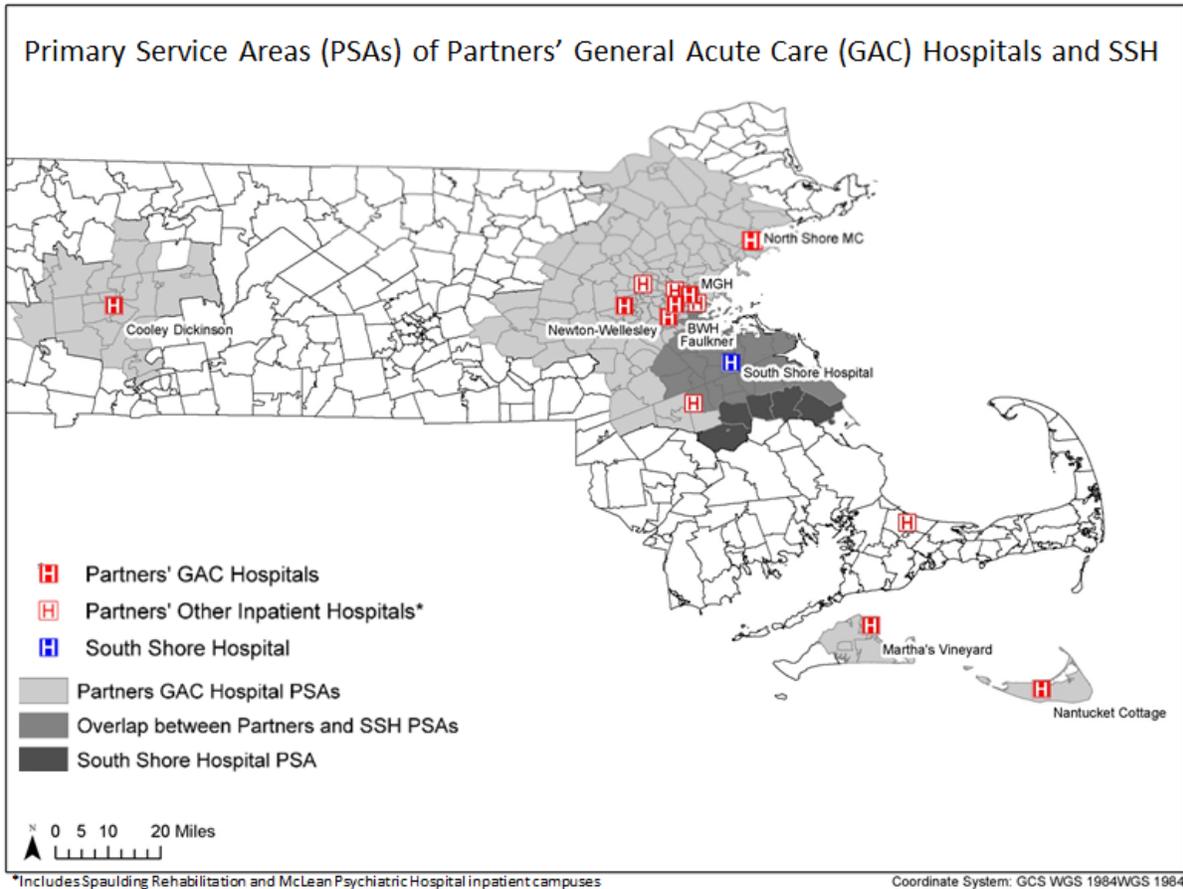
³¹ See generally SOUTH SHORE HOSPITAL, South Shore Physician Hospital Organization (SSPHO) Organization and Governance, <http://www.southshorehospital.org/organization-and-governance> (last visited Dec. 12, 2013).

³² Although SSPHO negotiates and manages risk contracts for both SSH and Harbor, SSH and Harbor are separate legal entities; neither has corporate control over the other.

³³ HARBOR MEDICAL ASSOCIATES, NOTICE OF MATERIAL CHANGE TO THE HEALTH POLICY COMM'N (Oct. 23, 2013), AS REQUIRED UNDER MASS. GEN. LAWS CH. 6D § 13 (2012).

³⁴ As discussed in Section IV.A.3, the HPC generally defines a hospital PSA to be the contiguous area closest to a hospital from which the hospital draws 75% of its commercial discharges. See *infra* note 118.

³⁵ Because Martha's Vineyard Hospital draws 75% of its commercial discharges from a compact area surrounding the hospital, that area of the island is defined to be its PSA.



III. ANALYSIS OF PARTIES' BASELINE PERFORMANCE (2010 – 2012)

To analyze the impact of a proposed transaction on costs, quality, and access, it is important to understand the parties' baseline performance in these areas, prior to the transaction. Part III examines the recent performance of Partners, SSH, and Harbor in each of these areas.

A. COST PROFILE

The law governing cost and market impact reviews directs the HPC to examine different measures of the parties' cost and financial performance, including their size, prices, health status adjusted TME, and market share. The HPC examined these measures over time and compared to other providers to establish the parties' baseline performance leading up to the proposed transactions. In Part IV, we will combine the parties' current performance with details of the transactions and the parties' goals and plans to project the likely impacts of the transactions on health care costs.

Measures of financial condition and market share indicate the relative strength of a provider compared to competitors. Comparisons of provider health status adjusted TME and of

relative prices (the relative amounts that payers pay providers for comparable services) show differences in provider efficiency and costs, both between the parties and compared to other area providers. In examining these elements of the parties' cost profile, the HPC found:

- Partners and SSH are in strong financial condition.
- Partners receives high prices for both its hospitals and its physicians. SSH receives high prices while SSPHO (including Harbor) receives lower prices.
- PCHI and SSPHO (including Harbor) both have high TME, which is driven in part by the high relative price of their hospitals.
- Partners and SSH each have strong market share in the South Shore region, and PCHI has strong physician market share statewide.

1. Partners and SSH Are in Strong Financial Condition

The HPC reviewed financial statements from 2009 through 2012 for Partners and SSH, which showed that the parties are in strong financial condition compared to other providers in Massachusetts. Over the last four years, Partners' total operating revenue increased by 18% from \$7.6 billion in 2009 to nearly \$9 billion in 2012. Over this same period, Partners' total net assets grew by 6.2% (over \$300 million). The following table shows key financial metrics for Partners compared to the next three largest health care systems in Massachusetts, as measured by total operating revenue. As shown below, Partners' total net assets are more than three times the combined assets of the next three largest systems in Massachusetts, and Partners has invested substantially more in its facilities and equipment than other systems, as reflected in its lower average age of plant.

Financial Performance of Four Largest Massachusetts Provider Systems (FY2011-2012) ³⁶				
	Partners	UMass Memorial	Steward Health Care	BIDMC
NPSR (\$000)				
FY 2011	6,443,391	2,084,438	1,421,697	1,461,503
FY 2012	6,951,914	2,105,265	1,759,979	1,509,882
Total Operating Revenue (\$000)				
FY 2011	8,481,112	2,274,945	1,604,185	1,812,256
FY 2012	8,981,337	2,293,871	1,963,164	1,856,672
Total Operating Expenses (\$000)				
FY 2011	8,248,295	2,239,991	1,649,077	1,771,051
FY 2012	8,790,428	2,288,860	1,985,362	1,824,488
Operating Margin				
FY 2011	2.70%	1.50%	2.80%	2.30%
FY 2012	2.10%	0.20%	1.10%	1.70%
Total Net Assets (\$000)				
FY 2011	5,453,587	1,315,764	929,521	787,346
FY 2012	5,282,679	603,524	21,322	913,739
Current Ratio				
FY 2011	2.4	1.8	0.9	3.5
FY 2012	2.6	1.7	1	3.3
Days Cash on Hand				
FY 2011	147.1	52.3	21.9	180.6
FY 2012	156.3	47.8	24.5	193.2
Cash and equivalents, and short-term investments				
FY 2011	3,163,294	308,129	94,597	838,264
FY 2012	3,585,274	287,543	128,205	922,817
Average age of plant				
FY 2011	6.7	10.0	N/A	18.9
FY 2012	6.9	10.0	N/A	18.8

³⁶ See PricewaterhouseCoopers LLC, Consolidated Financial Statements: Partners HealthCare System, Inc. and Affiliates: Dec. 14, 2012; PricewaterhouseCoopers LLC, Consolidated Financial Statements: Partners HealthCare System, Inc. and Affiliates: Dec. 2, 2011; KPMG LLP, Consolidated Financial Statements and Other Financial Information: Beth Israel Deaconess Medical Center, Inc. and Affiliates: Dec. 20, 2012; KPMG LLP, Consolidated Financial Statements and Other Financial Information: Beth Israel Deaconess Medical Center, Inc. and Affiliates: Jan. 9, 2012; Ernst & Young LLP, Consolidated Financial Statements: Steward Health Care System, LLC: Apr. 2, 2013; Ernst & Young LLP, Consolidated Financial Statements: Steward Health Care System, LLC: Jan. 30, 2012; PricewaterhouseCoopers LLC, Consolidated Financial Statements with Supplemental Consolidating Information: UMass Memorial Health Care, Inc. and Affiliates: Dec. 21, 2012; PricewaterhouseCoopers LLC, Consolidated Financial Statements with Supplemental Consolidating Information: UMass Memorial Health Care, Inc. and Affiliates: Dec. 20, 2011.

NOTES

- (1) Net Patient Service Revenue (NPSR) is the total inpatient and outpatient revenue after deductions for free care charges and contractual adjustments.
- (2) Total Operating Revenue includes all revenues gained from everyday business, including NPSR.
- (3) Total Operating Expenses is all expenses incurred by the provider system (e.g., salaries, benefits, supplies).
- (4) Operating Margin measures the system's profitability from patient care services and other operations.
- (5) Total Net Assets is the system's total assets minus its liabilities.
- (6) Current Ratio measures the systems' ability to meet its current liabilities with its current assets; a ratio of 1.0 or higher indicates that all current liabilities could be adequately covered by the system's existing current assets.
- (7) Days Cash on Hand is the number of days of operating expenses that the system could pay with its current available cash, cash equivalents, and short term investments.
- (8) Cash, cash equivalents, and short-term investments refer to assets that are readily available to use (e.g., stocks and bonds that can be quickly liquidated).
- (9) Average Age of Plant measures the average age of the system's facilities, including capital improvements and major equipment purchases. Steward's age of plant is not included because comparable data was not available.

SSH and its parent, South Shore Health and Educational Corporation (SSHEC), are also financially strong. Between 2009 and 2012, SSHEC's total net assets grew by 32.9% (over \$44 million), indicating steady growth.³⁷ As shown below, SSH's FY11 and FY12 total operating revenue and total net assets were substantially greater than those of other area hospitals.

Financial Performance of SSH Compared to Other Area Hospitals (FY2011-2012) ³⁸					
	SSH	BID-Milton	Good Samaritan	Quincy MC	Signature Brockton
NPSR (\$000)					
FY 2011	417,328	65,895	176,503	95,551	205,479
FY 2012	436,499	72,819	N/A	N/A	228,176
Total Operating Revenue (\$000)					
FY 2011	435,612	68,411	183,031	98,591	219,586
FY 2012	455,396	75,462	N/A	N/A	239,515
Total Operating Expenses (\$000)					
FY 2011	426,550	68,203	182,924	117,137	203,503
FY 2012	451,220	74,306	N/A	N/A	213,960
Operating Margin					

³⁷ Deloitte and Touche, LLP, Combined Financial Statements: South Shore Health and Educational Corporation and Subsidiaries: Jan. 11, 2013; Deloitte and Touche, LLP, Combined Financial Statements: South Shore Health and Educational Corporation and Subsidiaries: Dec. 21, 2011; Deloitte and Touche, LLP, Combined Financial Statements: South Shore Health and Educational Corporation and Subsidiaries: Dec. 30, 2010; Deloitte and Touche, LLP, Combined Financial Statements: South Shore Health and Educational Corporation and Subsidiaries: Jan. 5, 2010.

³⁸ See CTR. FOR HEALTH INFO. & ANALYSIS, *Hospital Financial Performance FY 2011 Databook*, <http://www.mass.gov/chia/docs/r/qtr/fy11-annual/hosp-fy11-databook.xls> (last visited Feb. 17, 2014); CTR. FOR HEALTH INFO. & ANALYSIS, *Hospital Financial Performance FY 2012 Databook*, <http://www.mass.gov/chia/docs/r/qtr/fy12-annual/fy12-databook.xls> (last visited Feb. 17, 2014).

FY 2011	2.1%	0.3%	0.1%	18.8%	7.3%
FY 2012	0.9%	1.5%	N/A	N/A	10.7%
Total Net Assets (\$000)					
FY 2011	111,519	27,211	2,470	17,985	6,298
FY 2012	131,702	62,011	N/A	N/A	26,105
Current Ratio					
FY 2011	1.1	1.5	0.5	0.7	0.7
FY 2012	1.3	1.7	N/A	N/A	0.8
Days Cash on Hand					
FY 2011	11.8	69.8	0.1	14.8	3.9
FY 2012	13.6	61.4	N/A	N/A	9.9

NOTES

(1) Comparable individual hospital data was unavailable for the Steward hospitals in FY2012.

The HPC also reviewed financial statements for Harbor showing it is a financially stable physician group. Between 2010 and 2013, total professional revenue for physician services grew steadily.

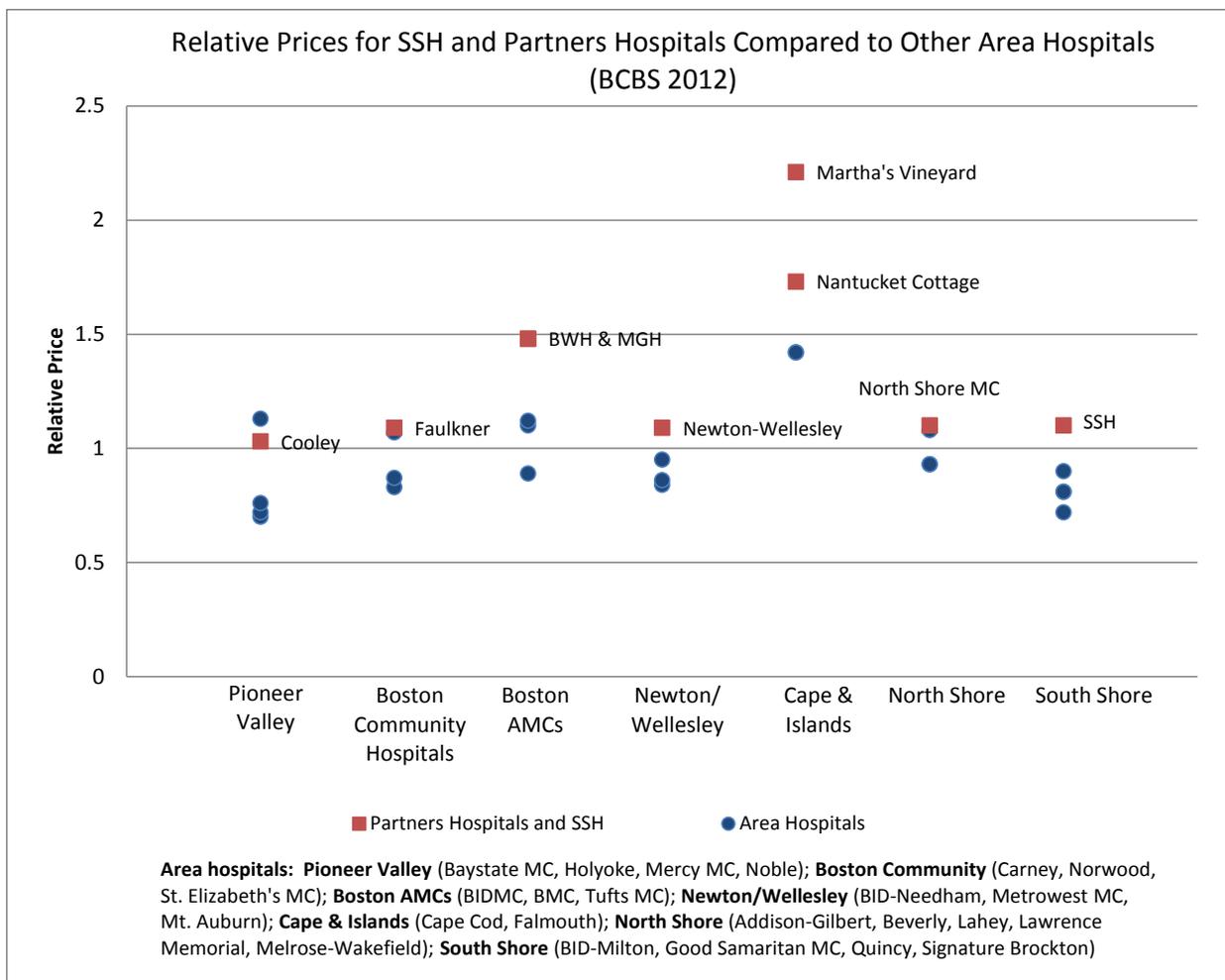
2. Partners and SSH Receive Higher Prices Than Other Area Providers; Harbor/SSPHO Does Not

The HPC examined hospital relative price³⁹ data for the parties from 2010 to 2012, and observed consistent trends for all three major commercial payers. In each region in which Partners operates, its hospitals were consistently high priced.⁴⁰ Similarly, SSH was consistently paid the highest relative price among area hospitals.⁴¹ The following chart is an example of this trend, showing relative prices for inpatient and outpatient services for one major payer. In each region, SSH and the Partners hospitals' relative price is shown in red.

³⁹ Relative price is a standardized pricing measure that accounts for differences among provider service volume, service mix, patient acuity, and insurance product types in order to allow comparison of negotiated price levels. CHIA ANNUAL REPORT AUG. 2013, *supra* note 16, at 35.

⁴⁰ From 2010 to 2012, each Partners hospital received the highest price among area hospitals from BCBS and THP, except for Cooley Dickinson (acquired by Partners in July 2013 and received the second highest price from BCBS) and Faulkner (received a lower price from THP). HPHC's prices for all of the Partners hospitals except Martha's Vineyard and Nantucket Cottage were consistently either the highest or second highest among area hospitals. See CHIA ANNUAL REPORT AUG. 2013, *supra* note 16, at 10; CTR. FOR HEALTH INFO. & ANALYSIS, *2012 Relative Prices, APM, and TME by Payer Databook*, <http://www.mass.gov/chia/docs/r/pubs/13/2013-annual-report-rp-ape-tme-data-book.xlsx> (last visited Dec. 3, 2013) [hereinafter CHIA 2012 Relative Prices, APM, and TME by Payer Databook].

⁴¹ See *id.* (showing that from 2010 to 2012, for all three major payers, SSH was paid the highest relative price among hospitals on the South Shore).



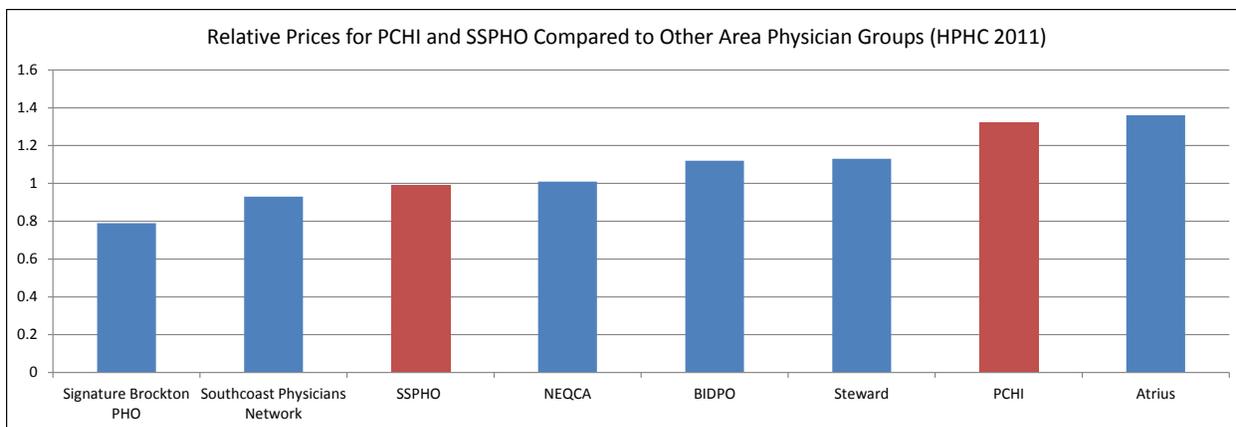
Source: CHIA 2012 Relative Prices, APM, and TME by Payer Databook, supra note 40.

The HPC examined physician relative price data from 2009 to 2011 for the three major payers,⁴² and found that PCHI received higher prices than most other physician groups in the state.⁴³ However, unlike the hospital prices described above, SSPHO (including Harbor) has not had high physician prices compared to area physician groups. The following chart shows physician prices for groups practicing in the South Shore region as an example of this general trend.⁴⁴ Section IV.A.1 will project how total medical spending will be impacted if SSPHO physicians, such as the Harbor physicians, join PCHI's payer contracts at PCHI's higher prices.

⁴² 2012 physician relative price data will likely be available from CHIA in late 2014.

⁴³ See, e.g., CTR. FOR HEALTH INFO. & ANALYSIS, *Data Appendix: Relative Price by Provider Type* (Oct. 2013), <http://www.mass.gov/chia/docs/r/pubs/13/rp-2012-cy-2012-data-appendix.xlsx> (last visited Dec. 10, 2013); CTR. FOR HEALTH INFO. & ANALYSIS, *HEALTH CARE PROVIDER PRICE VARIATION: RESULTS FROM 2011 - Data Appendix* (Feb. 2013), <http://www.mass.gov/chia/docs/r/pubs/13/relative-price-variation-data-appendix-2013-03-06.xlsx> (last visited Dec. 10, 2013) (showing that PCHI generally receives prices in the 80th to 95th percentile of the 30 providers reported by CHIA).

⁴⁴ See *id.* (showing that SSPHO's statewide relative prices ranged from the 24th percentile to the 73rd percentile, with prices from many payers in the low 40th percentile).



Source: CHIA 2012 Relative Prices, APM, and TME by Payer Databook, *supra* note 40.

3. PCHI and SSPHO Have Higher TME Than Other Area Providers

The HPC also reviewed the parties’ TME to examine the total cost of all health care services for health maintenance organization (HMO) and point of service (POS) patients cared for by the parties.⁴⁵ TME reflects both utilization and price; high TME can reflect high utilization of services, but it can also reflect high prices of the hospitals or physicians that patients use. It is standard industry practice to adjust for health status differences when comparing TME, so a provider caring for a sicker population will not appear to have higher spending solely for that reason. The TME data we present is adjusted using the health status scores provided by each payer.⁴⁶ Across the three major payers, we found that PCHI’s 2010 and 2011 health status adjusted TME was in the 85th to 95th percentile of providers statewide.⁴⁷

TME can vary by region.⁴⁸ Since SSPHO (including Harbor) operates in a single region of Massachusetts, in evaluating SSPHO’s TME, it is important to compare it to the TME of like

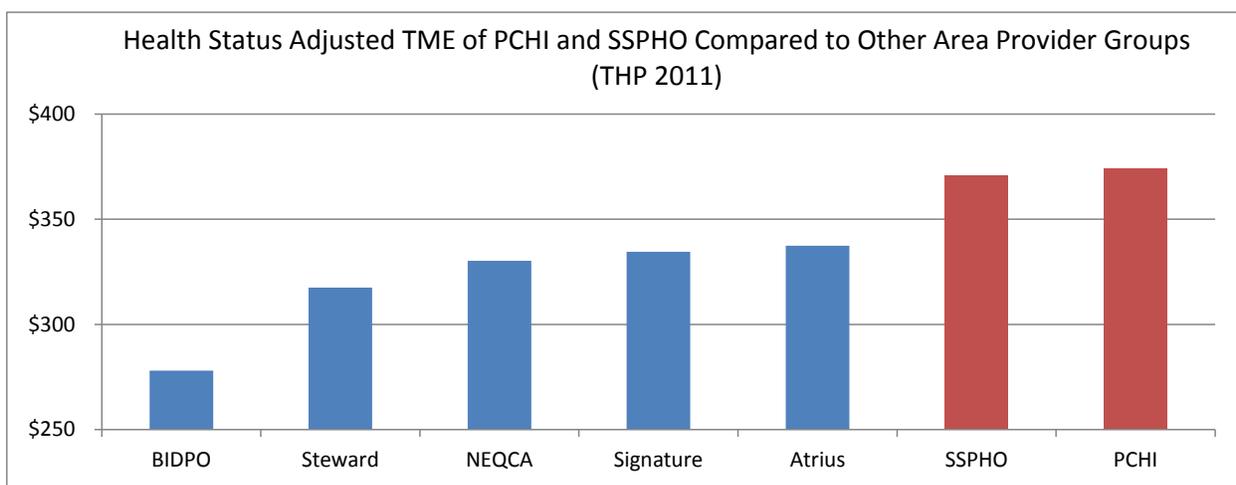
⁴⁵ TME is expressed as a per member per month (PMPM) dollar figure that reflects the average monthly covered medical expenses paid by the payer and the member for all of the health care services the member receives in a year. TME is currently publicly reported by provider system for patients who have explicitly selected a PCP with the provider system (patients in HMO and POS products, which require patients to select a PCP and obtain referrals to other providers through that PCP). A provider’s TME for its HMO/POS patients can be informative of its TME for preferred provider organization (PPO) patients. For example, many PPO patients – though they are not required by product design to select a PCP to direct their care – functionally have PCPs who help direct their care, and in general, PCPs do not manage the care of their patients differently depending on the type of insurance product they hold. In other cases, however, TME could differ between HMO and PPO patients. For example, if there is a substantial difference in the prices a provider receives for its HMO patients versus its PPO patients, that difference in prices could drive a difference in resulting TME. It is important that payers continue to develop PPO attribution models in order to track and report TME for PPO populations. With the further development of such models, it is our hope that we will be able to analyze both HMO/POS and PPO TME in future reports.

⁴⁶ Since each payer calculates health status scores for its network according to its own methodology, TME should not be compared across payers.

⁴⁷ Only HPHC 2010 TME was outside this range, with PCHI in the 75th percentile of providers statewide that year.

⁴⁸ See, e.g., OFFICE OF ATT’Y GEN. MARTHA COAKLEY, EXAMINATION OF HEALTH CARE COST TRENDS AND COST DRIVERS PURSUANT TO G.L. C. 6D, § 8: REPORT FOR ANNUAL PUBLIC HEARING, at Part II(B) (Apr. 24, 2013) [hereinafter AGO 2013 COST TRENDS REPORT], available at <http://www.mass.gov/ago/docs/healthcare/2013-hcctd.pdf> (showing differences of \$30 PMPM to more than \$100 PMPM in health status adjusted TME across different regions in Massachusetts).

providers that operate in southeastern Massachusetts (as opposed to providers that operate in other parts of the Commonwealth, like downtown Boston, where TME is consistently higher than in other parts of the state). The HPC reviewed data reported by the AGO on regional TME, focusing on the TME of practice groups in the South Shore region. The below chart reproduces published AGO data showing 2011 TME for practice groups in this region. For provider systems operating in multiple regions of the state (i.e., Atrius, Beth Israel Deaconess Physician Organization (BIDPO), New England Quality Care Alliance (NEQCA), PCHI, and Steward), only the TME of the practice groups within these systems that operate in the South Shore region are shown. As shown below, for one major payer, the health status adjusted TME of SSPHO and the PCHI practice groups operating on the South Shore were the highest in that region. AGO and CHIA data indicate that for the other two major payers, PCHI and SSPHO were two of the top three highest TME providers on the South Shore in 2011.⁴⁹



Source: AGO 2013 COST TRENDS REPORT, *supra* note 48, at 34.

4. Partners and SSH Have Strong Market Share

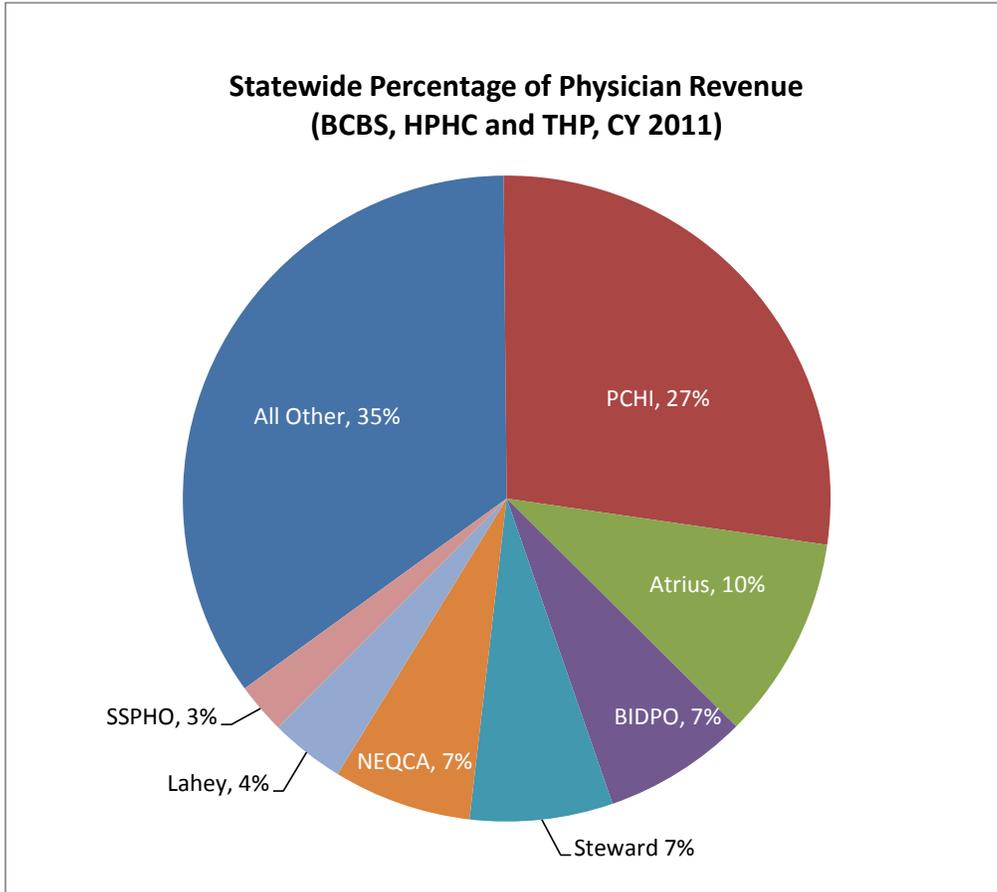
The market share of a provider is the provider's share of patient volume in a particular market or region. When we examined inpatient utilization in SSH's PSA,⁵⁰ we found that SSH and Partners have, by a substantial margin, the highest commercial market shares in that region, capturing 26% and 24% of commercial discharges respectively.⁵¹ Partners has high market share even though it does not have a hospital located in that region; its high market share is driven by significant numbers of patients traveling from the South Shore region to obtain care at BWH and MGH. Combined, SSH and Partners' hospitals account for 50% of all commercial discharges originating from SSH's PSA.

⁴⁹ *Id.* at 35-36. Statewide, SSPHO's 2010 and 2011 health status adjusted TME was in the 63rd to 93rd percentile of providers for the three major payers. While we did not have access to TME data for Harbor specifically, it is one of the largest primary care groups in SSPHO, responsible for about 29% of SSPHO's HMO/POS member months according to data from one major payer.

⁵⁰ As discussed in Section IV.A.3, the HPC generally defines a hospital PSA to be the contiguous area closest to a hospital from which the hospital draws 75% of its commercial discharges. *See infra* note 118.

⁵¹ Because hospitals primarily negotiate with commercial, not government, payers for prices, commercial market share is more relevant for assessing the competitive impact of a transaction. *See* Section I.B.

In addition to its strong market share in the South Shore region, as CHIA has previously reported, Partners also has the highest hospital and physician market share statewide based on revenue reported from nine of the largest commercial payers in Massachusetts.⁵² Among the three largest payers, PCHI received 27% of statewide physician revenue in 2011, and SSPHO received 3%.⁵³ If all or a substantial number of SSPHO physicians join PCHI, Partners would receive about 30% of statewide physician revenue from the top three commercial payers.



NOTES

- (1) Source: CTR. FOR HEALTH INFO. & ANALYSIS, PHYSICIAN PAYMENT DATA, 2011 (HPC Analysis).
- (2) As of May 1, 2012, Lahey Clinic and Northeast Health System combined to become Lahey Health System. This chart includes Northeast Physician Hospital Association (NEPHO) revenue with Lahey to reflect the current configuration of the market. Separately, the former Lahey Clinic and NEPHO were each 2% of statewide physician revenue for the three major payers in 2011.

In sum, Partners and SSH are both financially strong provider systems, with consistently high hospital prices. Similarly, PCHI physicians are paid more than most other physician groups. From a total cost of care perspective, PCHI and SSPHO have high TME compared to other provider groups, due in part to these high prices. Partners and SSH collectively command about half of the market for commercial discharges in SSH’s PSA, and PCHI and SSPHO

⁵² CHIA ANNUAL REPORT AUG. 2013, *supra* note 16, at 33 (finding that Partners received 31% of acute hospital payments in 2012 and 25% of physician payments in 2011 from these commercial payers).

⁵³ The HPC used revenue from the three major payers so that data for SSPHO may be included (smaller payers do not consistently report on SSPHO).

receive about 30% of statewide physician revenue from the top three payers. It is important to keep in mind the parties' financial strength and cost performance to date in assessing the likely cost impact of the proposed transactions.

B. QUALITY AND CARE DELIVERY PROFILE

The HPC examined the parties' quality performance⁵⁴ in recent years to provide a baseline from which to evaluate the parties' goals of implementing innovative care delivery models, and to assess whether there are any differences in the parties' performance that might be expected to drive a beneficial clinical impact following the transactions.⁵⁵ We focused on four core dimensions of quality: health care system structures, clinical processes, clinical outcomes, and patient experience of care. We discuss each of these below.

After examining over 100 nationally recognized measures⁵⁶ across these dimensions, we found:

- Partners, SSH, and SSPHO (including Harbor) have high quality performance compared with Massachusetts and national averages.

⁵⁴ Our analysis is based on the best available, nationally accepted measures of quality and care delivery performance. As additional measures of quality performance are developed, we look forward to incorporating them into our future work.

⁵⁵ An important factor that may increase the likelihood of a beneficial quality impact from a transaction is substantial pre-merger clinical superiority of the acquiring party, though differences in quality by themselves do not guarantee a transaction will result in quality improvements. See Patrick Romano & David Balan, *A Retrospective Analysis of the Clinical Quality Effects of the Acquisition of Highland Park Hospital by Evanston Northwestern Healthcare*, 18 *INTL. J. OF ECON. OF BUSINESS* 45 (2011) (“[P]re-merger quality differences suggest one hospital has something of value to impart to the other.”).

⁵⁶ Where possible, measures were drawn from the Massachusetts Standard Quality Measure Set. We assess a broad spectrum of measures, each capturing different segments of care. The following measures were examined: **Hospital Process Measures** - CMS Hospital Compare Acute Myocardial Infarction, Pneumonia, and Heart Failure Composites, and Surgical Care Improvement Project Composite; **Hospital Outcome Measures** - Mortality CMS 30-Day Risk Standardized Acute Myocardial Infarction, Pneumonia, and Heart Failure, and Massachusetts Data Analysis Center (MassDAC) Cardiac Surgery and Percutaneous Coronary Intervention Measures; **Readmissions** CMS 30-Day Risk Standardized Acute Myocardial Infarction, Pneumonia, and Heart Failure Measures; **Patient Safety** AHRQ Patient Safety Indicators, CMS Hospital Acquired Conditions; Massachusetts Department of Public Health Healthcare Associated Infection Rates; select AHRQ Inpatient Quality Indicators; **Hospital Patient Experience** - CMS Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Composite Score; **Ambulatory Care Process Measures** - select Healthcare Effectiveness Data and Information Set (HEDIS) measures; **Ambulatory Care Patient Experience** - Adult Patient Experience Composite and Pediatric Patient Experience Composite. See generally CTR. FOR HEALTH INFO & ANALYSIS, STANDARD QUALITY MEASURE SET RECOMMENDATION (Oct. 29, 2013), available at <http://www.mass.gov/chia/docs/g/sqac/2013/2013-final-report-appendix-b-standard-quality-measure-set.pdf>; *Measures Displayed on Hospital Compare*, CTR. FOR MEDICARE & MEDICAID SERVICES, <http://www.medicare.gov/hospitalcompare/Data/Measures-Displayed.html>; *Outcome Measures*, CTR. FOR MEDICARE & MEDICAID SERVICES, <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/OutcomeMeasures.html>; *Reports*, MASS-DAC, <http://www.massdac.org/index.php/reports/>; *Patient Safety Indicators Overview*, AGENCY FOR HEALTHCARE RESEARCH AND QUALITY, http://www.qualityindicators.ahrq.gov/modules/psi_resources.aspx; *Summary Analyses*, HOSP. CONSUMER ASSESSMENT OF HEALTHCARE PROVIDERS AND SYSTEMS, <http://www.hcahponline.org/SummaryAnalyses.aspx>; *What is HEDIS?*, NATIONAL COMMITTEE FOR QUALITY ASSURANCE, <http://www.ncqa.org/HEDISQualityMeasurement/WhatIsHEDIS.aspx> (all last visited Dec. 12, 2013).

- Each party performs higher on certain measures, but there is very little material variation in quality performance between them.

1. Partners, SSH, and SSPHO (including Harbor) Generally Have Strong Quality Performance

Provider organizations in Massachusetts generally deliver high quality care with little material variation and demonstrate consistent improvement over time. Even compared to other Massachusetts providers, Partners, SSH, and SSPHO are high quality, with performance year-over-year that routinely exceeds state and national averages for both inpatient and outpatient care. For inpatient care, SSH's performance exceeded the national average in 71% of measures. Partners' community hospitals' performance was slightly higher, exceeding the national average in 76% of measures. In the outpatient setting, both SSPHO and PCHI generally outperform the state averages. Partners and SSH each had very few measures on which their performance was meaningfully lower than accepted benchmarks.⁵⁷

2. Partners, SSH, and SSPHO (including Harbor) Each Perform Higher on Certain Quality Measures, But There is Very Little Material Variation in Quality Performance Between Them

Across most measures, the HPC found little material variation between Partners, SSH, and SSPHO, and variation among the hospitals and physician groups within the Partners system generally exceeds any variation between Partners hospitals and SSH, or PCHI and SSPHO.⁵⁸ SSH's performance is comparable to that of Partners' community hospitals, especially North Shore Medical Center⁵⁹ and Newton-Wellesley Hospital. In the inpatient setting, the average performance of all Partners hospitals exceeds that of SSH on 59% of measures, but there is statistically significant variation in very few of the measures examined. In the outpatient setting, SSPHO's average quality performance exceeds PCHI's average in 61% of measures, and SSPHO's performance is comparable to the strongest PCHI local practice groups.⁶⁰

The following section details the parties' quality performance in the inpatient and outpatient setting across a variety of procedures, conditions, and disease states.⁶¹

⁵⁷ SSH's 2013 30-day health status adjusted mortality rate for pneumonia reported by CMS was statistically significantly worse than the national average. Two of Partners' hospitals' rates of central line associated blood stream infection were statistically significantly higher than predicted in an intensive care unit setting (notably, other Partners hospitals had statistically significantly lower rates than predicted).

⁵⁸ The level of variation within the Partners system indicates that uniform high performance has not been achieved across Partners hospitals and physician groups, raising the question of whether sufficiently centralized, system-wide characteristics are in place that would specifically and consistently raise the performance of SSH and SSPHO.

⁵⁹ Many quality measures refer only to North Shore MC's Salem campus.

⁶⁰ The PCHI local practice group that the Harbor physicians will join, BWPO, is among these strongest performing PCHI local practice groups. Its weighted average performance on outpatient process measures is slightly higher than SSPHO's, though the difference is not statistically significant.

⁶¹ We examined all measures over the most recently available three-year period, analyzed system-wide performance and differences in performance across providers within each system, and compared the results across Massachusetts providers and to national and state benchmarks.

a. *Measures of Health System Structures*

HPC's examination of a series of structural factors related to quality and patient safety (including, e.g., staff policies, accreditation, certification, and physical plants) indicates that the parties perform well.⁶² Measures of structural quality, such as vaccination of health care workers for influenza, indicate that SSH and Partners perform comparably and exceed the state average.⁶³ The HPC's review of select accreditations and certifications relevant to operating a safe, high quality provider organization indicates that the parties have consistently complied with core requirements.

b. *Clinical Process Measures*

Clinical processes are the elements of workflow in a clinical environment, such as adherence to guidelines or the provision of certain accepted services. HPC examined the following clinical process measures:

- *Hospital Process Composites for Acute Myocardial Infarction, Pneumonia, and Heart Failure, and Surgical Care Improvement Project Measures (SCIP).*⁶⁴ SSH and Partners hospitals perform comparably on these measures, both better than national and state averages.
- *Ambulatory Care (HEDIS) Process Measures.*⁶⁵ HPC computed a weighted average of 25 measures that show how primary care providers perform on preventative care services, including hypertension, cancer screening, heart failure, and diabetes. SSPHO outperforms the PCHI average and the state average on this weighted average.⁶⁶

⁶² The Leapfrog Group® conducts an annual assessment of hospital patient safety performance across the nation. Based upon a series of factors, including utilization of computerized physician order entry, ICU physician staffing ratios, core safety practices, five surgical care improvement project measures, data on seven hospital acquired conditions, and six patient safety indicators, the Leapfrog Group assigns a Hospital Safety ScoreSM to each hospital. Looking at select Partners hospitals, BWH and Newton-Wellesley received an "A," MGH and North Shore MC (Salem) a "B," and SSH received an "A." Note: The Hospital Safety ScoreSM grades hospitals on data related to how safe they are for patients. See *Hospital Safety Score*, THE LEAPFROG GROUP, www.hospitalsafetyscore.org (last visited Dec. 12, 2013).

⁶³ These data are from the Massachusetts Department of Public Health for 2012. See, e.g., MASS. DEPT. PUBLIC HEALTH, 2012 HEALTHCARE ASSOCIATED INFECTION ANNUAL REPORT (2013), available at <http://www.mass.gov/eohhs/docs/dph/quality/healthcare/hai/employee-flu-vac/acute-care-hospital-2012-2013.pdf> (last visited Feb. 17, 2014) and MASS. DEPT. PUBLIC HEALTH, CIRCULAR LETTER DHCQ 10-02-521, available at <http://www.mass.gov/eohhs/docs/dph/quality/hcq-circular-letters/2010/dhcq-1003531.pdf> (last visited Feb. 17, 2014) (describing requisite implementation of Code Help Plans).

⁶⁴ Hospital process composite measures and SCIP measures were obtained from CMS for years 2011-2013.

⁶⁵ HPC obtained data for years 2009 and 2010 from Massachusetts Health Quality Partners (MHQP) to conduct these analyses. MHQP is the premier source of outpatient clinical quality data in the Commonwealth. Measures derived from HEDIS are calculated at the local practice group level and can demonstrate clinical processes in the outpatient setting. A composite of all HEDIS components was used, and included adult diagnostic and preventive care, depression, medication management, asthma care, heart disease and chronic disease management, diabetes care, well-child visits (where applicable), pediatric medications and testing (where applicable), and women's health.

⁶⁶ Notably, the measures included in the HEDIS composite reflect those more likely to be valued in the provision of population health management, and to be included in quality incentives in at-risk contracts. SSPHO performance generally exceeded that of PCHI physician groups and the PCHI average on these measures. HEDIS tools are required for inclusion in the Massachusetts Standard Quality Measure Set and are in use by more than 90 percent of health plans nationwide to measure important elements of outpatient care. See *What is HEDIS?*, *supra* note 56.

Overall, on these nationally accepted process measures, inpatient performance of Partners and SSH is comparable, and outpatient performance at SSPHO generally exceeds that of the majority of PCHI local practice groups.⁶⁷

c. *Clinical Outcome Measures*

HPC also examined clinical outcomes, or the results from a given course of care, in the hospital setting.⁶⁸ On most clinical outcome measures, including of healthcare-associated infections and hospital acquired conditions, SSH and Partners perform comparably. For a series of patient safety indicators, SSH performance exceeded that of Partners hospitals. On measures of readmissions and mortality, inpatient performance at the Partners hospitals generally exceeded that of SSH.⁶⁹ Differences in the performance of the Partners community hospitals and SSH on CMS measures of 30-day health status adjusted readmissions and Massachusetts Data Analysis Center (MassDAC) measures of mortality after cardiac procedures were not statistically significant. SSH's performance on the pneumonia mortality measure was statistically significantly below national performance, while performance of several Partners hospitals was statistically significantly above national benchmarks for heart attack and heart failure mortality.⁷⁰

d. *Patient Experience of Care Measures*

HPC assessed the parties' performance on ten hospital experience measures⁷¹ and eight ambulatory patient experience measures.⁷² On the inpatient hospital measures, Partners outperforms SSH, but both parties exceed the state average. On the adult outpatient measures, PCHI outperforms SSPHO and the state average, while SSPHO performs just below the state

⁶⁷ The HPC's review of available measures of outpatient utilization and appropriateness of care, including the ratio of specialist to primary care physician use and CMS imaging use measures, is consistent with this finding. These measures bear on quality performance since many examples of inappropriate utilization (e.g., duplicative treatment) have direct implications for health care outcomes. See e.g., Donald Berwick & Andrew Hackbarth, *Eliminating Waste in US Health Care*, 307 J. AM. MED. ASS'N. 1513 (Apr. 11, 2012), available at <http://jama.jamanetwork.com/article.aspx?articleid=1148376>.

⁶⁸ The HPC calculated Patient Safety Indicators and Inpatient Quality Indicators from MHDC hospital discharge data for 2010-2012, using code available from the Agency for Healthcare Research and Quality. The HPC analyzed CMS data on hospital mortality and hospital acquired conditions for each year 2011 to 2013, MassDAC mortality data for 2010 and 2011, CMS readmissions data for 2011 and 2012, and DPH data on healthcare associated infections for 2010 to 2012.

⁶⁹ The only exception was MGH, which had statistically significantly more 30-day readmissions for pneumonia in 2012 (health status adjusted).

⁷⁰ SSH improved on heart attack mortality rates over the last three years, but performance declined on mortality for heart failure and pneumonia.

⁷¹ HCAHPS data were obtained from CMS for years 2011-2013 and analyzed to produce these findings. See *Survey of Patients' Experiences*, CTR. FOR MEDICARE & MEDICAID SERVICES, <http://www.medicare.gov/hospitalcompare/About/Survey-Patients-Experience.html> (last visited Dec. 8, 2013) (explaining HCAHPS survey criteria).

⁷² Adult and Pediatric Ambulatory Care Patient Experience Surveys for 2009 and 2011 were obtained from Massachusetts Health Quality Partners and analyzed to produce these findings. See *Quality Insights: 2011 Patient Experiences in Primary Care, Technical Appendix*, MASS. HEALTH QUALITY PARTNERS, <http://www.mhqp.org/quality/pes/pesTechApp.asp?nav=031638> (last visited Dec. 9, 2013) (explaining the Adult and Pediatric Ambulatory Care Patient Experience Survey).

average. In the pediatric outpatient measures, SSPHO outperforms PCHI, but the parties both perform above the state average.

In sum, based upon available measures, Partners and SSH both have strong clinical quality performance. In certain areas of clinical care such as outpatient quality, SSPHO outperforms PCHI, while in patient experience and certain inpatient mortality and readmissions measures, Partners outperforms SSH. In the inpatient setting, the Partners hospitals' average performance is slightly higher than that of SSH (the Partners average performance exceeds SSH's performance in 59% of inpatient measures), but the variation is statistically significantly different from benchmark in very few of the measures examined. In many cases, the difference in performance between the parties is negligible or is outweighed by variation within the Partners system. In the outpatient setting, SSPHO's quality performance is stronger than PCHI's average in 61% of measures and is comparable to that of the strongest PCHI local practice groups.

C. ACCESS PROFILE

The law governing cost and market impact reviews also tasks the HPC with monitoring factors that relate to health care access. The HPC recognizes that "access" is a broad term that encompasses a spectrum of interrelated factors.⁷³ In Massachusetts, different agencies monitor access to health care in different ways. For example, CHIA tracks rates of insurance coverage and the DOI monitors levels of coverage and insurance network adequacy. The DPH is responsible for licensing and health resource planning, including the Determination of Need program, which relate to structural dimensions of access. The AGO reviews health care consumer complaints, which may reveal patterns in barriers to health care access.

The statute identifies additional factors that impact access, which are currently not well-monitored and reported in our system:

1. **Provider payer mix.** Payer mix shows the proportion of care a provider delivers to patients on different forms of insurance, including government payer patients.
2. **Provider service mix.** Service mix shows the proportion of care a provider delivers in different service lines, including lower margin service lines.

Differences in payer mix and service mix can have significant financial implications for how our health care system sustainably apportions care for our neediest populations, and provides adequate access to all needed services. Given presumed lower payments by government payers, there are financial implications for providers who care for a greater

⁷³ For example, in evaluating the accessibility of services, health care experts examine factors as varied as: (1) financial barriers, which may restrict access either because patients have limited ability to pay for services or because providers avoid treating patients of limited means; (2) structural barriers, which may impede access through a poor match between the needs of the population and the number, type, location, hours of operation, or organizational configuration of health care providers; and (3) personal and cultural barriers, which may inhibit people who need medical attention from seeking it or adhering to plans of care, and which can impact effective communication with providers. See, e.g., Institute of Medicine, *Access to Health Care in America*, 39-44 (Michael Millman, Ed., 1993); J. Emilio Carillo et al., *Defining and Targeting Health Care Access Barriers*, 22 J. OF HEALTH CARE FOR THE POOR AND UNDERSERVED 562, 564-68 (2011).

proportion of government payer patients, and those that do not.⁷⁴ Similarly, service mix has financial implications: certain service lines (e.g., behavioral health) tend to be lower margin than other service lines (e.g., surgery). Consistently tracking and reporting on payer mix and service mix will complement the work of other agencies in monitoring health care trends that impact access to services.

In examining available measures of payer mix and service mix,⁷⁵ the HPC found:

- SSH and most Partners hospitals have a higher commercial payer mix and/or lower Medicaid mix than other area hospitals, as measured by both revenue and discharges;
- In its service area, SSH provides a smaller share of inpatient behavioral health services and a larger share of deliveries than other area hospitals.

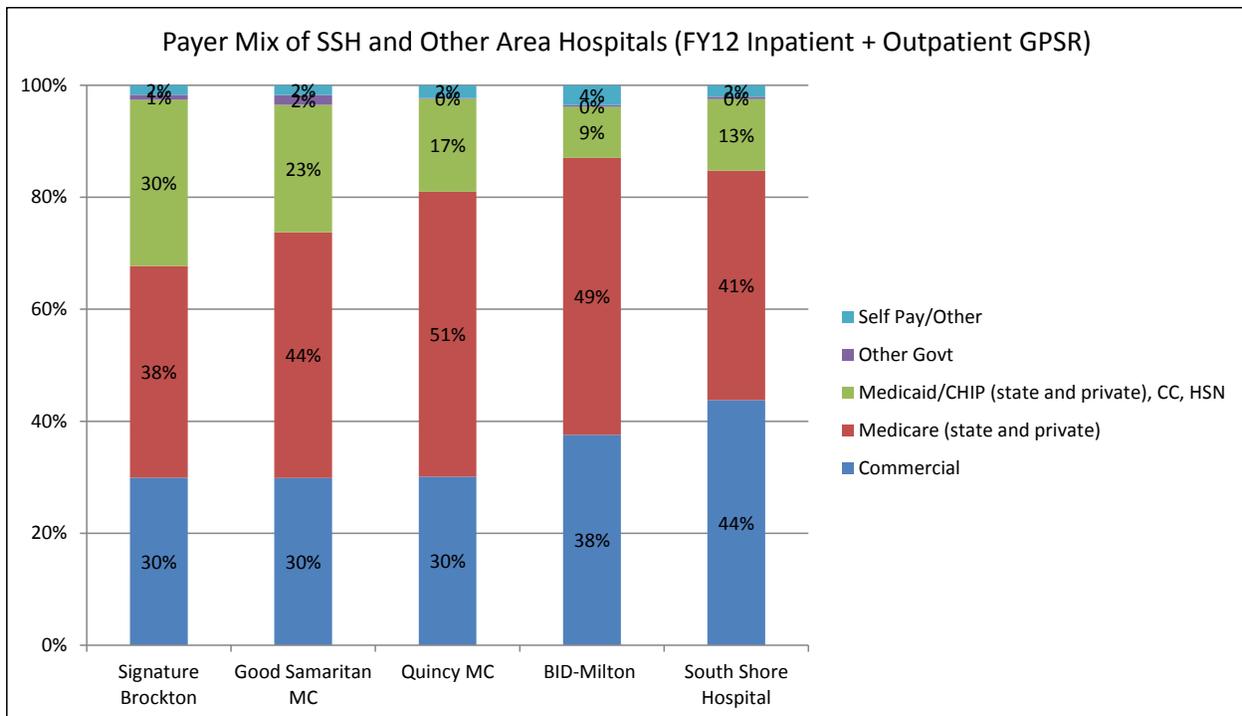
1. SSH and Most Partners Hospitals Have a Higher Commercial Payer Mix and/or Lower Medicaid Mix Than Other Area Hospitals

The HPC examined the payer mix of Partners' hospitals and SSH, as measured by revenue (encompassing inpatient (IP) and outpatient (OP) services) and discharges (IP services). From 2010 to 2012, each Partners hospital, with the notable exception of North Shore MC, had the highest commercial payer mix and/or lowest Medicaid/Children's Health Insurance Program (CHIP) mix of any area hospital, based on revenue.⁷⁶ SSH's payer mix reflects the same trend: high commercial payer mix and low government payer mix compared to area hospitals, as shown in the chart below.

⁷⁴ See Millman at 40 (“[M]ost structural barriers to access have their roots in the way health care is financed. Despite a greatly enlarged physician force and the existence of some 600 community health centers, many of today's poor still find it difficult to identify physicians who will accept Medicaid. A major reason for this dilemma is Medicaid's low reimbursement rates.”).

⁷⁵ The HPC examined hospital payer mix using (1) data gathered by CHIA on hospital inpatient (IP) and outpatient (OP) revenue by payer and (2) MHDC data on hospital discharges by payer. The HPC examined IP service mix using the MHDC's hospital discharge database. Based on production from the parties and other market participants, the HPC also preliminarily surveyed outpatient service mix, and physician payer mix and service mix, but is unable to report any results due to inconsistencies in that data. In future reports, based on the facts of a given transaction and data availability, the HPC may explore other dimensions of access.

⁷⁶ By contrast, North Shore MC had the lowest commercial payer mix and the highest Medicaid/CHIP mix compared to area hospitals. Where we examined two Partners hospitals together (MGH and BWH among Boston AMCs and Martha's Vineyard and Nantucket Cottage among the four Cape and Island hospitals), the two Partners hospitals were the two highest commercial payer mix and/or lowest Medicaid/CHIP mix compared to other area hospitals.



Source: CTR. FOR HEALTH INFO. & ANALYSIS, HOSPITAL DATA ON GROSS PATIENT SERVICE REVENUE, FY10-FY12 (HPC Analysis).

When examined by PSA,⁷⁷ the above patterns in payer mix become even more pronounced. A review of payer mix by PSA is instructive because it focuses on a fixed population (the residents of a hospital’s PSA). Within that fixed population, we examine the cross-section that each hospital serves, and the payer mix of that cross-section. For example, the below table shows (in the column to the left) that the residents of SSH’s PSA “used” or “needed” 100,053 discharges in 2011. Of those 100,053 discharges, 34% (33,600 discharges) were commercial patients and 20% (20,026 discharges) were Medicaid/CHIP, Commonwealth Care, or health safety net (HSN) patients. The table then organizes the hospitals that serve residents of the PSA into four categories: (1) SSH, (2) other area community hospitals (Signature Brockton, Good Samaritan, BID-Milton, Quincy MC), (3) the two Partners AMCs (BWH, MGH), and (4) all other tertiary hospitals (those besides BWH and MGH with a case mix index of 1.1 or more, as identified in the notes to the table). The table also includes an “All Other Hospitals” category consisting of all other Massachusetts hospitals not included in one of the above four categories.

This table allows us to examine the cross-section of the PSA that each hospital category serves, and the payer mix of that cross-section. As shown, SSH has strong market share in its PSA, caring for 19%⁷⁸ of all PSA discharges in 2011 (19,193 SSH discharges of 100,053 total PSA discharges). Within its share of discharges, though, SSH provided a greater proportion of commercial and a lower proportion of Medicaid discharges: 42% of its discharges were commercial, compared to 34% within the general PSA population, and while 20% of the PSA discharges were Medicaid, SSH only provided 9% Medicaid discharges. By contrast, the four

⁷⁷ As discussed in Section IV.A.3, the HPC generally defines a hospital PSA to be the contiguous area closest to a hospital from which the hospital draws 75% of its commercial discharges. See *infra* note 118.

⁷⁸ Nineteen percent is SSH’s share of all discharges (commercial and non-commercial) in its PSA; the previously reported 26% market share reflects SSH’s share of commercial discharges only.

other community hospitals near SSH that also service SSH's PSA had a very different payer mix. Combined, these four hospitals served 30% of the 2011 discharges from the PSA, or 30,176 discharges. Within their share of discharges, 21% were commercial, compared to 34% within the overall PSA, and 42% at SSH; and 22% were Medicaid, compared to 20% within the overall PSA, and 9% at SSH.

Residents of SSH's PSA also often traveled outside of the PSA to obtain care at Massachusetts tertiary hospitals. These eleven hospitals, which have a case mix index of 1.1 or above, cared for 29% of all PSA discharges in 2011, or 28,770 discharges. Of these 28,770 discharges, 12,747 occurred at BWH and MGH, and 16,023 occurred at nine other tertiary hospitals in the state. The payer mix of the discharges at BWH and MGH versus the discharges at other tertiary hospitals is markedly different: 54% of BWH and MGH discharges were commercial, whereas 43% of discharges at other tertiary hospitals were commercial, and 12% of discharges at MGH and BWH were Medicaid whereas 22% of discharges at other tertiary hospitals were Medicaid.⁷⁹

Inpatient Payer Mix for Residents of SSH's PSA – 2011

	All Discharges from PSA		SSH Discharges		Area Community Hospital Discharges		MGH/BWH Discharges		Other Tertiary Hospital Discharges		All Other MA Hospital Discharges	
Commercial	34%	33,600	42%	7,994	21%	6,230	54%	6,866	43%	6,860	26%	5,650
Medicare	44%	44,506	48%	9,228	55%	16,671	33%	4,249	33%	5,299	41%	9,059
Medicaid/CHIP	20%	20,026	9%	1,670	22%	6,602	12%	1,491	22%	3,543	31%	6,720
Other Gov't	1%	896	1%	103	1%	430	0.3%	40	1%	89	1%	234
Self Pay/Other	1%	1,025	1%	198	1%	243	0.8%	101	1%	232	1%	251
Total Discharges	100,053		19,193		30,176		12,747		16,023		21,914	

NOTES

- (1) Source: 2011 MHDC Discharge Data, all discharges (all hospitals, commercial and non-commercial payers).
- (2) "Area Community Hospitals" are the other hospitals located on the South Shore that serve residents of SSH's PSA: BID-Milton, Signature Brockton, Good Samaritan, Quincy MC.
- (3) Tertiary hospitals are those with an average case mix index of ≥ 1.1 in FY11 (CHIA calculation using APR DRG case weights): Baystate Medical Center, BIDMC, BWH, Children's Hospital, Dana-Farber, Lahey Hospital and Medical Center, Massachusetts Eye and Ear Infirmary, MGH, New England Baptist, Tufts MC, and UMass Memorial Medical Center. Boston Medical Center is not included because its case mix is less than 1.1.
- (4) Medicaid/CHIP includes Commonwealth Care and Health Safety Net discharges.

⁷⁹ Children's Hospital is the only tertiary hospital that, due to the nature of its services, would not be expected to serve a material number of patients of one insurance type monitored (Medicare). If Children's Hospital is excluded from this analysis, the share of each type of discharges at the "other tertiary hospitals" changes to 41% commercial, 39% Medicare, 18% Medicaid/CHIP, 0.5% other government and 2% self-pay/other.

We conducted the same analysis for six Partners hospital PSAs⁸⁰ based on 2011 discharges and found similar results for five of the six hospitals (serving a lower Medicaid mix than the overall Medicaid mix in their respective PSAs). The sixth hospital, MGH, served a slightly higher Medicaid mix than in its overall PSA (21% compared to 20% in the overall PSA).⁸¹

2. SSH Provides A Smaller Share of Inpatient Behavioral Health Services and a Larger Share of Deliveries than Other Area Hospitals

We also examined the inpatient services that SSH provides to residents of its PSA, compared to the services provided by other area hospitals.⁸² The below table again examines the 100,053 discharges from SSH's PSA in 2011. Twelve percent of the PSA's discharges, or 12,065 discharges,⁸³ were for deliveries and newborns, and 6% were for behavioral health services. Within SSH's share of PSA discharges (19,193), 18% were for deliveries and newborns,⁸⁴ but only 1% were for behavioral health.⁸⁵ By contrast, the other community hospitals provided a mix of services to residents of the PSA that was 6% deliveries and newborns⁸⁶ and 8% behavioral health.⁸⁷ In short, it appears that residents of SSH's PSA usually traveled to other area community hospitals, or even further, for their inpatient behavioral health needs. Similar trends were observed in 2010 and 2012.

⁸⁰ We did not examine payer mix for the PSAs of Martha's Vineyard Hospital or Nantucket Cottage Hospital, which have significantly smaller numbers of discharges as well as unique patient flow patterns resulting from their location on an island. We elected not to compare those island-based patient flow patterns to the patient flows of mainland hospitals on Cape Cod.

⁸¹ In addition to serving a lower Medicaid mix, both Faulkner and North Shore MC served a lower commercial mix than in their respective PSAs.

⁸² This analysis focuses on inpatient behavioral health services provided by SSH and other areas hospitals. SSH's mix of outpatient services may be very different than the mix of inpatient services described in this section.

⁸³ In analyzing discharges by service line, we excluded normal newborn discharges. Including normal newborns effectively double-counts a single obstetrics case as two discharges.

⁸⁴ Obstetrics can be a desirable service line because women drive many of the health care decisions for their families; a good labor and delivery experience can make it more likely that the entire family will return to the hospital in the future. See Rhoda Nussbaum, *Studies of Women's Health Care: Selected Results*, 4 THE PERMANENTE JOURNAL, 62 (2000); Dagmara Scalise, *Defining and Refining Women's Health*, HOSP. & HEALTH NETWORKS MAGAZINE (Oct. 2003).

⁸⁵ This finding is consistent with public data showing that, unlike three of the four other area hospitals, SSH does not have licensed inpatient psychiatry beds. See DIV. OF HEALTH CARE FIN. & POLICY, MASS. EXEC. OFFICE OF HEALTH & HUMAN SERVS., 403 HOSPITAL STATEMENT OF COSTS, REVENUES & STATISTICS files provided to CHIA (FY2012). In 2012, area hospitals with substantial inpatient psychiatry capacity included Signature Brockton (22 licensed beds), Good Samaritan, (16 licensed beds), and Quincy MC (22 licensed beds). BID-Milton also has no licensed psychiatry beds. While SSH has behavioral health discharges, the lack of designated beds limits SSH's ability to meet more complex behavioral health needs.

⁸⁶ The mix of deliveries and newborns at each of the four community hospitals that comprise this category are: BID-Milton (0%), Good Samaritan (9%), Quincy MC (0%), Signature Brockton (8%). Similar trends were observed in examining just deliveries (and not newborns). In 2011, 14% of SSH's discharges from its service area were deliveries as compared to 9% for the PSA overall and 5% for area community hospitals serving residents of SSH's PSA.

⁸⁷ The mix of behavioral health at each of the four community hospitals that comprise this category are: BID-Milton (1%), Good Samaritan (12%), Quincy MC (7%), Signature Brockton (7%).

Inpatient Service Mix for Residents of SSH PSA – 2011

	All Discharges from PSA		SSH		Area Community Hospitals		Tertiary Hospitals		All Other MA Hospitals	
	%	Count	%	Count	%	Count	%	Count	%	Count
Medical	60%	59,771	64%	12,241	72%	21,616	46%	13,316	57%	12,598
Surgical	22%	22,273	17%	3,233	14%	4,368	34%	9,910	22%	4,762
Obstetrics	12%	12,065	18%	3,488	6%	1,792	17%	4,861	9%	2,924
Behavioral Health	6%	5,944	1%	231	8%	2,400	2%	683	12%	2,630
Total Discharges		100,053		19,193		30,176		28,770		21,914

NOTES

- (1) Source: 2011 MHDC Discharge Data, all discharges (all hospitals, commercial and non-commercial payers).
- (2) Service categories based on methodology set forth in *2012 Health Care Cost and Utilization Report*, HEALTH CARE COST INSTITUTE, available at <http://www.healthcostinstitute.org/files/HCCI%202012%20Methodology.pdf>.
- (3) “Area Community Hospitals” are the other hospitals located on the South Shore, who serve residents of SSH’s PSA: BID-Milton, Signature Brockton, Good Samaritan, Quincy MC.
- (4) “Tertiary Hospitals” are those with an average case mix index of ≥ 1.1 in FY11 (CHIA calculation using APR DRG case weights): Baystate Medical Center, BIDMC, BWH, Children’s Hospital, Dana Farber, Lahey Hospital and Medical Center, Massachusetts Eye and Ear Infirmary, MGH, New England Baptist, Tufts MC, and UMass Memorial Medical Center.

We were unable to replicate this analysis for Partners’ hospitals. One principal reason is that, unlike SSH, the Partners system includes non-GAC hospitals like McLean Hospital, which provides a range of inpatient and outpatient behavioral health services. Because statewide data on utilization of services at non-GAC hospitals like McLean are not yet available, we were unable to conduct a reliable analysis that would accurately reflect the full extent of the behavioral health services provided by Partners.

In sum, both revenue and discharge data indicate that SSH and most Partners hospitals have a higher commercial payer mix and/or lower Medicaid mix than other area hospitals. In its service area, SSH also provides a smaller share of inpatient behavioral health services and a larger share of deliveries than other area hospitals.

IV. IMPACT PROJECTIONS (2014 ONWARD)

Chapter 224 directs the HPC to enhance the transparency of significant changes to our health care market, given that provider alignments and consolidations impact health care system performance and levels of medical spending.⁸⁸ On the one hand, shifting physician alignments, increases in market concentration, and changing care referral patterns can increase the prices we

⁸⁸ See, e.g., AGO 2013 COST TRENDS REPORT, *supra* note 48, at Part III(C) (“While a provider alignment may improve an organization’s ability to bear risk or promote more efficient, coordinated care, those potential benefits should be balanced against the concerns of increasing market leverage and reducing consumer options.”).

pay for health care services.⁸⁹ On the other hand, provider alignments may improve an organization's ability to promote more efficient, coordinated care.⁹⁰

The parties before us are high-quality provider organizations with a stated commitment to improving care delivery on the South Shore. They have demonstrated experience in delivering high-quality care, and propose to enhance accountable care in this region. At the same time, there is the prospect that the union of financially strong organizations will tend to reinforce and continue the market strength of the resulting system, with potentially negative consequences for costs and market functioning. Included in these concerns are questions as to whether these transactions will yield gains in quality and access, and savings from care delivery improvements that are commensurate with anticipated cost increases. The remainder of this report addresses these related questions. It first examines ways in which the transactions may facilitate cost increases. It then turns to how the transactions may facilitate improvements in care delivery, and thus potential spending decreases and quality improvements.

A. COST IMPACT

One of the HPC's central responsibilities is to monitor the Commonwealth's progress in meeting the health care cost growth benchmark set forth in Chapter 224.⁹¹ Growth in total medical spending is driven by four principal factors: price, utilization, provider mix, and service mix. Provider consolidations or alignments can affect all of these factors. For example, hospital and physician alignments can result in:

- Changes in physician prices as new physicians join higher-priced physician groups;
- Changes in referral patterns (provider mix) as physicians shift utilization to their higher-priced new system;
- Increased bargaining leverage to negotiate higher commercial prices and other favorable contract terms; and
- Added facility fees when physician groups and their ancillaries are acquired by a hospital system.

⁸⁹ See generally Martin Gaynor & Robert Town, *The Impact of Hospital Consolidation – Update*, ROBERT WOOD JOHNSON FOUNDATION, SYNTHESIS PROJECT POLICY BRIEF, no. 9 (2012), available at http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf73261 (last visited Feb. 17, 2014) (reviewing literature indicating that increases in hospital market concentration lead to increases in hospital prices, that mergers in highly concentrated markets generally lead to price increases, and that competition increases quality of care); Deborah Haas-Wilson & Christopher Garmon, *Hospital Mergers and Competitive Effects: Two Retrospective Analyses*, 18 INT'L J. OF THE BUSINESS OF ECON. 17-32 (Feb. 2011), available at <http://www.smith.edu/economics/documents/Haas-WilsonGarmon.pdf> (last visited Feb. 17, 2014).

⁹⁰ See, e.g., Richard M.J. Bohmer & Thomas H. Lee, *The Shifting Mission of Health Care Delivery Organizations*, 361 N. ENGL. J. MED. 551 (Aug. 6, 2009), available at <http://www.exed.hbs.edu/assets/Documents/healthcare-mission.pdf> (suggesting that provider systems must aggressively pursue strategies of alignment, integration, and investment in order to meet market and regulatory demands for an improved value-to-price ratio).

⁹¹ MASS. GEN. LAWS ch. 6D, § 9 (2012) (requiring the HPC to establish annually “a health care cost growth benchmark for the average growth in total health care expenditures in the commonwealth,” pegged to the growth rate of the gross state product, and to “prominently publish the annual health care cost growth benchmark on the commission’s website”).

We examined each of these mechanisms for cost impact, and found:

- As SSPHO physicians join Partners, there will be changes in physician prices that increase total medical spending. Whether and how physicians from other systems may join Partners and begin receiving PCHI prices are governed by a complex series of intersecting contractual provisions, which are continually being renegotiated.
- Changes in referral patterns are anticipated to increase utilization of Partners and SSH facilities, thereby increasing total medical spending as Partners and SSH are generally higher-priced than their competitors.
- The commercial inpatient market will become significantly more concentrated as a result of the proposed acquisitions. This will likely reduce competition and increase the ability of the resulting system to leverage higher prices (whether fee for service or alternate payment prices) and other favorable contract terms in negotiations with commercial payers.
- Total medical spending will increase if facility fees are added to Harbor’s clinic or ancillary visits. Due to time and data constraints, the HPC was not able to estimate the potential cost impact of any new facility fees related to these transactions.

We report on projected increases to medical spending in two ways: (1) as a total dollar amount and (2) as a percent change to total medical spending in the South Shore region.⁹² Increases in total medical spending will lead to equivalent increases in health insurance premiums. The businesses and consumers who will most directly experience premium increases are those who obtain their care from SSH and SSPHO (including Harbor), whose prices and revenue are anticipated to increase as a result of these transactions. Most of those businesses and consumers are located in the South Shore region, which is why we show increases in costs as a proportion of total medical spending in this region. However, not all of the patients who obtain care from SSH and SSPHO necessarily live in the South Shore region, so a small proportion of the impact of the parties’ increased prices and revenue may be experienced outside of this region. For this reason, when we describe anticipated percent increases in total medical spending in the South Shore region, we use qualifiers such as “up to” or “approximately.”

Our cost impact analysis is based on data from the three major payers, who represent 80% of the commercial market. As such, our cost projections tend to underestimate the total dollar impact to commercial spending.⁹³ Due to the nature of contract negotiations and bargaining leverage, we would expect to see similar trends in the 20% of the commercial market for which we did not have detailed data.⁹⁴

⁹² Throughout this Part IV, the percent change to total medical spending in the South Shore region is based on 2011 spending by the three largest commercial payers for all members residing in the zip codes that constitute SSH’s PSA. See Section IV.A.3 for a further discussion of the HPC’s approach to calculating hospital PSAs.

⁹³ By contrast to total dollar figures, where we report on *percent impact* to spending, those figures do not necessarily underestimate impact to the commercial market. This is because those percentages reflect the dollar impact for the three major payers divided by only those three payers’ total medical spending in the South Shore region.

⁹⁴ In fact, the impact may be proportionately greater for this 20% of the market, which is comprised of small payers with less clout. For example, the HPC confirmed with a national payer that is not a top three payer in Massachusetts that its contracts do not include provisions – like the growth caps discussed below – that the three major payers have negotiated to moderate the cost impact of physician network growth. Contracts without these growth caps will

1. Increases in Physician Prices Are Anticipated As a Result of Partners' Acquisition of Harbor Medical Associates

As described above in Section III.A.2, PCHI receives some of the highest physician prices in the state. One mechanism by which these transactions are anticipated to increase costs is that the SSPHO physicians acquired by Partners will begin receiving higher PCHI prices. When and how physicians who join Partners can receive PCHI prices are governed by complex contractual provisions.

Contract negotiations between payers and providers determine prices for health care services in the commercial market, whether fee-for-service prices, bundled prices, or global risk payments. These negotiations are confidential, and until the health care cost trends examinations of the AGO pursuant to Chapter 305 of the Acts of 2008, the public had little to no information on the results of these private deliberations.

In addition to establishing prices, negotiations between payers and providers determine other important features of our market that impact total medical spending, such as the terms of quality incentive payments and the potential for other supplemental payments from payers to providers. These contract negotiations also shape whether and how physician groups can grow. The HPC found significant variation in the presence, content, and scope of provisions that govern physician network growth in the Commonwealth. We observed this variation across provider contracts at a single payer, and across different payers. Unevenly applied growth provisions often appeared to have the effect of “freezing” certain physician groups at historic sizes, without clear relation to the group’s price or efficiency. Consistent with previous Massachusetts reports, it is not always clear that the results of these private contract negotiations reflect value for purchasers and consumers.⁹⁵

The HPC interviewed the three major commercial payers to develop a deeper understanding of their contracts with PCHI and SSPHO. Our conversations suggest that even payers may not know with certainty all of the ramifications of a transaction on physician prices. This could be due to, for example, recently added contract provisions that have not yet been tested, and thus may be open to differing interpretations by provider and payer. Contracts are also renegotiated every couple of years, so the impact over time of a transaction that closes in a given year is shaped by contract negotiations that have not yet occurred.

In each of PCHI’s contracts with the three major payers, there is room for new physicians to join at PCHI’s prices,⁹⁶ which is anticipated to increase health care spending.⁹⁷ Some

experience a more immediate and proportionately greater cost impact than what we report for the three major payers below.

⁹⁵ See AGO 2010 COST TRENDS REPORT, *supra* note 14, at 43 (stating that “[w]hile growth caps can be seen as a reasonable attempt by payers to save costs by limiting the growth of their most highly-paid provider groups, given the market dynamics and price disparities we have documented, we are concerned that growth caps may have the deleterious effect of freezing disparities in the market place.”).

⁹⁶ As further detailed in Section II.B of Exhibit B-1, the HPC reviewed detailed payer contracts and confirmed its understanding of this topic with market participants. We found that each of the three major payers has negotiated a “growth cap” with PCHI, or a maximum number of physicians who may receive PCHI’s contracted rates at any

contracts permit new physicians to access PCHI rates over time, paying them an increasing fraction of full PCHI rates over several years. The timing and number of physicians seeking to join will also affect the scope of price increases. We report on our work modeling the cost impact of Harbor and other SSPHO physicians joining PCHI below. Because of the above-described contract terms related to timing and “phasing-in” of full PCHI rates, we report on our results separately for two periods. During the first three years following the Harbor acquisition, the annual cost impact will be slightly lower than the cost impact beginning in Year 4, when all of the new physicians will receive full PCHI rates.

We first modeled the cost impact of Harbor’s 65 physicians joining PCHI. We reviewed information indicating Harbor will join PCHI’s contracts on January 1, 2015, likely at PCHI integrated rates.⁹⁸ Across the three major payers, this would result in an average increase in Harbor physician prices of about 37.1% for the first three years. This equates to an additional \$7.2 million each year that the three major payers would pay for Harbor’s services (assuming no change to Harbor’s patient volume). Starting in Year 4, as full PCHI prices phase in for all Harbor physicians, the initial price increase of 37.1% for the first three years would grow to an anticipated permanent price increase of 41.5%. This equates to an additional \$8 million each year that the three major payers would pay for Harbor’s services, or a permanent increase to these payers’ total medical spending (and thus premiums) in the South Shore region of approximately 0.46%.⁹⁹

given time. PCHI can grow its network beyond this cap, but those “above-cap” physicians will receive far lower rates based on the payer’s standard rate schedule. Some growth caps are static over the term of the contract, while others permit a pre-defined annual increase for each year of the contract.

⁹⁷ In the major payer contracts we reviewed, we observed that growth caps can be effective in moderating the cost impact of growth of physician networks, but have not generally been successful in preventing cost impact altogether. Like all contract terms, growth caps are negotiated, and thus subject to the exercise of bargaining leverage. As contracts are renegotiated, growth caps can increase. In fact, some growth caps explicitly provide for growth over time, providing PCHI a pre-negotiated annual increase in the number of network physicians for the term of the contract. Moreover, while other contracts maintain a fixed growth cap over the term of the contract – generally only permitting *replacement* of slots for a physician group that leaves PCHI and not *net new* slots – replacing physician groups over time can still result in cost growth for the Commonwealth. This is because different PCHI groups are paid different prices, depending on whether the group is owned or affiliated, and whether it is considered an academic or community regional service organization (RSO). *Infra* note 98. As Partners moves to a more tightly integrated model of ownership of most members of PCHI, groups leaving at lower “affiliated” rates may be replaced with owned groups paid at a higher “integrated” or even “academic” rate. Cambridge Health Alliance (CHA) is an example of one such group that currently receives PCHI’s lowest “affiliated” price, and is leaving PCHI at the end of 2013. If CHA is replaced by an integrated or academic RSO that receives higher prices, there is likely to be a net increase in health care spending.

⁹⁸ PCHI physicians within a payer’s growth cap are paid one of three rates, depending on the type of physician and the classification of the physician’s RSO. Academic rates (for BWPO and MGPO physicians) are the highest, followed very close by integrated rates (generally, for PCHI’s employed physicians in the community). Non-employed PCHI affiliated community physicians receive a third rate, known as affiliated rates. All three rates are well above median rates for the three major commercial payers. Because Harbor is joining an academic RSO of PCHI, it is possible their physicians will receive PCHI’s slightly higher academic rates rather than its integrated rates. If so, the cost impact of Harbor joining PCHI will be somewhat higher than the figures we present here. *See infra* note 102.

⁹⁹ Payers would at some point raise premiums in an equivalent amount to cover this increase in medical spending, either for employer accounts in the South Shore area that use SSH and SSPHO services, or spread out across a broader actuarial pool across the state.

Not including Harbor, there are about 350 physicians remaining in SSPHO. Like Harbor, these physicians are clinically affiliated with SSH and, for many years, have jointly managed patient care with SSH pursuant to risk contracts with all three of the largest payers. Based on the parties' own plans, which emphasize close hospital-physician alignment as key for PHM and which include an unexecuted contract for SSPHO to join PCHI,¹⁰⁰ the HPC expects other SSPHO physicians to join PCHI as SSH joins Partners.¹⁰¹ Under current contracts with the three major payers, we found room for an additional several dozen to potentially more than 100 physicians to obtain PCHI rates (depending on the payer). We modeled the cost impact of this additional number of SSPHO physicians joining PCHI (which is considerably fewer than the actual number of physicians remaining in SSPHO), and found that for the three major payers, these physicians' prices would increase by an average of 28.3% for the first three years. This would amount to an additional \$6 million per year in spending for these payers. Beginning in Year 4, the price increase would grow to a permanent 36.6% increase in rates, resulting in a total dollar increase to spending of \$7.7 million per year, or a permanent increase to these payers' total medical spending in the South Shore region of approximately 0.44%.

Combined, these increased prices for Harbor and some additional SSPHO physicians will increase health care spending for the three major payers by an estimated \$15.8 million each year (\$13.2 million each year during the first three years). This equates to a permanent increase in total medical spending (and thus premiums) in the South Shore region of up to 0.90%.¹⁰²

	Annual Increase in Spending (Years 1 to 3)	Annual Increase in Spending (Year 4 onward)
Harbor Medical Associates (65 physicians)	\$7.2 million	\$8.0 million
Additional SSPHO Physicians (several dozen to 100+ physicians)	\$6.0 million	\$7.7 million
Total Yearly Increase in Spending	\$13.2 million	\$15.8 million

The presence and content of physician growth provisions in future Partners rate contracts will materially impact whether and by how much total medical spending increases due to

¹⁰⁰ See SSH Determination of Need Application, Attachment B, Affiliation Agreement *supra* note 19, at Art. 5.9.1 (stating “tighter integration” and “alignment” of physicians with SSH and the Partners hospitals is “a key component to successful implementation” of population health management) and SSH Determination of Need Application, Attachment B, Affiliation Agreement *supra* note 19, at Exh. 4.10.1 (affiliation agreement between SSPHO and PCHI).

¹⁰¹ However, one SSPHO local practice group has elected not to join PCHI. We received notice in July 2013 that Healthcare South, a 26-physician pediatrics group within SSPHO, is leaving SSPHO to join NEQCA's contracting network at the end of 2013.

¹⁰² These calculations assume that Harbor will receive PCHI integrated rates, rather than the higher AMC rates that other BWPO physicians generally receive.

changes in physician prices. If the parties obtain more favorable “physician add” terms from the payers than the ones we reviewed,¹⁰³ this increase in prices could be larger than the increase we modeled. For example, if Harbor and the other approximately 350 SSPHO physicians (minus Healthcare South¹⁰⁴) all increased to PCHI prices, it would increase annual spending by the three major payers by \$50.9 million, which equates to a permanent increase in total medical spending (and thus premiums) in the South Shore region of approximately 2.9%.

2. These Transactions Will Likely Result in Changes in Patient Care Referral Patterns (Provider Mix) That Increase Total Medical Spending

In addition to changes in rates of reimbursement (unit price), changes in referral patterns or site of care (i.e. provider mix) also impact total medical spending. This section examines changes in care referral patterns anticipated as a result of the proposed transactions, which are expected to shift utilization from competitor providers to more expensive Partners providers.¹⁰⁵

There are two groups of physicians whose care referral patterns might be expected to change following the transactions:

- a. Existing physicians who are already part of SSPHO (including Harbor); and
- b. New physicians whom the parties have stated they will recruit to the new combined system

For both groups of physicians (existing and new), we examine whether the physicians are likely to change which hospitals or physician groups they refer patients to following the transactions. We had access to site of care data by physician group for HMO/POS patients. In addition, we reviewed network-wide site of care data for total HMO/POS and preferred provider organization (PPO) populations, and noted they had similar distributions.¹⁰⁶ In our analysis, we examined the current care referral patterns of SSPHO/Harbor physicians, PCHI physicians, and the physicians of other provider systems operating in eastern Massachusetts. Within PCHI, we focused on the physicians at Newton-Wellesley and North Shore MC, the two Partners hospitals who are most similarly situated to SSH (all three are community hospitals of similar size and service offerings, and are located in communities surrounding metropolitan Boston). For each physician group, we examined how often physicians referred their patients to “in-system” or “preferred” hospitals, and whether those “in-system” hospitals, or rates of referral, were likely to change following the proposed transactions.

¹⁰³ See Section IV.A.3 for a discussion of how bargaining leverage with payers is anticipated to increase as a result of these transactions.

¹⁰⁴ Healthcare South is leaving SSPHO at the end of 2013. See *supra* note 101. For all of our calculations in which we model the effects of changes to SSPHO as a whole, we exclude Healthcare South.

¹⁰⁵ It is possible that, due to increased coordination of care, overall utilization levels will decrease as a result of these transactions. Potential efficiencies in reduced utilization are addressed in Section IV.B.1.

¹⁰⁶ This may be explained in part by the fact that many PPO patients – though they are not required by product design to select a PCP to direct their care – functionally have PCPs who help direct their care. See DIV. OF HEALTH CARE FIN. & POLICY, HEALTH CARE IN MASSACHUSETTS: KEY INDICATORS, at 18 (NOV. 2010), available at <http://www.mass.gov/chia/docs/r/pubs/10/key-indicators-november-2010.pdf> (last visited Feb. 17, 2014) (reporting that 90% of Massachusetts residents identified as having a personal health care provider in 2009).

a. Existing SSPHO Physicians

We compared referral pattern data for SSPHO physicians, Newton-Wellesley physicians, and North Shore MC physicians. We examined how often SSPHO patients received care at SSH versus other area hospitals and, when they traveled to Boston, how often they received care at BWH and MGH versus the three other GAC AMCs in Boston (BIDMC, BMC, and Tufts MC). Similarly, for Newton-Wellesley and North Shore MC patients, we examined how often they used Newton-Wellesley Hospital and North Shore MC versus other area hospitals, and how often they used BWH and MGH versus competitor AMCs.

We found that SSPHO's care referral patterns look very similar to those of the PCHI physicians at Newton-Wellesley and North Shore MC. These data indicate that SSPHO patients use SSH as frequently as – and often more frequently than – Newton-Wellesley patients and North Shore MC patients use Newton-Wellesley Hospital and North Shore MC. Because SSPHO physicians are already using their “home” hospital very frequently, there is not likely to be a significant change in these physicians' rate of use of SSH following the transactions.

SSPHO's rates of referral to Partners AMCs are approaching the rates at which PCHI community physicians (particularly Newton-Wellesley and North Shore physicians) refer their patients to Partners AMCs, likely bearing out the success of SSH's longstanding clinical affiliation with Partners. There is thus unlikely to be a dramatic change in SSPHO's use of Partners AMCs following the transactions. With that said, the data show some opportunities for SSPHO physicians to increase their use of Partners AMCs – particularly for outpatient care – to be more in line with the data for Newton-Wellesley and North Shore physicians. Shifting utilization from non-Partners AMCs to BWH and MGH is also consistent with the parties' plans for implementing PHM, which include keeping more care in-system following the transactions. If Harbor and other SSPHO physicians shifted their referrals to Partners AMC providers to more closely mirror the referral rates of Newton-Wellesley and North Shore physicians, the total cost impact for the three major payers would be approximately \$1.6 million per year.¹⁰⁷ This figure represents the projected impact to both HMO/POS and PPO populations.

b. New Physicians the Parties Seek to Recruit

Plans to recruit additional physicians to support PHM are a common goal of both the Harbor and SSH transactions.¹⁰⁸ In particular, Partners and SSH have specified plans to recruit 27 to 42 new PCPs to their network over five years to support implementation of PHM in the South Shore region.¹⁰⁹ Consistent with information provided by the parties, we expect that a number of patients currently receiving care from other local providers will become patients of these new PCHI PCPs. We also expect the care referral patterns of these PCHI PCPs to be in line with current SSPHO/PCHI practices (higher use of SSH and Partners hospitals).

¹⁰⁷ This figure is based on current SSPHO physicians, minus Healthcare South, shifting their care referral patterns to mirror other PCHI physicians. *See supra* note 101.

¹⁰⁸ See Section I.C of Exhibit B-2 for further detail on these common plans.

¹⁰⁹ See Section IV.B.2 for a discussion of the parties' perspective that there is a shortage of PCPs in the South Shore region to implement PHM effectively.

The table below shows, for one major payer, the average price of hospital services for patients of SSPHO compared to the patients of five large physician groups serving the South Shore region. The table shows how the prices for hospital services vary significantly based on the system with which the patient’s PCP is affiliated. On average, SSPHO doctors refer their patients to the most expensive mix of hospitals for outpatient care, and the second most expensive mix of hospitals for inpatient care. Our review of available data from the two other major payers suggests that for those payers, differences between SSPHO and other area groups is even more pronounced.

Hospital Referral Prices by Physician Group (One Major Commercial Payer)

	Area Physician Group 1	Area Physician Group 2	Area Physician Group 3	Area Physician Group 4	Area Physician Group 5	Average of 5 Area Groups	SSPHO
Average Price of IP Referral Hospitals	0.97	1.10	1.14	1.14	1.20	1.11	1.18
Average Price of OP Referral Hospitals	0.90	0.97	1.01	1.04	1.00	0.98	1.15

If any of the patients cared for by the parties’ newly recruited PCPs come from area physician groups, listed above, then a shift to care referral patterns in line with existing SSPHO practices will increase total medical spending. We modeled this increase in spending for 27 to 42 new PCPs and found that the three largest payers would pay an additional \$5.8 to \$9.0 million dollars each year for the care of these physicians’ HMO and PPO patients, due to changes in provider mix.¹¹⁰ This would increase total medical spending in the South Shore region by approximately 0.33% to 0.52% per year. Given that Partners and SSH have stated they will recruit these 27 to 42 PCPs over several years, the cost impact of this anticipated shift in care referral patterns will be experienced over time.

3. Increases in Market Concentration as a Result of these Transactions Are Anticipated to Increase the Ability of the Resulting System to Leverage Higher Reimbursement and Other Favorable Contract Terms

As discussed above, commercial prices for health care services (whether fee-for-service prices, global budgets, or other alternative payment methodologies) are established through contract negotiations between payers and providers. The results of these negotiations – both the prices that payers will pay for services and other contractual terms – are influenced by the bargaining leverage of the negotiating parties.¹¹¹ To assess whether bargaining leverage to

¹¹⁰ For each physician who fills his or her panel with patients from a low-cost system like Physician Group 1, payers will pay an additional \$132,000 annually for hospital care as referral practices for those patients shift to reflect greater use of SSH/Partners instead of lower-priced alternatives.

¹¹¹ Bargaining leverage impacts negotiations because a payer network that excludes “important” providers will be less marketable to purchasers (employers and consumers). If there are few or no effective substitutes for that

negotiate higher prices and other favorable contract terms is likely to increase as a result of Partners' acquisition of South Shore Hospital, the HPC analyzed the competitive effects of the proposed transaction, focusing on the parties' market share, anticipated changes in market concentration, and the parties' claims regarding competitive effects.^{112, 113}

An analysis of competitive effects often begins with an assessment of relevant markets. Relevant markets are markets in which the competitive effects of a proposed transaction, if any, are likely to manifest. Defining the relevant market depends largely on the composition of services offered by the parties (product markets), the location or locations in which these services are offered (geographic market), and the preferences and alternatives of consumers. For these transactions, the HPC analyzed the competitive effects on inpatient general acute care services¹¹⁴ in SSH's PSA.¹¹⁵ This approach is consistent with methods endorsed by the Federal Trade Commission (FTC) and the Department of Justice (DOJ) to screen for potential competitive effects.¹¹⁶ The HPC applied two methods for defining SSH's PSA¹¹⁷:

provider in a market, the potential cost to a payer of excluding the provider from that payer's network will be high, and that provider will have increased ability to command a higher price (or other favorable contract terms) from the payer. Previous reports by the AGO have demonstrated that market leverage is positively correlated with price differences between health care providers. Those reports also found that such price differences were not explained by differences in quality of care, complexity of services provided, or other value-based factors. *See, e.g.*, AGO 2010 COST TRENDS REPORT, *supra* note 14.

¹¹² In the context of antitrust law and economics, it is widely understood that market shares and market concentration analysis can shed light on the likely competitive effects of a proposed transaction. *See, e.g.*, F.M. Scherer, *Industrial Market Structure and Economic Performance*, Ch. 3 (2nd Ed. 1979); Dennis Carlton & Jeffrey Perloff, *Modern Industrial Organization*, 794-807 (2nd Ed. 1994); Massimo Motta, *Competition Policy: Theory and Practice*, 235-236 (2004).

¹¹³ Historically, it has been the role of state and federal law enforcement agencies such as the state AGO, the DOJ, and the FTC to investigate market consolidation through enforcement of antitrust law. However, that work is often non-public. This review does not repeat all of the econometric modeling of changes in competition (e.g., "willingness-to-pay" analysis) that might be pursued in a law enforcement context. Rather, we mirror many of the initial steps that would likely be included in an antitrust investigation to provide a public analysis of the likely nature of a transaction's competitive effects, so that transactions may be referred to appropriate agencies for further review as needed.

¹¹⁴ This analysis focuses on hospital discharges for GAC services, excluding normal newborns (including normal newborns would effectively double-count a single delivery as two discharges), non-acute discharges (e.g., discharges with a length of stay of greater than 180 days, rehabilitation discharges), and out-of-state patients. Given the scope of the parties' service offerings and the strength of their inpatient market share, we anticipate these transactions could result in competitive effects in other product markets as well, such as markets for outpatient and physician services in SSH's PSA. Due to time and data limitations, we did not engage in a separate competitive effects analysis for outpatient and physician services, but given the importance of inpatient care to the health care market, competitive effects in the market for inpatient GAC services could be probative of competitive effects in these other, related health care markets.

¹¹⁵ The HPC's working definition of hospital PSAs reflects key concepts that would be considered in a full antitrust analysis of "relevant geographic markets." For example, in defining PSAs, the HPC considered both whether the geographic area is important to the hospital (e.g., the area represents a significant proportion of the hospital's discharges) and whether the hospital is an important provider for the geographic area (e.g., the hospital is a short drive from the zip codes in question, and discharges from the hospital exceed a minimum proportion of the zip code's total discharges). As further discussed in Section II.A.2 of Exhibit B-1, this type of market share analysis by PSA is consistent with methods endorsed by the FTC and DOJ to screen for the likely competitive effects of a transaction, and as such is an efficient tool to determine which transactions this Commission should refer on to other agencies for potential further review.

¹¹⁶ *See, e.g.*, FED. TRADE COMM'N & U.S. DEPT. OF JUST. PROPOSED STATEMENT OF ANTITRUST ENFORCEMENT POLICY REGARDING PARTICIPATING IN THE MEDICARE SHARED SAVINGS PROGRAM, at 6 (2011), *available at*

1. The HPC's general method for defining a hospital PSA,¹¹⁸ which focuses on the contiguous zip codes closest¹¹⁹ to the hospital from which the hospital draws 75% of its commercial discharges; and
2. SSH's own method for defining its primary and secondary service areas, with the primary and secondary service areas respectively representing about 75% and 90% of SSH's total commercial and non-commercial discharges.¹²⁰

<http://www.justice.gov/atr/public/guidelines/269155.pdf> (last visited Feb. 17, 2014) (guidelines for evaluating the competitive impact of accountable care organizations (ACOs), which state that “[a]n initial step in determining whether an ACO is likely to raise competitive concerns, the Agencies will use a streamlined analysis that evaluates the ACO’s share of services in each ACO participant’s Primary Service Area (‘PSA’)”). See also 76 FED. REG. 67026, 67028 (Oct. 28, 2011), available at <http://www.gpo.gov/fdsys/pkg/FR-2011-10-28/pdf/2011-27944.pdf> (hereinafter FTC & DOJ ACO Final Policy Statement).

¹¹⁷ Both methods were implemented using 2011 MHDC discharge data purchased directly from MHDC. While an analysis could also be conducted for each of the Partners hospitals’ PSAs to determine whether SSH currently acts as a competitive restraint on price increases for Partners, we focused on SSH’s PSA based on our market understanding that it is SSH’s market in which the competitive effects of these transactions are most likely to be felt.

¹¹⁸ Chapter 224 requires the HPC to promulgate a standard methodology for calculating PSAs in the Massachusetts health care market. MASS. GEN. LAWS ch. 6D, § 13(j) (2012). We have surveyed (and continue to survey) how different providers in Massachusetts determine their service areas, and the latest empirical methods used by leading health care researchers. Our review has uncovered some modest differences in the various ways Massachusetts providers define their service areas (usually driven by unique characteristics of a provider or specific knowledge of the surrounding market), but similarities in approach far exceeded the differences. All methods in use assessed a hospital’s PSA based on the volume of discharges sent to the hospital from different towns or zip codes, and sought to identify a compact, contiguous area that is responsible for a significant proportion of the hospital’s discharges (and for which the hospital is an important provider). Some of the methods reviewed by the HPC explicitly considered the proximity of a given town or zip code to the hospital, while others did not. In seeking to identify a compact area that is responsible for a significant proportion of the hospital’s discharges, most methodologies resulted in a PSA comprising about 75% of the hospital’s discharges, which mirrors federal FTC/DOJ ACO guidelines. FTC & DOJ ACO Final Policy Statement, *supra* note 116. Based on this exhaustive review, and on extensive modeling of variations in methodologies across a spectrum of Massachusetts hospitals, the HPC has developed a working definition of PSA that yields coherent results for many different types of hospitals (e.g., quaternary/tertiary, community, urban, rural, high volume, low volume), whose service areas can be expected to be shaped by the hospital’s unique characteristics. The HPC’s methodology yields more consistently reliable results for a range of hospitals than other methods that may be used by individual hospitals to define their service area for business purposes. This methodology generally defines a PSA by focusing on the contiguous zip codes closest to a hospital by drive time, from which the hospital draws 75% of its commercial discharges, and for which the hospital represents a minimum proportion of the zip code’s total discharges.

¹¹⁹ Specifically, we measured the drive time from the centroid (or approximate center) of a zip code to the hospital. Although we reviewed some methods for defining a service area that do not explicitly consider geographic proximity, both the leading economic research and recent decisions by agencies that monitor health care markets have emphasized the importance of patient travel time in assessing a hospital’s market. See, e.g., *In the Matter of ProMedica Health System, Inc.*, FED. TRADE COMM’N, Docket no. 9346, at 26 (June 25, 2012); Katherine Ho, *The Welfare Effects of Restricted Hospital Choice in the US Medical Care Market*, 21 J. Applied Econ. 1039, 1051 (Nov. 7, 2006); Cory Capps et al., *Competition and Market Power in Option Demand Markets*, 34 RAND J. OF ECON. 737, 752 (2003); Robert Town & Gregory Vistnes, *Hospital Competition in HMO Networks*, 20 J. HEALTH ECON. 733, 746-47 (2001).

¹²⁰ We included both methodologies to ensure that our findings are robust, but we observe two limitations with SSH’s methodology for the purpose of assessing competitive impact. First, it appears that SSH uses all discharges, and does not examine commercial discharges separately. For the purpose of assessing competitive impact, it is more relevant to focus on commercially insured patients, as hospitals negotiate with private payers, not government payers. Second, SSH’s methodology does not assess geographic proximity of hospitals to patients, because it does

While the geographic areas defined by these two methods are not identical, they yield very consistent results for market shares and market concentration.

a. Market Shares

We found that in SSH’s PSA, as calculated using HPC methodology, Partners and SSH are each other’s closest competitors and the providers with the two highest market shares. Combined, Partners and SSH account for approximately 50% of the commercial discharges for residents of SSH’s PSA. To test whether these findings are consistent across different types of inpatient services, we also analyzed market shares for “tertiary/quaternary” discharges, and for “non-tertiary” discharges.¹²¹ When discharges are separated between tertiary and non-tertiary care, Partners and SSH remain the top two providers by market share in both service categories and together continue to account for 50% of the market.¹²²

Market Shares in South Shore Hospital’s Primary Service Area¹²³

Hospital System	Number of Commercial Discharges	Share of Commercial Discharges	Share of Non-Tertiary Commercial Discharges	Share of Tertiary Commercial Discharges
South Shore Hospital	7,927	26%	26%	16%
Partners	7,586	24%	24%	35%
Beth Israel Deaconess	4,155	13%	13%	15%
Steward	3,988	13%	13%	9%
Signature Healthcare	2,091	7%	7%	3%
Other	5,225	17%	16%	23%

not consider drive times. While their approach may be appropriate for internal business assessments, the HPC’s methodology is more appropriate in these dimensions for the purpose of assessing competitive impact.

¹²¹ “Tertiary or quaternary discharges” refer to those discharges of a higher intensity which are often less likely to occur at a secondary or community hospital. For the purposes of this report, “tertiary or quaternary discharges” are defined as those (1) within the top 10% of DRGs by case weight and (2) where at least 50% of services were rendered at hospitals with an average case mix index of 1 or greater.

¹²² Applying SSH’s methodology for defining a PSA yields even higher market share in the PSA – 62% combined, or 49% for SSH and 13% for Partners (51% and 12% for non-tertiary services, 28% and 30% for tertiary services). In all scenarios, SSH and Partners represent the two highest market shares in SSH’s PSA.

¹²³ Treats Jordan Hospital as part of the Beth Israel system, as Beth Israel’s acquisition of Jordan went into effect on January 1, 2014.

These data show that Partners and SSH already have significant (50%) market share in the region,¹²⁴ and that they are respectively the number 1 and number 2 providers of inpatient hospital services in that region. In health care markets, the merger of close competitors can reduce choices available to payers and employers building desirable provider networks and, as such, enhance the ability of the merging parties to negotiate higher prices and more favorable contract terms. Thus, the merger of these top two providers is anticipated to lessen competition and could have substantial implications for health care costs.

b. Market Concentration

The HPC also calculated market concentration before and after the proposed transaction in SSH's PSA¹²⁵ using the Herfindahl–Hirschman Index (HHI), a commonly used measure of market concentration and an indicator of the amount of competition among systems.¹²⁶ The change in concentration associated with a transaction can be indicative of the likely impact of the transaction on market power and the ability to negotiate higher prices. For example, the FTC and DOJ have noted that “[m]ost studies of the relationship between competition and hospital prices generally find increased hospital concentration is associated with increased price.”¹²⁷

The DOJ and the FTC use HHIs as initial screens for determining whether a given transaction raises competitive concerns and warrants further scrutiny. The highest level of scrutiny is reserved for transactions that result in a “highly concentrated market” (defined as an HHI of greater than 2,500) where the increase in HHI resulting from the transaction is greater than 200. Such transactions are presumed likely to enhance market power.¹²⁸

¹²⁴ It is worth noting that these high market shares, combined with a history of high prices at both the Partners hospitals and at SSH suggest that they may already be exerting considerable market power.

¹²⁵ A merger that significantly increases concentration in a PSA is likely to show similar effects in a full antitrust review. *See* Exh. B-1, Section II.A.

¹²⁶ The HHI is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of 30, 30, 20, and 20 percent, the HHI is 2,600 (900 + 900 + 400 + 400 = 2,600). HHIs range from near 0 (perfect competition) to 10,000 (one firm with a monopoly). When firms are equally sized, the HHI is equal to 100 times the per-firm market share. For example, two firms with a 50% share each give rise to an HHI of 5,000. Three firms with 33.3% share each give rise to an HHI of 3,333, and so on.

¹²⁷ FED. TRADE COMM'N & U.S. DEPT. OF JUST., IMPROVING HEALTHCARE: A DOSE OF COMPETITION, 1, 15 (July 2004), available at <http://www.ftc.gov/reports/healthcare/040723healthcarerpt.pdf> (last visited Feb. 17, 2014).

¹²⁸ This is a rebuttable presumption. Persuasive evidence that the merger is unlikely to enhance market power, including evidence of potential merger-specific efficiency gains, can rebut the presumption. This is important to note, as consolidation can produce benefits. *See, e.g.*, David Dranove & Richard Lindrooth, *Hospital Consolidation and Costs: Another Look at the Evidence*, 22 J. OF HEALTH ECON. 6, 983-997 (2003) (finding that mergers in which hospitals consolidate financial reporting and licenses can generate savings several years after the merger. However, this study did not find significant cost savings in non-license-combining mergers).

DOJ/FTC Horizontal Merger Guideline HHI Thresholds¹²⁹

Post-Merger Market	HHI	Δ in HHI	Presumption
Highly Concentrated	> 2,500	100 to 200	Potentially raises significant competitive concerns and often warrants scrutiny
		> 200	Presumed to be likely to enhance market power

Under the HPC’s methodology and SSH’s methodology for defining a PSA, as well as under SSH’s methodology for determining a secondary service area, market concentration is anticipated to increase substantially as a result of the transaction. Under all scenarios we analyzed, the increase in HHI in SSH’s PSA would be well over DOJ/FTC thresholds at which mergers are presumed likely to enhance market power.^{130, 131}

HHI Calculations Based on HPC and SSH Definitions of Primary Service Area

	HPC PSA	SSH-Primary	SSH-Secondary
Pre-Merger HHI	1,726	2,847	1,866
Post-Merger HHI	2,979	4,131	2,655
HHI Change	+1,254	+1,284	+789

Econometric studies of health care transactions and market models indicate that significant HHI increases, particularly in concentrated markets, increase providers’ ability to leverage higher prices and other favorable contract terms from commercial payers. For example, a leading 2012 analysis noted that “[h]ospital mergers in concentrated markets generally lead to significant price increases” and that “[t]he magnitude of price increases when hospitals merge in concentrated markets is typically quite large, most exceeding 20 percent.”¹³² Based on SSH’s

¹²⁹ See U.S. DEPT. OF JUST. & FED. TRADE COMM’N: HORIZONTAL MERGER GUIDELINES (Aug. 19, 2010), available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf>.

¹³⁰ The HHIs for the tertiary and non-tertiary markets are similarly above the DOJ/FTC thresholds. Using the HPC PSA, the post-merger HHI and change in HHI are 2,979 and 1,246 respectively for non-tertiary care, and the post-merger HHI and change in HHI are 3,073 and 1,113, respectively, for tertiary care.

¹³¹ This is only the effect in the market for inpatient general acute care services. Similar effects could be seen in other markets (outpatient care, physician services) and, if Partners succeeds in aligning physician incentives and recruiting area physicians away from competitors, market concentration could increase even further.

¹³² Gaynor & Town, *supra* note 89, at 2. We reviewed a “willingness-to-pay” (WTP) analysis of the SSH acquisition produced by a competitor provider using public data that indicated increases to SSH’s prices could be similarly large. A WTP analysis uses statistical modeling to predict how much customers of an insurance payer would be willing to pay to have (or keep) a particular health care provider in its network. In essence, it measures the value that consumers place on having the option of going to a particular provider. This value is assessed by determining a provider’s market share across hundreds of “micromarkets” defined by patient demographics and diagnoses. See Capps et al., *Antitrust Policy and Hospital Mergers: Recommendations for a New Approach*, 47 ANTITRUST BULL. 677, 693, 706-09 (2002); David Dranove & Andrew Sfekas, *The Revolution in Health Care Antitrust: New Methods and Provocative Implications*, 87 MILBANK QUARTERLY 607, 616-17 (2009). An extensive

commercial revenue for 2012, each 1% increase to SSH's prices would equal an additional \$1.7 million in payments from the three largest payers (or, across all commercial payers, an additional \$2 million to \$2.3 million). This equates to about a 0.1% increase in medical spending for those three payers in the South Shore region. The cumulative cost impact resulting from this enhanced bargaining leverage may also be amplified by other favorable contract terms that the provider negotiates with payers (such as favorable physician network growth terms, which can impact total medical spending).

c. Partners' and SSH's Claims That There Are Unlikely to Be Negative Competitive Effects Are Unpersuasive

Despite the significant increase in HHI as a result of this transaction, Partners and SSH have suggested that the transaction will not, in fact, enhance their market power. The HPC finds these statements to be contrary to and unsupported by the evidence. Specifically, Partners and SSH claim that the following factors will prevent them from obtaining additional bargaining leverage as a result of the transaction:

- SSH faces many competitors in the South Shore region;
- Competitor hospitals have excess capacity that would constrain the parties' market power; and
- Payers can successfully market limited and tiered network products in the South Shore region.

We address each of these points in turn.

First, contrary to their claims, SSH and Partners are the primary competitors in SSH's PSA. Other hospital systems each account for only a small percent of market share. In claiming that there is strong competition in the South Shore region, Partners and SSH significantly underestimate their market share both by calculating based on number of hospital beds (claiming

review of published papers also found that an HHI increase of 800 points within a metropolitan statistical area (a generally larger geographic area than a PSA) led to an average price increase of 5%. William Vogt & Robert Town, *How Has Hospital Consolidation Affected the Price and Quality of Hospital Care?* ROBERT WOOD JOHNSON FOUNDATION, SYNTHESIS PROJECT REPORT, no. 9 (Feb. 2006), available at http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2006/rwjf12056/subassets/rwjf12056_1 (last visited Feb. 17, 2014). Or, as others have put it, "each 160-point increase in HHI leads, on average, to price increases of about 1 percent." Cory Capps, *Price Implications of Hospital Consolidation*, in *THE HEALTHCARE IMPERATIVE: LOWERING COSTS AND IMPROVING OUTCOMES* 177, 182 (2010). See also Cory Capps & David Dranove, *Hospital Consolidation and Negotiated PPO Prices*, 23 *HEALTH AFFAIRS*, 175-181 (2004) (conducting a before-and-after study of 12 hospitals in various markets that participated in consolidations between 1998 and 2000 in which HHI increased by more than 500; finding that prices at all consolidating hospitals increased at a rate at least equal to the median rate of increase by other providers in the same market over the same time period; and finding that nine of the 12 consolidating hospitals increased prices by more than the median percentage); Steven Tenn, *The Price Effects of Hospital Mergers: A Case Study of the Sutter-Summit Transaction*, FED. TRADE COMM'N, BUREAU OF ECON., WORKING PAPER NO. 293, at 18-20 (2011) (conducting a retrospective review of the 1999 acquisition of Summit Hospital by Sutter medical system where the merger was estimated to result in about a 50% market share and finding that, controlling for hospital characteristics, Summit's price growth was 23% to 50% higher than other California hospitals, depending on the payer).

a combined market share of beds as 28.5%)¹³³ and by citing market shares for only the region SSH defines as a “secondary service area” (claiming a combined market share of 38.2%). Unlike the discharge data HPC used to calculate PSA, bed counts do not reflect the degree to which the local community relies on SSH, and thus misrepresent the importance of SSH and understate the degree to which SSH and Partners are viewed as close substitutes by commercially insured patients in SSH’s PSA. Moreover, the secondary service area for which the parties provide market shares will, as a larger geographic region, dilute the market share of SSH. Based on our calculations, using SSH’s own methodology for calculating market share, the combined share of Partners and SSH in SSH’s *primary* service area is over 62%.

Partners and SSH also highlight that there are several community hospitals located immediately south of Boston, referring specifically to Quincy MC, BID-Milton, Jordan Hospital,¹³⁴ Good Samaritan, and Signature Brockton. However, they do not describe the extent to which these hospitals are able to attract commercially insured patients from SSH’s PSA. Based on our analysis, we find that, combined, these facilities account for a minority (19%) of commercial discharges for patients living in SSH’s PSA.

Second, excess capacity at competitor hospitals is unlikely to be effective in constraining market power here. Even without the acquisition, Partners and SSH are among the highest priced hospitals in the state (as shown in Section III.A.2). Arguably, excess capacity may have kept prices from rising even higher, but it has not effectively constrained Partners’ and SSH’s prices from becoming among the highest in the state. With the additional bargaining leverage that will likely result from this transaction, it is unlikely that excess capacity at other area hospitals will function as a significant constraint on price increases post-merger when it has not effectively constrained the growth of historic prices. To the extent that Partners succeeds in its plans for physician alignment and recruiting, the excess capacity problem could become more severe as physicians refer patients to SSH and other Partners facilities instead of competitor hospitals.

Finally, there is evidence that limited and tiered networks are unlikely to be effective in constraining market power for these transactions. First, approximately 18% of the members of the four largest commercial payers in Massachusetts are currently in limited or tiered plans,¹³⁵ suggesting that the majority of commercially insured patients in the state still prefer broad networks. Second and more specifically, tiered and limited networks may not have the same success on the South Shore as in other regions of the state. For example, the payer with the most successful limited network plans in the state (Fallon, located in Central Massachusetts) does not offer a successful plan in the South Shore region. Moreover, since these transactions will result in the Partners-South Shore Hospital system having 50% of commercial inpatient market share in SSH’s service area, if Partners and SSH were to elect not to participate in a tiered network product, that non-participation alone would likely impair the product’s appeal. Even with

¹³³ Partners and SSH state that SSH’s market share is 3.3% and Partners’ market share is 25.2% using a count of beds.

¹³⁴ Throughout this report we have not listed Jordan Hospital as a comparator hospital for SSH due to patient discharge data which shows Jordan only accounts for 1% of discharges from the SSH PSA, compared to 7%, 5%, 3% and 3% for Signature Brockton, Good Samaritan, BID-Milton and Quincy MC, respectively.

¹³⁵ Calculated from data in the AGO 2013 COST TRENDS REPORT, *supra* note 48, at 12.

Partners' and SSH's participation in a tiered network product, employers may be reluctant to shift to a tiered plan that substantially increases their employees' out of pocket costs for popular hospitals that local patients use about 50% of the time.¹³⁶

For all of these reasons, we find Partners' and SSH's arguments that this transaction will not lead to negative competitive effects unconvincing. To the contrary, the combined market share of 50% in SSH's PSA, the merger of direct competitors, and the dramatic increase in HHIs raise significant concerns that this transaction will substantially reduce competition in SSH's PSA and confer market leverage to the parties. As a result, we anticipate that the parties will be able to leverage higher prices during future contract negotiations with payers.

4. Facility Fees May Further Increase Costs

A fourth mechanism for increases in health care costs as the result of an acquisition is the potential addition of "facility fees" for routine office visits and ancillary procedures. Facility fees are payments assessed by hospitals to cover their overhead costs, such as medical records, medical equipment, facility upkeep, and salaries of nurses and other staff. Facility fees are routinely included in hospital outpatient department visits, but can also apply to care delivered at off-campus sites—such as a physician's office or an ambulatory care center (ACC)—if that site is considered an outpatient clinic that bills through the hospital.

The acquisition of physicians with freestanding offices or ACCs, like Harbor, can result in added facility fees if the acquiring entity decides to treat those sites as outpatient clinics that bill through the hospital. Facility fees may be added without any change to the name or physical location of the office. This is, in effect, an immediate (and difficult to discern) site of care shift from a freestanding office visit to an outpatient hospital visit. Patients will begin receiving two bills for their usual office visits: a bill from their physician for his or her professional services and a second bill from the associated hospital.

When professional services are combined with a facility fee, the total bill is often much higher than it would be at a freestanding practice, even though the physician's professional fee may be lower than it would be in a freestanding practice. Facility fees can be added both for commercially insured patients and patients insured through government programs like Medicare. According to the Medicare Payment Advisory Commission (MedPAC) in its 2012 Report to Congress, the combined Medicare facility and professional payment to a practice billing as a hospital outpatient clinic can be 80 percent more than the equivalent professional payment to a freestanding practice.¹³⁷

In recent years there has been rapid growth in the acquisition of physician practices by hospitals or hospital systems, which raise the potential for added facility fees. Concurrently,

¹³⁶ Our review is consistent with information provided by one major payer, who noted that membership growth in tiered and limited networks has been modest so far, having little influence on market dynamics in eastern Massachusetts. This payer noted that if Partners and South Shore, which are in a higher tier than other network providers, were to merge, even fewer members who are tied to these providers would opt for tiered and limited network products.

¹³⁷ MEDICARE PAYMENT ADVISORY COMMISSION, REPORT TO THE CONGRESS: MEDICARE PAYMENT POLICY (Mar. 2012), available at http://www.medpac.gov/documents/Mar12_EntireReport.pdf.

MedPAC has noted that visits to outpatient-based practices, which can bill a facility fee, are increasing at a faster rate than visits to freestanding practices.¹³⁸ This shift in site of care can substantially increase costs,¹³⁹ and is currently not well-monitored in the Commonwealth.

These transactions have the potential to increase facility fees, as Harbor provides a range of physician services at its freestanding sites, from primary care and urgent care to imaging and laboratory. Harbor also owns an ambulatory surgery center, South Shore Endoscopy Center, which provides colonoscopies and other outpatient gastrointestinal procedures. As of December 2013, the parties had not yet determined how they would approach billing for many Harbor services. In the Partners-SSH Response to the Preliminary Report, the parties state for the first time they “have no plans to institute facility fees for Harbor physician office visits.”¹⁴⁰ This is an important update. However, in addition to office visits, Harbor provides an array of ancillary and ambulatory surgery services. It will be important to verify that billing for these ancillary and ambulatory surgery services, similar to billing for office visits, is included in the parties’ commitment not to charge facility fees and that the parties execute on their commitment. This is especially important given the well-documented trend in growth of facility fees, and the contractual potential, once Partners owns SSH and Harbor, for added facility fees.

Of the four mechanisms for cost impact described in this section—changes in physician prices, changes in referral patterns, increased bargaining leverage to negotiate higher prices and other favorable contract terms, and added facility fees—we modeled in detail increases in spending due to the first two mechanisms. As described above, we found that anticipated increases in physician prices, based on current contract terms for the three largest commercial payers, will increase total medical spending for those payers by about \$15.8 million annually.¹⁴¹ We also found that changes in referral patterns will likely increase spending by an additional \$7.4 million to \$10.6 million annually: \$1.6 million for changes in care referral practices by existing SSPHO physicians, and \$5.8 to \$9.0 million for changes in the referral practices of newly-recruited physicians (depending on the number of PCPs the parties ultimately recruit). Thus, for changes in price and referral patterns alone, we anticipate an annual increase in total medical spending of \$23 to \$26 million for the three largest commercial payers, or a 1.3% to 1.5% increase to total medical spending in the South Shore region.¹⁴² While we did not model the price impact of increased market concentration, it is worth noting that each additional 1% increase in SSH’s price would equal an additional \$1.7 million in annual spending for the three largest commercial payers. Thus, the additional spending impact of any such price increases may be substantial.

¹³⁸ See *id.* at 51 (“In 2010, the volume of visits to the higher paid outpatient-based practices owned by hospitals grew by 6.7 percent, while visits to the lower paid freestanding practices grew by less than 1 percent.”).

¹³⁹ MedPAC predicted that if the percentage of office visits billing as hospital outpatient visits were to increase at the rate they increased in 2010, Medicare spending would increase by \$2 billion a year and patient cost sharing would increase by an additional \$500 million per year nationally by 2020. *Id.* at 73.

¹⁴⁰ Exh. A-1, Partners-SSH Response, at 9.

¹⁴¹ After a three-year ramp up period, during which the added spending will average \$13.2 million annually. The precise amount of this increase will depend on exactly how many, when, and at what rates SSPHO physicians are able to join PCHI’s contracts.

¹⁴² The corresponding cost impact for smaller payers may be even greater. See *supra* note 94.

B. CARE DELIVERY IMPACT: POTENTIAL FOR COST SAVINGS AND QUALITY IMPROVEMENT

The parties describe their goal in undertaking these transactions as developing a “population health management (PHM) system of the future for patients in Southeastern Massachusetts.”¹⁴³ The parties expect successful implementation of PHM to result in significant quality and cost benefits in the region, including improved health outcomes, the provision of care “in a more patient centered manner,” and moderation of “the rate of growth of health care expenditures in Southeastern Massachusetts.”¹⁴⁴ The parties’ strategies for implementing PHM include:

- Implementing “medical neighborhoods” to align primary care and specialist physicians and encompass a full spectrum of care including community-based prevention and post-acute services;
- Expanding Partners’ high-risk management program, the Integrated Care Management Program (iCMP), to support cross-continuum management of complex patients with chronic diseases;
- Utilizing telehealth programs and mobile observation units to provide alternatives to hospital care;
- Keeping care in the community setting, focusing on a strategic priority of “right care, right time, right place”;
- Expanding information technology resources, including Partners’ Epic EMR infrastructure enhancements;
- Building upon Partners’ prior success in accountable care initiatives.

One important way Chapter 224 advances the transformative potential of such care delivery reforms is by requiring that providers proposing to undertake significant changes provide measurable indicators of how those changes are likely to result in improved performance. This is particularly important given that success is not assured, and given the potential burdens to employers and consumers that can result from the additional scale and corporate integration that some providers believe is necessary to achieve accountable care. This section addresses the HPC’s extensive review of the parties’ stated goals for the transactions and the information they provided in support of how and when these alignments would result in efficiencies and care delivery improvements.

We first examine potential savings, based on data provided by the parties regarding their previous success with accountable care initiatives and projected future savings. We then examine the role of these transactions in facilitating the parties’ plans for PHM and quality improvement. We found:

¹⁴³ See SOUTH SHORE HOSP., NOTICE OF MATERIAL CHANGE TO THE HEALTH POLICY COMM’N, (Apr. 3, 2013), AS REQUIRED UNDER MASS. GEN. LAWS CH. 6D § 13 (2012); PARTNERS HEALTHCARE SYSTEM, NOTICE OF MATERIAL CHANGE TO THE HEALTH POLICY COMM’N (Apr. 22, 2013), AS REQUIRED UNDER MASS. GEN. LAWS CH. 6D § 13 (2012).

¹⁴⁴ *Id.*

- Partners' experience in accountable care initiatives demonstrates potential for improving quality and efficiency through more integrated, accountable care. However, the anticipated cost increases described in Section IV.A far exceed the potential savings from expanding these initiatives into the South Shore region. Nor have the parties provided compelling evidence of other potential efficiencies that would offset these known costs.
- The parties' position that a corporate acquisition of SSH and Harbor is necessary to achieve the quality and efficiency benefits of care delivery reform is not consistently supported by the experience of the parties and other Massachusetts providers.

1. Partners' Experience in Accountable Care Initiatives Demonstrates Potential for Improving Quality and Efficiency, But Anticipated Costs from These Transactions Far Exceed the Potential Savings

a. *Partners' Experience in Accountable Care Initiatives Demonstrates Potential for Improving Quality and Efficiency*

Partners has implemented innovative delivery models focused on PHM. Its activities to promote PHM across its system include implementation of medical neighborhoods to enhance alignment across the care continuum, increasing the number of accredited PCMHs, expanding its high-risk care management program (iCMP), as well as investing in health information technology (HIT). In materials to the HPC, Partners highlighted three examples of its historic experience in PHM:

- A two-phase CMS Demonstration from 2006 to 2011, in which successive Partners providers (MGH, followed by BWH and North Shore MC) managed the care of certain high-risk Medicare beneficiaries (about 3,400 patients in Phase I and about 6,990 in Phase II¹⁴⁵);
- Partners' first year of performance in CMS's Pioneer ACO program, which encompassed 52,000 Medicare beneficiaries;
- Partners' first year of performance in the Alternative Quality Contract (AQC)

For the two recent initiatives, the Pioneer ACO and AQC, Partners has only completed one year of performance, so it is challenging to make meaningful projections and we are not yet able to study trends. Partners' results in the CMS high-risk demonstration were positive.¹⁴⁶ The first pilot, implemented at MGH, improved quality performance across multiple domains. For example, primary care providers supported the program with 67% agreeing that the demonstration improved their quality of practice; admissions and emergency department visits rose more slowly for the demonstration cohort compared with peers, suggesting both cost and

¹⁴⁵ The total number of participants over both phases may be somewhat fewer than these figures reflect due to some patients continuing on from Phase I to Phase II, and some patients opting out.

¹⁴⁶ Lyle Nelson, *Lessons from Medicare's Demonstration Projects on Disease Management and Care Coordination*, CONGRESSIONAL BUDGET OFFICE, Working Paper 2012-01 (Jan. 18, 2012), available at http://www.cbo.gov/sites/default/files/cbofiles/attachments/WP2012-01_Nelson_Medicare_DMCC_Demonstrations.pdf.

quality benefit; and adjusted mortality rates were lower for the MGH populations.¹⁴⁷ Later pilots at BWH and North Shore MC also demonstrated benefits to patient care, though on a smaller scale.¹⁴⁸

Partners has recently implemented an internal performance framework that pools risk at the system level and establishes consistent financial and quality performance benchmarks for its physicians. Partners states that, by insulating physicians from the variation in payer-specific performance requirements, this uniform structure creates an opportunity to focus day-to-day provider activities on a consistent set of PHM-related aims. The HPC was unable to make any findings regarding the impact of this framework on the parties' cost and quality performance as a result of these transactions.

b. The Cost Increases Anticipated from the Proposed Transactions Far Exceed Savings Achieved from Partners' Accountable Care Initiatives to Date

Partners provided information on the savings it generated from each of the above initiatives. The HPC applied those savings to its best estimates of the applicable population on the South Shore to model potential cost savings from the proposed transactions.¹⁴⁹ In this section, we present our estimates of cost savings. In the next section, we examine whether a corporate acquisition is necessary to attain these savings.

For the CMS high-risk demonstration, the HPC reviewed three evaluation reports, commissioned by CMS,¹⁵⁰ to estimate potential decreases in total medical spending if the parties achieved similar rates of savings for a comparable patient cohort on the South Shore. The reports indicate that over different phases of the demonstration, MGH, BWH, and North Shore MC achieved different rates of savings (or losses) for the intervention cohort compared to similarly situated control groups. "Losses" are possible under the program because CMS paid Partners certain care management fees to manage the care of the demonstration cohorts, which were payments CMS did not make for the care of the control groups. Where the medical spend of the intervention cohort *combined* with the additional care management fees exceeded the medical spend of the control groups, the intervention is characterized as resulting in a net "loss."

¹⁴⁷ Nancy McCall et al., RTI INTERNATIONAL, *Evaluation of Medicare Care Management for High-Cost Beneficiaries (CMHCB) Demonstration: Massachusetts General Hospital and Massachusetts General Physicians Organization (MGH)*, CTR. FOR MEDICARE & MEDICAID SERVICES (Sept. 2010).

¹⁴⁸ The total number of beneficiary months engaged in the demonstration at MGH was more than twice the respective beneficiary months at BWH and at North Shore MC.

¹⁴⁹ While the HPC received some information on Partners' historic savings from these three initiatives, we did not receive requested documentation of corresponding savings on the South Shore as a result of the proposed transactions.

¹⁵⁰ William Wrightson et al., ACTUARIAL RESEARCH CORPORATION, *Massachusetts General Hospital Phase 1: Care Management for High Cost Beneficiaries Demonstration* (July 21, 2010); Nancy McCall et al., RTI INTERNATIONAL, *Evaluation of Medicare Care Management for High-Cost Beneficiaries (CMHCB) Demonstration: Massachusetts General Hospital and Massachusetts General Physicians Organization (MGH)*, CTR. FOR MEDICARE & MEDICAID SERVICES (Sept. 2010); Nancy McCall et al., RTI INTERNATIONAL, *Evaluation of Medicare Care Management for High-Cost Beneficiaries (CMHCB) Demonstration: Final Reconciliation Draft Report*, CTR. FOR MEDICARE & MEDICAID SERVICES (June 4, 2013) [hereinafter Final Reconciliation Draft Report].

For most cohorts, Partners achieved some meaningful level of net savings, though the experience of North Shore MC, the one community provider that participated, resulted in a net loss.¹⁵¹ If SSH's performance in managing the care of high-risk Medicare patients were to mirror that of the most successful provider in the demonstration, MGH, annual savings in the South Shore region of up to \$6.4 million could be possible¹⁵² (not accounting for the cost of additional upfront infrastructure investments that Partners made to implement the demonstration¹⁵³). Alternatively, should SSH's experience align more closely with that of North Shore MC, "losses" (higher spending than would otherwise be projected) could reach \$1.6 million annually.

Regarding CMS's Pioneer ACO program, Partners is one of five Pioneer ACOs in Massachusetts and 32 nationwide. In its first year, 2012, Partners reported early returns for the management of 52,000 Medicare patients, decreasing the rate of growth of their health care costs by approximately 2.4% as compared to the Medicare reference trend. Based upon Partners' 2012 Pioneer ACO Settlement Report, and publicly available information on the performance of three of the other four Massachusetts Pioneer ACOs,¹⁵⁴ the HPC developed estimates of potential cost savings if the parties achieved similar trends for Medicare patients on the South Shore.

The HPC examined available information on three of the other four Massachusetts Pioneer ACOs. We averaged the performance of these three ACOs, and found that Partners' performance was better than this average. Overall, two of these ACOs (Beth Israel Deaconess Care Organization (BIDCO) and Mount Auburn Cambridge Independent Practice Association (MACIPA))¹⁵⁵ outperformed Partners, while Partners outperformed the third ACO. Should a potential Pioneer ACO in the South Shore region perform similarly to the Partners Pioneer ACO, annual savings on the order of \$150,000 to \$240,000 could be achieved for the Medicare population in this region.

¹⁵¹ In Phase I of the program, MGH achieved net savings of \$4.3 million over three years (but returned a portion of care management fees to CMS as a result of falling short of targets). In Phase II, across MGH, BWH, and North Shore MC, the program netted annual savings of \$6.01 million (a 4.1% savings rate) from August 1, 2009 to December 31, 2011 in comparison to control populations. The vast majority of these savings derived from MGH cohorts during later years of the demonstration. The original MGH cohort and the BWH cohorts each achieved net savings of less than \$500,000 annually, while the experience of North Shore MC resulted in a net loss of \$2.1 million over this provider's 29-month participation period (-3.2%). Under two different methods, ARC and RTI calculated different results, and neither method appears inherently superior to the other. The variability in cohort results under either method raises some questions about the generalizability of these findings to other Partners or non-Partners institutions. See Final Reconciliation Draft Report, *supra* note 150.

¹⁵² We cannot infer savings for a commercial population based on savings achieved for a high-risk Medicare population. See *infra* note 158.

¹⁵³ Partners invested significantly in the demonstration, including a pilot study and more than two years of planning, in addition to personnel and logistics (e.g., 11 nurse case managers, a project manager, administrative assistant, community resources specialist, patient financial counselor, clinical team leader, medical director, discharge case manager, data analytics team, mental health team leader, clinical social worker, two psychiatric social workers, forensic clinical specialist, Health Dialog, EMR, and an IT based assessment tool). We were unable to estimate "all-in" savings to apply to the South Shore region (savings net of upfront investments), because Partners' program costs are not known.

¹⁵⁴ Data were unavailable for Steward.

¹⁵⁵ BIDCO achieved 4.2% savings and MACIPA achieved 3.4% savings.

Finally, the HPC obtained information on the parties' performance under BCBS's AQC risk contract. Under a commercial global risk contract, providers negotiate a "global budget" for the total cost of care of the commercial members in the risk contract. The budget is a targeted maximum amount the payer will pay for the cost of all of the care these members receive in a given year (including the cost of care the members receive from other providers). At the end of the year, if the total cost of care is less than the negotiated budget, the provider may receive a surplus payment from the payer. If the total cost of care exceeds the budget, the provider may owe a deficit payment to the payer. The AQC is a multiyear contract, so providers negotiate not only a global budget for the first year, but also a target "trend" to apply to this budget year over year, to determine the spending trend the provider must "beat" to earn a surplus. Risk budgets, like other aspects of commercial contracts, are negotiated, and subject to the exercise of bargaining leverage. As previous Massachusetts reports have noted, there is significant variation in the size of budgets that different providers receive to care for comparable patient populations.¹⁵⁶

In 2012, Partners' first year in the AQC, both Partners and SSPHO (including Harbor) beat the negotiated trend against their respective negotiated budgets. However, we did not see evidence that Partners had superior efficiency performance compared to SSPHO. In comparing PCHI's effective budget¹⁵⁷ with SSPHO's, we found that PCHI received a higher budget than SSPHO to care for a comparable patient population. Notwithstanding that PCHI's budget was 8.7% larger than SSPHO's, SSPHO outperformed PCHI, coming under its smaller budget by 7.1%, while PCHI came in under its larger budget by 0.7%. Here, where there is no evidence that Partners' performance was superior to that of SSPHO, we would not anticipate SSPHO to achieve superior savings in the AQC as a result of the transactions. Besides citing AQC performance, the parties did not provide any other data on their comparative experience managing commercially insured populations to support reliable projections of commercial efficiencies driven by the transactions.¹⁵⁸

¹⁵⁶ See AGO 2013 COST TRENDS REPORT, *supra* note 48, at 24.

¹⁵⁷ By effective budget, we mean we adjusted both budgets to account for differences in health status and covered services, so they may be validly compared.

¹⁵⁸ We cannot infer savings for a commercial population based on savings achieved for a Medicare population. Medicare populations differ from commercially insured populations based on age, medical complexity, health status, and other important factors. Due to these differences, the scope of opportunity for savings and the types of interventions necessary to achieve savings are likely to be very different between these populations, with potentially more dollars available for savings for Medicare populations, which have on average higher TME. See, e.g., Henry Dove & Ian Duncan, *An Introduction to Care Management Interventions and their Implications for Actuaries, Actuarial Issues in Care Management Evaluations* (Aug. 2004), available at <http://www.soa.org/research/research-projects/health/research-evaluating-the-results-of-care-management-interventions-comparative-analysis-of-different-outcomes-measures-claims.aspx> (finding that variation in Medicare eligibility can affect the result of outcome measurement exercises); CTR. FOR HEALTH INFO. & ANALYSIS, *Preventable Hospitalizations - Data Appendix* (Aug. 2012), available at <http://www.mass.gov/chia/docs/cost-trend-docs/cost-trends-docs-2012/preventable-hospitalizations-appendix-a.pdf> (finding that the most common types of preventable hospitalizations are disproportionately found in Medicare beneficiaries); Elizabeth Stranges & Carol Stocks, AGENCY FOR HEALTHCARE RESEARCH AND QUALITY, *Potentially Preventable Hospitalizations for Acute and Chronic Conditions*, HCUP STATISTICAL BRIEF, no. 99 (Nov. 2010), available at <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb99.jsp> (finding that "[h]ospital stays paid for by Medicare were over three times more likely to be potentially preventable than were stays paid for by private insurance or Medicaid") (all last visited Feb. 17, 2014).

c. *Partners' and SSH's New Claims of Commercial Savings Lack Necessary Information to Elevate Them from Speculative Assertions to Credible Projections and Raise Methodological and Substantive Concerns*

In the Partners-SSH Response, Partners and SSH submit new claims on potential commercial savings not previously provided to the HPC. Partners and SSH project that the totality of various PHM strategies that Partners plans to implement in the South Shore region will result in commercial savings of \$158.6 million over eight years (2016 to 2023), or an average of \$19.8 million a year. These figures do not contain the substantiation required to elevate speculative assertions to credible projections. For example, Partners and SSH do not provide any information regarding the scope of savings for individual PHM strategies cited, their underlying assumptions for per member savings projections, a timetable for implementation of strategies that could be tested for consistency with savings, or detail regarding how savings would be passed on to consumers. This substantiation is all the more critical here, where the rates of savings projected by Partners and SSH exceed even the most successful PHM savings rates reported to date.¹⁵⁹ We find these high-level claims do not provide compelling evidence that these transactions are likely to drive lower TME compared to South Shore providers' already more-efficient independent performance. At a minimum, these claims require further review.

Partners' and SSH's new claims also raise methodological and substantive concerns. In particular, several aspects of these claims are contradicted by the data, while the overall model relies on questionable assumptions.

First, potential savings must be compared to a meaningful baseline: the performance of South Shore providers independent of the transactions. We saw no evidence that Partners' and SSH's model credits South Shore providers with the care management expertise and abilities they have already developed, which have resulted in commercial TME that is *lower* than Partners'. Partners confirmed it developed its per member savings assumptions without the benefit of SSPHO data.

¹⁵⁹ The parties' model assumes savings of approximately five percent of TME. Evidence from statewide performance in the AQC suggests that gross savings that average 2.8% of TME can be achieved compared to spending in non-participating groups. Zirui Song et al., *The 'Alternative Quality Contract,' Based on a Global Budget, Lowered Medical Spending and Improved Quality*, 31 HEALTH AFFAIRS, no. 8 (2012), available at <http://content.healthaffairs.org/content/early/2012/07/09/hlthaff.2012.0327.full.pdf+html> (last visited Feb. 17, 2014). Compared with other nationally recognized models, Partners' projected savings are also high, especially given varied results across models. See, e.g., Robert Reid et al., *The Group Health Medical Home At Year Two: Cost Savings, Higher Patient Satisfaction, and Less Burnout for Providers*, 29 HEALTH AFFAIRS, no. 5, at 835-843 (2012), available at http://www.ncqa.org/portals/0/public%20policy/reid_-_pcmh_success_8.30.12.pdf (last visited Feb. 17, 2014) (describing savings in the Seattle-based Group Health Cooperative's patient centered medical home model); David Bott et al., *Disease Management for Chronically Ill Beneficiaries in Traditional Medicare*, 28 HEALTH AFFAIRS 1, 93 (2009), available at <http://content.healthaffairs.org/content/28/1/86.full.pdf+html?sid=fa7bebe9-c8ab-49df-8804-ab3ca5db90d9> (last visited Feb. 17, 2014) (only seven of 35 Medicare-funded disease management pilots in 22 states were cost effective enough to be net cost neutral); Meredith Rosenthal et al., *Will the Patient-Centered Medical Home Improve Efficiency and Reduce Costs of Care? A Measurement and Research Agenda*, 67 MED. CARE RESEARCH & REV. 383, 476 (Aug. 2010).

Second, genuine savings must be netted against investments. Partners' and SSH's figures do not account for program investment costs or other upfront or supplemental spending, which the parties indicate are substantial. In addition, Partners' and SSH's model depends on unrealistic assumptions about the size and health of the relevant patient population that overstate the scope of potential savings. For example, leading research indicates that an appropriate patient panel size would likely be fewer than the 2,600 patients assumed by the parties. This means that the size of the patient population that Partners and SSH assume savings could apply to may be overstated.¹⁶⁰ Partners and SSH also assume that their commercial populations have similar risk profiles, and therefore similar opportunities for savings. However, data from the three major payers show that SSPHO's commercial population is healthier than PCHI's, and thus the scope of savings asserted for the higher-risk PCHI population is not necessarily translatable to the healthier SSPHO population.

In addition to these methodological concerns, several of Partners' and SSH's claims about potential commercial savings are contradicted by the data. For example, they claim that these transactions are likely to result in substantial savings from bringing admissions rates at SSH in line with those at Newton-Wellesley. Data on admissions rates from the major payers contradicts this claim that SSH's admissions rates are higher than Partners' and that an acquisition by Partners would drive down admissions rates.¹⁶¹ The most recent data available from one major payer shows that SSPHO physicians had a *lower* admissions rate than PCHI physicians, including Newton-Wellesley physicians.¹⁶² This payer's data shows that SSPHO admitted patients at a rate of 58 admissions per 1,000 members, compared to 76 admissions per 1,000 members for all PCHI physicians and 78 per 1,000 members for Newton-Wellesley physicians. For another major payer, SSPHO again had lower admissions rates than PCHI (63 per 1,000 members versus 68 per 1,000 members).¹⁶³

¹⁶⁰ See, e.g., Justin Altschuler et al., *Estimating a Reasonable Patient Panel Size for Primary Care Physicians With Team-Based Task Delegation*, 10 ANNALS FAM. MED., no. 5, at 396-400 (2012), available at <http://www.annfammed.org/content/10/5/396.full.pdf+html> (last visited Feb. 17, 2014) (finding that a primary care team could reasonably care for a patient panel of between 1,387 and 1,947). See also AHRQ Innovations Exchange, *Service Delivery Innovation Profile: Medical Home Features Small Panels, Long Visits, Outreach, and Caregiver Collaboration, Leading to Less Staff Burnout, Better Access and Quality, and Lower Utilization* (2010), available at <http://www.innovations.ahrq.gov/content.aspx?id=2703> (last visited Feb. 17, 2014) (examining a top-performing patient-centered medical home and finding increases in performance as panel size decreased to an average of 1,800 patients per physician). Rendering the panel size underlying the parties' projections consistent with leading research would reduce the parties' projected savings by an estimated 25% to 47%, or \$40 to \$74 million over the eight years.

¹⁶¹ We reviewed 2011 and 2012 data available from two major payers (including the largest commercial payer) showing the admissions rate for the commercial patients under PCHI's and SSPHO's care. These data show precisely the number of patients under PCHI's and SSPHO's care, and precisely the number of admissions for those patients. Rather than using these data, Partners relied on a national database of insurance coverage information to estimate the number of patients under its care and then linked those estimates to general data on admissions for its hospitals. The figures in the Partners-SSH Response accordingly do not reflect provider-specific admissions rates.

¹⁶² See Exh. B-1, at 5.

¹⁶³ We also examined risk-adjusted and case mix-adjusted admission rates and found trends that consistently contradict the parties' position that Newton-Wellesley has experienced lower admissions rates than SSH that could drive significant reductions in admissions post-transaction. Other aspects of the parties' admissions analysis also suffer from methodological flaws, even if one were to accept that the transactions would drive admissions reductions. Principally, in calculating potential savings from admissions reductions, the parties fail to net out the costs of additional ambulatory care needed to prevent hospitalizations, and they overestimate savings by assuming avoided admissions are of average cost (preventable hospitalizations are typically of lower complexity than the average admission and are thus of below average cost). See CTR. FOR HEALTH INFO. & ANALYSIS, *Preventable*

In summary, we have not received adequate evidence showing how these transactions are likely to drive overall improvements to South Shore providers' performance. Based on detailed analysis over a four month period, the HPC credited every data driven model of the parties' performance to estimate that these transactions could result in care delivery savings of up to \$6.6 million per year, driven by expansion of Medicare programs. These potential savings amount to a small fraction of the anticipated increases in spending from the proposed transactions, as well as compared to Partners' initial \$200 million investment (described in Part II).

2. The Parties' Position that Partners' Ownership of SSH and Harbor Is Necessary to Achieve the Benefits of Care Delivery Reform Is Not Consistently Supported by the Experience of the Parties and Other Providers

The parties have stated that the corporate acquisition of SSH and new "docking" models for the parties to manage and align physicians are necessary for delivery system transformation on the South Shore. These "docking" models include shifting to employed and other tightly integrated models of physician alignment where the provider system can effectively establish uniform payment incentives and quality benchmarks across all its physicians.¹⁶⁴

The parties make two principal claims why a corporate acquisition, by contrast to another form of alignment, is necessary to achieve the benefits of PHM:

1. Partners has essential expertise and resources to support development of PHM on the South Shore, which are only reasonably accessible through a corporate acquisition; and
2. Corporate integration facilitates a degree of structural alignment and stability that is critical for implementation of PHM, and which is not achievable through clinical or contractual alignment.

We review each of these claims below, comparing them with available information on the experience of the parties and of other Massachusetts providers.

a. *The Parties' First Claim: Partners' Expertise and Resources Are Necessary for Residents of the South Shore to Access PHM Services*

The parties describe Partners' care delivery expertise and financial resources to invest in infrastructure as instrumental to supporting PHM on the South Shore. We examined the parties'

Hospitalizations - Data Appendix (Aug. 2012), <http://www.mass.gov/chia/docs/cost-trend-docs/cost-trends-docs-2012/preventable-hospitalizations-appendix-a.pdf> (last visited Feb. 17, 2014) (finding that from 2008 to 2012, preventable hospitalizations were approximately 63% of the cost of non-preventable hospitalizations). See Exhibit B-1 for additional discussion of Partners' and SSH's new claims of commercial savings.

¹⁶⁴ The parties state in documents submitted to the HPC that "[achieving the goals of Chapter 224] will require the redesign of care across the full care continuum, including redirection of resources to community based care and the development of new capabilities to deliver population health . . . [s]uch a redesign of care cannot be achieved by either [SSHEC or Partners] independently . . . [the] continuation of the limited and non-integrated collaborations that exist under [current] clinical affiliations will not lead to the achievement of [integrated population health management.]"

experience to date with care delivery improvement and did not find clear evidence that PHM on the South Shore is contingent on expertise that is uniquely Partners’.

As previously described, Partners has pursued innovative strategies focused on PHM and has a stated commitment to expanding those strategies in southeastern Massachusetts. At the same time, a broad spectrum of measures does not indicate that Partners’ performance in this area is superior to SSH’s or Harbor’s. As detailed in Section III.B, all three of the parties have consistently high quality performance. Partners hospitals generally outperform SSH on readmissions, suggesting an opportunity for improvement, yet on many clinical process measures related to PHM,¹⁶⁵ SSPHO (including Harbor) outperforms the PCHI network average. The similarity of Partners’ and SSPHO’s care delivery performance suggests that developing PHM is not uniquely contingent on accessing Partners’ expertise.¹⁶⁶

Similarly, when we examine strategies the parties have identified to facilitate PHM – such as managing the cost and quality of care for a patient population through global risk contracts – we do not find that Partners has had superior experience to SSH/SSPHO (including Harbor). To the contrary, while Partners entered risk budgeted contracts with the commercial payers and CMS in 2012, SSH and SSPHO have been jointly participating in risk contracts with all three major commercial payers for over a decade. In addition, Harbor has participated in a risk ACO with CMS since 2012.¹⁶⁷ The risk contracts of SSH/SSPHO are large, and they include significant quality payments at risk. For example, the proportion of commercial lives covered by SSH and SSPHO’s risk contracts exceeds Partners’; among all provider organizations in Massachusetts, SSH/SSPHO has the second highest proportion of their commercial lives in risk contracts.¹⁶⁸ The HPC’s review of the parties’ 2012 participation in the AQC also indicates that SSH and SSPHO assumed materially higher risk than Partners for their quality performance.¹⁶⁹

¹⁶⁵ Certain elements of clinical quality, especially those related to management of chronic diseases, communication to facilitate care coordination and patient engagement, and readmissions, are particularly relevant as clinical signals of patient-centered care and PHM.

¹⁶⁶ There is some evidence that the proposed transactions, by reducing competition, could result in a market structure that actually has negative ramifications for quality performance. *See, e.g.,* Martin Gaynor & Robert Town, *Competition in Health Care Markets*, in HANDBOOK OF HEALTH ECONOMICS. VOL. 2, 559-97 (Pedro Barros et al., eds., 2012).

¹⁶⁷ Harbor was an early entrant into the CMS Advance Payment ACO Model, and began to bear Medicare risk in July 2012. The Advance Payment ACO is targeted at entities, such as smaller and rural providers, with insufficient capital to enter the Medicare Shared Savings Program. No results are yet available for this program. *See* CTR. FOR MEDICARE & MEDICAID SERVICES, *Advanced Payment Accountable Care Organization (ACO) Model*, <http://innovation.cms.gov/Files/fact-sheet/Advanced-Payment-ACO-Model-Fact-Sheet.pdf> (last visited Dec. 16, 2013).

¹⁶⁸ In an analysis of the HMO/POS lives cared for by the ten largest provider organizations in Massachusetts, SSPHO had the second highest proportion of HMO/POS member months under risk (83%). PCHI had 79% of its HMO/POS member months under risk. CTR. FOR HEALTH INFO. & ANALYSIS, *ALTERNATIVE PAYMENT METHODS IN THE MASS. COMMERCIAL MARKET: BASELINE REPORT (2012 DATA)* (Dec. 2013), *available at* <http://www.mass.gov/chia/docs/r/pubs/13/alternative-payment-methods-report-2012-data.pdf> (last visited Feb. 17, 2014).

¹⁶⁹ The HPC found material differences in the quality standards for Partners and South Shore in their respective AQC contracts, with differences in outpatient performance benchmarks favoring Partners (i.e., Partners’ benchmarks were easier to achieve). SSH/SSPHO also generally had steeper quality incentives than Partners (i.e., greater dollars at risk). Through a combination of more dollars at risk and higher overall quality performance, South Shore earned

The parties further describe Partners' financial support as critical to enable investment in needed infrastructure, including recruitment of new primary care physicians, alignment of specialists, and upgrades in health information technology. Partners and SSH estimate this trio of necessary initiatives (PCP, SCP, and IT) will total more than \$200 million over five years. Partners has indicated that it would only make this level of investment in a corporate affiliate.

An in-depth analysis of whether each element of this \$200 million investment is integral for PHM to succeed on the South Shore is beyond the scope of this review. The HPC examined available measures of computerized physician order entry utilization, which is informative of hospital-based electronic health record implementation, and found that Partners hospitals and SSH performed above state and national benchmarks.¹⁷⁰ Ultimately, the stated benefits of this \$200 million investment should be carefully considered by employers and consumers – the health care purchasers who ultimately fund such investments – as they seek to balance health care spending with other priorities in their communities.

b. The Parties' Second Claim: Corporate Integration Enables a Unique Level of Structural Alignment and Stability That Is Critical for Implementation of PHM

Partners and SSH have stated that only “full integration – in this case acquisition of SSH by Partners – will enable the appropriate alignment of incentives and distribution of resources to facilitate success.” The parties describe this level of corporate control as necessary to achieve clinical and financial integration, assess and make financial tradeoffs across the care continuum, allow for delivery of the right care in the right place, and share in economic incentives, including effectively managing risk payments for the care of patient populations. According to the parties, alignment short of corporate control leaves gaps in important services, like primary care, behavioral health, and long-term care, and permits independent providers to continue to act in their own interest to maximize volume in a fee for service environment.

We examined the parties' own experience and that of other Massachusetts providers. We found that these experiences raise some questions as to whether a corporate acquisition by Partners is necessary to achieve the level of clinical and financial integration the parties describe as necessary to support risk contracting and other strategies to implement PHM.

First, SSH and SSPHO (including Harbor) are already clinically and financially aligned as the largest provider system in the South Shore region. SSPHO physicians refer their patients to SSH very frequently (at rates comparable to those of corporately integrated systems, such as

\$24.62 PMPM in quality payments in 2012, or 19 times Partners' payout. SSPHO's outpatient performance in the AQC also exceeded PCHI's in a substantial majority of measures; performance was generally comparable between the parties on inpatient measures.

¹⁷⁰ No similar metrics of outpatient implementation of electronic health records are available. Our review suggests that implementation of health information technology (HIT) can facilitate as well as raise challenges for care coordination and health care competition. HIT tools that facilitate interoperability, both within a provider organization and between different provider organizations, can enhance coordinated, effective care delivery. Tools that lack interoperability can create silos, with challenges both for care coordination and access to competitors. See Katherine Baicker & Helen Levy, *Coordination versus Competition in Health Care Reform*, 369 NEW ENGL. J. MED. 789-91 (Aug. 29, 2013), available at <http://www.nejm.org/doi/pdf/10.1056/NEJMp1306268>.

the rates at which Newton-Wellesley and North Shore MC physicians refer to their respective community hospitals).¹⁷¹ As discussed in the previous section, SSH and SSPHO have shared participation in global risk contracts for significant books of business for more than a decade, with self-described success in managing the cost and quality of care in the South Shore region.¹⁷² Since SSH and Harbor are already engaged in strategies for PHM such as risk-based contracting, it is not clear that corporate affiliation with Partners is critical for PHM to succeed on the South Shore. The previous section discusses our findings that SSH and Harbor have more experience than Partners in risk contracting, and comparable performance in care delivery, suggesting that the success of PHM on the South Shore is not contingent on accessing Partners' expertise.

If we assume that access to Partners *is* critical to developing PHM in the South Shore region, the experience of other Massachusetts providers raises questions as to whether full corporate ownership is necessary for effectively aligning incentives and distributing resources. In addition to the parties' own longstanding clinical affiliation, which care referral data suggest has generated significant clinical alignment,¹⁷³ there are examples of other provider models in the Commonwealth that offer alternative approaches to effectively coordinating care delivery.¹⁷⁴ These approaches include a variety of physician-based models that offer high quality, coordinated care without ownership by a hospital or hospital system.¹⁷⁵ Where hospitals align with one another, and with physicians, there are also alternative approaches to corporate ownership, including contractual alignments around shared PHM goals.¹⁷⁶ In sum, it is unclear how corporate ownership of the parties is instrumental to raising quality performance in the South Shore region.

¹⁷¹ In fact, South Shore physicians already admit their patients to Partners hospitals, particularly BWH, at rates comparable to those of current PCHI physicians, suggesting the effectiveness of SSH's and Partners' longstanding clinical affiliation. See Section IV.A.2.

¹⁷² "For the 3 commercial payers that SSPHO contracts with, SSPHO has always been in a surplus condition. [SSPHO] has not had to rely on the standard risk mitigation strategies of withholds offsets, caps on maximum liability per patient, or risk reserves. However, withholds have been in place to offer protection and liquidity to the providers in the event of a deficit. SSPHO has recently reduced or eliminated withholds since they had never been called upon to satisfy a deficit." MASS. HEALTH POLICY COMM'N, Annual Cost Trends Hearing (2013), Pre-Filed Written Testimony of SSPHO, at 6, available at <http://www.mass.gov/anf/docs/hpc/south-shore-pho-hpc-pre-filed-testimony-9-27-2013.pdf> (last visited Feb. 17, 2014).

¹⁷³ See *supra* note 171.

¹⁷⁴ Previous analysis in the Commonwealth reinforces the relevance of considering plural organizational models. OFFICE OF ATT'Y GEN. MARTHA COAKLEY, EXAMINATION OF HEALTH CARE COST TRENDS AND COST DRIVERS PURSUANT TO G.L. C. 6D, § 8: REPORT FOR ANNUAL PUBLIC HEARING, at 39-44 (June 22, 2011), available at <http://www.mass.gov/ago/docs/healthcare/2011-hcctd-full.pdf> (finding that "a variety of provider organizations can successfully deliver high quality, efficient care" and finding "no evidence that corporately integrated health systems perform better than other groups").

¹⁷⁵ See generally MASS. HEALTH POLICY COMM'N, Annual Cost Trends Hearing (2013), Pre-Filed Written Testimony of Acton Medical Associates, Response to Exh. B, <http://www.mass.gov/anf/docs/hpc/acton-medical-written-testimony.pdf> (last visited Feb. 17, 2014) (describing Acton's approach to PHM and risk management in a relatively small, PCP-based organization); MASS. HEALTH POLICY COMM'N, Annual Cost Trends Hearing (2013), Pre-Filed Written Testimony of Atrius Health, Response to Exh. B, <http://www.mass.gov/anf/docs/hpc/pre-filed-testimony-response-from-atruius.pdf> (last visited Feb. 17, 2014).

¹⁷⁶ See, e.g., MASS. HEALTH POLICY COMM'N, Annual Cost Trends Hearing (2013), Pre-Filed Written Testimony of BIDCO, Response to Exh. B, <http://www.mass.gov/anf/docs/hpc/bidco-written-testimony-response-exhibit-c-9-27-13.pdf> (last visited Feb. 17, 2014); MASS. HEALTH POLICY COMM'N, Annual Cost Trends Hearing (2013), Pre-Filed Written Testimony of NEQCA, Response to Exh. B, <http://www.mass.gov/anf/docs/hpc/neqca-exhibit-b.pdf> (last visited Feb. 17, 2014).

C. ACCESS IMPACT

As discussed in Section III.C, data on the parties' hospital payer mix and service mix show:

- SSH and most Partners hospitals care for a higher mix of commercially insured patients and a lower mix of Medicaid patients than other area hospitals; and
- SSH provides a smaller share of behavioral health services and a greater share of deliveries than other area hospitals.

Because SSH and the Partners hospitals have similar payer mix patterns (lower government payer mix, especially Medicaid), the HPC anticipates that a combined system will reflect similar payer mix patterns at its hospitals. One factor that could change this pattern of lower Medicaid mix is if Partners and SSH actively seek to increase their proportion of government payer patients. Partners and SSH have not provided evidence of any such specific plans to increase their mix of government payer patients.¹⁷⁷

In the Partners-SSH Response, Partners shares for the first time behavioral health plans that include expanding adult inpatient and adolescent residential treatment capacity at McLean SouthEast, and expanding Massachusetts Child Psychiatry Support to pediatricians and school nurses in the South Shore region. Partners is to be commended for its commitment to improving behavioral health access. However, the HPC did not receive sufficient evidence to make a finding either way regarding specific changes in access at SSH as a result of these transactions. While the parties have referenced their general commitment to behavioral health in connection with their plans for PHM, including integrating behavioral health services into patient centered medical homes, they have not shared any specific plans to make service line changes at SSH, or to specifically increase SSH's mix of behavioral health services. Accordingly, the HPC did not review information indicating that SSH's service mix will change as a result of these transactions.

Contrasting trends in payer mix and service mix across different providers can contribute to, or exacerbate, financial distress at providers that care for the highest mix of government payer patients, or provide the greatest proportion of low-margin services – with potential long-term consequences for access for such patients and to such services. Combining providers with similar profiles of high commercial payer mix may reinforce the resulting system's financial strength vis-à-vis area competitors.

V. CONCLUSION

We estimate the impact of these transactions on total medical spending, based solely on increases in physician prices and anticipated changes in referral practices, will be \$23 million to \$26 million annually for the top 3 commercial payers. Based on our modeling, the possible

¹⁷⁷ Harbor provided information to the HPC indicating plans to begin accepting new Medicaid primary care patients following the transactions.

savings in the South Shore region based on expanding Partners' historic performance in the CMS high risk Medicare beneficiary demonstration and Pioneer ACO are in the range of costs *increasing* by \$1.4 million¹⁷⁸ to cost *savings* of \$6.6 million annually. Below, we summarize our findings.

- **Cost Impact:** Over time, for the three major commercial payers studied, these transactions are anticipated to increase total medical spending by \$23 million to \$26 million each year as a result of increases in Harbor/SSPHO physician prices and increased utilization of Partners and SSH facilities. The resulting system is anticipated to have increased ability to leverage higher prices and other favorable contract terms in negotiations with commercial payers. The cost impact of this increased leverage is not included in the above projection, and will be substantial if payers are unable to prevent the exercise of the parties' leverage in future contract negotiations. Overall, based on the evidence the parties provided, increases in spending are anticipated to far exceed potential cost savings from expanding Partners' existing PHM initiatives into the South Shore region.
- **Care Delivery Impact:** Partners' work on PHM demonstrates potential for improving care delivery and health outcomes. However, the parties have not provided adequate evidence showing how these transactions are likely to drive overall improvements to South Shore providers' performance. Furthermore, given SSH and SSPHO's historically strong quality performance, and their own experience managing populations through risk-based payments, it is unclear how corporate integration of the parties is instrumental to raising quality performance in the South Shore region.
- **Access Impact:** Partners and SSH have not proposed specific changes in services that would cause the HPC to anticipate changes to their existing hospital service mix and payer mix trends. Combining providers with similar profiles of high commercial payer mix may reinforce the resulting system's financial strength vis-à-vis area competitors.

RECOMMENDATION FOR FURTHER REVIEW

Section 13 of Chapter 6D provides that the Health Policy Commission "shall identify any provider or provider organization that...has a dominant market share for the services it provides...charges prices for services that are materially higher than the median prices charged by all other providers for the same services in the same market...[and that] has a health status adjusted total medical expense that is materially higher than the median total medical expense for all other providers for the same service in the same market."

As described in Section III.A.4, the HPC found that Partners has the highest hospital and physician market share of any provider statewide, and SSH and Partners respectively have the first and second largest market shares for commercial inpatient services provided in SSH's PSA.

¹⁷⁸ An intervention can result in costs increasing if the total medical expenses for the intervention group (including spending on care management interventions) exceed the total medical expenses for the control group. See Section IV.B.1.b.

Combined, these two systems would command a 50% commercial inpatient market share in SSH's PSA and up to 30% of statewide physician revenue.

The HPC also found that both Partners and SSH are paid hospital prices that are well above median in each market in which they operate, and that PCHI is generally paid physician prices that are in the 80th to 95th percentile of the 30 largest Massachusetts providers reported by CHIA. As described in Section IV.A.1, following the transactions, the resulting system is expected to include new physicians, such as Harbor, whose prices increase to PCHI's higher prices. The resulting system is also anticipated to have increased ability to leverage higher prices as described in Section IV.A.3.

Finally, the HPC found that PCHI and SSPHO have health status adjusted TME that is well above the median TME for area providers. Based on our review, including our findings presented in Sections IV.A and IV.B, we find that the proposed transactions will increase health care spending, likely reduce market competition, and result in increased premiums for employers and consumers. We find the parties have not provided adequate evidence showing how the proposed transactions are likely to drive overall performance improvements of South Shore providers, or how corporate integration of the parties is instrumental to achieving proposed care delivery reforms.

The HPC therefore concludes that the transactions warrant further review and refers our report to the AGO.

**COMMONWEALTH OF MASSACHUSETTS
HEALTH POLICY COMMISSION**

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EXHIBIT A-1:

PARTNERS HEALTHCARE, BRIGHAM AND WOMEN'S HOSPITAL,
AND SOUTH SHORE HOSPITAL'S RESPONSE TO PRELIMINARY
REPORT*

*For the full appendix to the response, please see the Health Policy Commission's website at <http://www.mass.gov/anf/docs/hpc/material-change-notices/phs-bwh-ssh-cmir-response-final-consolidated-.pdf>

**Partners HealthCare, Brigham and Women's Hospital, and South
Shore Hospital's Response to the Health Policy Commission's
Preliminary CMIR Report dated December 18, 2013**

January 17, 2014

Partners HealthCare System (“Partners”) and South Shore Hospital (“SSH”) fully embrace and have taken concrete steps to meet the quality and cost imperative in today’s healthcare environment. We acknowledge and support the objectives of the Massachusetts Health Policy Commission’s (“HPC’s”) conduct of Cost and Market Impact Reviews (“CMIRs”). However, we strongly disagree with the HPC’s CMIR conclusions regarding the impact of Partners’ proposed acquisition of SSH (the “Transaction”) and the Brigham and Women’s Physicians Organization’s proposed acquisition of Harbor Medical Group (the “Harbor Transaction”) and collectively with the Transaction, the “Transactions”) on Massachusetts healthcare.

We submit that the December 18, 2013 Preliminary Report of CMIR findings (the “Preliminary Report”) wrongly concludes that the Transactions will impute net additional cost to the Massachusetts health care system and presents misleading characterizations of the effects of the Transactions. This response to the Preliminary Report (the “Response”) refutes the incorrect and incomplete analysis underlying the HPC’s findings regarding “Cost Impact,” “Care Delivery Impact,” and “Access Impact” of the Transactions.¹

For reasons outlined in detail in this Response, Partners and SSH request that the HPC withdraw each of the Preliminary Report’s three central findings regarding “Cost Impact,” “Care Delivery Impact,” and “Access Impact” of the Transactions. We further submit that the Preliminary Report fails to demonstrate any basis for a referral to the Office of the Massachusetts Attorney General (“AGO”) under Chapter 224, and request that the HPC withdraw the Preliminary Report’s recommendation for regulatory review by the AGO.

OVERVIEW

The Preliminary Report disregards the evolving health care marketplace in which the Transactions are occurring, an environment that is notably shaped by the regulatory imperatives of the HPC’s own enabling statute, Chapter 224 of the Acts of 2012 and the federal Patient Protection and Affordable Care Act (ACA). Partners and SSH fully understand that the passage of Chapter 224 compels Massachusetts health care providers to form new alignments and redesign the delivery of care in order to meet the Commonwealth’s 3.6% cost growth benchmark² and the cost moderation expectations of payers, employers and consumers. Marketplace dynamics are shifting rapidly as Massachusetts providers, including all other community hospitals in the South Shore region, are affiliating with larger systems. These Transactions represent our best thinking and the investment of considerable resources into strategies and the implementation of plans to ensure we meet the 3.6% cost growth benchmark.

The Preliminary Report’s inexplicable omission of potential efficiency gains through the Population Health Management (“PHM”) initiatives of the Transaction and its misreading of payer contract provisions, seriously undermine the credibility of its “Cost Impact” finding that

¹ See Pages 54-55, Preliminary Report

² This 3.6% cost growth benchmark encompasses changes in both price and utilization.

the Transactions³ will increase Massachusetts healthcare costs. In addition, the HPC's misapplication of antitrust law methodologies to an arbitrary geographic service area cannot support its conclusion that the Transaction creates market leverage.

The important synergies between the parties' respective experience, expertise and resources will bring value and efficiencies to the South Shore region resulting in a "Care Delivery Impact" that offsets any additional costs associated with the Transaction.

We also question the HPC's failure to acknowledge in its "Access Impact" findings the parties' significant behavioral health access contributions to the Massachusetts healthcare system and its failure to credit SSH and Partners' plans to increase access to primary care and behavioral health services.

After careful deliberation and analysis, SSH and Partners have each independently determined that the Transaction is the best path forward to move beyond the limitations of our successful ten-year clinical affiliation and is a foundational step in the successful development and large-scale deployment of PHM strategies on the South Shore. It provides the cost savings structure to both Partners and SSH that is critical to our collective ability to meet the 3.6% cost growth benchmark set out in Chapter 224.

Finally, we appreciate that the HPC is conducting these first CMIRs without the benefit of experience in evaluating the new health care marketplace. However, the current environment is dynamic and calls on healthcare organizations to respond rapidly to shifting incentives and market expectations. The Preliminary Report appears to reject the notion that Partners' early trends and gains are a barometer of future success. Instead, it uses flawed reasoning to cast doubt on trends that may be pathways to progress in meeting the goals of Chapter 224, and thereby does a disservice to the spirit of innovation at the core of that landmark legislation.

I. THE HPC MISCHARACTERIZES THE IMPACT OF THE TRANSACTION ON HEALTH CARE COSTS AND WRONGLY CONCLUDES THAT THE TRANSACTION WILL ADD COSTS THAT "FAR EXCEED" SAVINGS AND CREATE MARKET LEVERAGE

A. The HPC Wrongly Omits PHM Commercial Savings Impact in Its Conclusion that Health Care Cost Increases Resulting from the Transaction Will "Far Exceed" PHM Efficiencies Underlying the Transaction

Partners and SSH are adopting PHM because it sets the right course for health care providers in today's environment and lays important groundwork for success with global reimbursement and alternative payment methodologies. We submit that PHM is becoming such a sufficiently accepted approach that the HPC cannot credibly exclude commercial market PHM efficiency gains from the CMIR analysis. We fail to see how the HPC can conclude that "[o]verall increases in spending [from the Transaction] are anticipated to far exceed potential

³ This HPC finding includes the HPC's calculations of the effects of the Harbor Transaction on physician health care costs.

cost savings from expanding Partners' PHM initiatives into the South Shore region"⁴ when it omits entirely from its analysis any consideration of savings associated with PHM efficiencies in the commercial population. The HPC cannot ignore the transformative potential of PHM in all patient populations, particularly when its foundational principles of financial and clinical integration are the underpinning of the health care reform policies currently being promoted by federal and state agencies.⁵

Partners is an industry leader in embracing and advancing PHM. Partners launched a high-risk Medicare demonstration project in 2006 that generated in its first program phase an annual net health care savings of 7 percent among enrolled patients. These phase 1 savings reflected a return on investment of \$2.65 for every dollar spent. In the second phase of the project, Partners expanded the number of sites, improved basic program design and delivered 19% savings on enrolled patients. Partners also has shown success as one of the nation's first CMS Pioneer Accountable Care Organizations (ACOs). During its first year as a Pioneer ACO, Partners slowed the rate of cost growth by approximately 3% over CMS's reference trend, translating to nearly \$29 million to be shared with Medicare.

Today, Partners has moved beyond being an early industry adopter of PHM and into the comprehensive planning and roll-out of a system-wide program of twenty PHM tactics. These tactics address access to care, design of care and measurement across the full spectrum of primary, specialty and hospital services. Specific program initiatives to be deployed include patient portals, extended hours/same day appointments, virtual visits, referral management, assessment of appropriateness, shared decision-making, high risk case management, electronic health record decision support and order entry, expanded incentive programs and variance reporting and quality metrics.⁶

As part of its planning, Partners has developed detailed models of cost savings for eight PHM program initiatives addressing a subset of the twenty tactics that will be deployed in the South Shore region.⁷ As further described in **Appendix A**, under these cost savings models, Partners estimates that these eight program initiatives will generate cumulative savings over an eight-year implementation and optimization ramp up period of approximately **\$158.6 million** for the South Shore region commercial population.

Another PHM savings resulting from the Transaction is associated with keeping secondary care volume at SSH, rather than sending it to Partners' academic medical centers ("AMCs"). Partners and SSH currently have the opportunity to generate up to \$5 million in annual savings through such a strategy. Partners has a proven track record for generating efficiency gains of this kind. Since 2009, healthcare spending associated with inpatient care at

⁴ Page 54, Preliminary Report.

⁵ Federal antitrust guidance provides no precedent for the HPC's refusal to assume a level of savings generated within the commercial population.

⁶ See **Appendix A** for detailed descriptions of these tactics.

⁷ These program initiatives are: iCMP (integrated case management), patient-centered medical homes, palliative care, mental health, virtual visits, Partners mobile observation units, shared decision-making and CHF telemonitoring.

the Brigham and Women's Hospital ("BWH") has been reduced by approximately **\$83 million** through an initiative to shift secondary care volume from the BWH to the Faulkner Hospital, a Partners community hospital. Partners seeks to replicate this success at SSH. This proven model only makes sense when two hospitals are in the same risk contracts and share a common system margin target.⁸

Even without cost savings models available to Partners internally, the HPC could have estimated the scope of savings through commercial PHM efforts through a number of simple and reasoned proxy calculations. One such approach would be to look at potential commercial market savings that would result from reducing inpatient admissions through the implementation of PHM. While PHM's ultimate impact on Total Medical Expenditures ("TME") may not be limited to inpatient admissions, we believe that the large proportion of TME spend associated with inpatient admissions makes inpatient admission estimates a directionally sound proxy of the potential savings impact of PHM.

For example, SSH's commercial inpatient utilization rate was approximately 79 admissions per thousand in 2010. This rate is significantly higher than Newton Wellesley Hospital's ("NWH's") rate of 56 admissions per thousand.⁹ Thus, there is clear opportunity for Partners and SSH to generate savings in SSH inpatient healthcare spending by reducing commercial admissions. Assuming that SSH's admissions can be reduced to a rate comparable to NWH's, SSH total admissions would decline by about 2,300 annually. Given that SSH's average net revenue per admission is approximately \$8,760, this reduction in admissions translates to a reduced spending on inpatient admissions of nearly **\$19 million** per year.

The HPC's decision to omit entirely any consideration of PHM efficiency gains to the commercial market is a significant flaw that undermines the Preliminary Report's central conclusion that the impact of the Transactions on Massachusetts healthcare costs will "far exceed" savings as a result of the Transactions. We reject such a conclusion and, as described in Section V below, restate our intentions to reduce costs and increase the efficiency of the healthcare system in the South Shore region through the Transaction.

B. The HPC Wrongly Concludes that the Transaction Will Create Market Leverage

The Preliminary Report's conclusions that the Transaction would create or enhance market power, cause undue market concentration, or result in anticompetitive effects are based on faulty analysis and should therefore be rejected. Notwithstanding the HPC's disclaimer of the ability to perform a thorough antitrust analysis given the time constraints of the CMIR process,¹⁰ the Preliminary Report draws conclusions using antitrust terminology, while at the same time acknowledging that it has not applied the well-settled principles of antitrust law to support those conclusions. Those portions of the Preliminary Report that purport to analyze market shares, market concentration, or theoretical market power do so

⁸ Note that the Preliminary Report asserts that Partners and SSH will do exactly the opposite of this.

⁹ Newton Wellesley Hospital was chosen as the comparator because it is the community hospital most similar to SSH in the Partners system.

¹⁰ Footnote 109 (Page 36, Preliminary Report)

without any legitimate legal basis. They are inaccurate, misleading and should be stricken from the Final Report.

Because it draws an indefensibly narrow circle around SSH and calls that a relevant geographic antitrust market, and then ignores competition from all the relevant competitors, the market analysis in the Preliminary Report is structured from the outset in a way that can only produce erroneously high market shares, erroneously high market concentration, and lead to erroneous predictions of anticompetitive effects from the Transaction. All of these conclusions are belied by the facts on the ground.

As further detailed in **Appendix B** to this Response, antitrust review of hospital mergers is governed by decades of relevant precedents applying well-established methodologies such as the DOJ-FTC Horizontal Merger Guidelines. Under all of those precedents and methodologies, the bedrock first principle of any antitrust analysis is a robust, reliable market definition produced through a rigorous process of identifying the relevant product market at issue in the relevant geographic market at issue. Metrics such as market shares and market concentration can only be calculated in the context of an appropriately defined product and geographic market. Since the HPC has not even attempted to appropriately define an antitrust relevant market in the Report, its findings concerning market share and market concentration are unreliable.

The Preliminary Report's construction of a primary service area ("PSA") around SSH based on commercially insured patients, and its use of this PSA as a proxy for a relevant geographic antitrust market, is inconsistent with the reality that patients regularly travel outside of the SSH service area to obtain health care services—a fact that the HPC itself acknowledges.¹¹ The fact that there is no Partners hospital in the SSH service area defined by the HPC, and yet the Preliminary Report finds that Partners has a significant market share in that geographic area, proves that the entire analysis is incorrect and unreliable. Decades of antitrust case law make clear that this analytical error is fatal to the HPC's analysis.

The Preliminary Report also inexplicably fails to consider competition from many of the most relevant competitors to SSH, namely Quincy, Milton, Jordan, Good Samaritan and Brockton hospitals, stating that the parties have not proven that they should be included in the analysis. However, that is not how competition is analyzed in antitrust cases. All of these hospitals are reasonable substitutes for SSH inpatient services and would be counted as competitors in the market in any antitrust case arising from this Transaction because they all draw patients from the same geographic area as SSH.

The Preliminary Report's attempt to have it both ways—to acknowledge that it has not undertaken an appropriate antitrust analysis, and yet to arrive at antitrust findings and conclusions—should not be accepted by the HPC. For all of these reasons, and as further explained in **Appendix B**, the Preliminary Report's market analysis is fundamentally flawed, and its conclusions that the Transaction creates market leverage cannot be relied upon or withstand scrutiny. They should be stricken from the final report.

¹¹ Pages 16 and 25, Preliminary Report

C. The HPC Wrongly Speculates that the Transaction Will Add \$23-26 Million in Annual Physician Health Care Costs

The key “Cost Impact” finding in the Preliminary Report is that the Transactions will add \$23-26 million in annual physician healthcare costs to the Massachusetts healthcare system, consisting of up to \$15.8 million in reimbursement increases that Harbor and SSPHO physicians will allegedly realize through access to Partners payer contract rates (the so-called “unit price” effect) and up to \$10.6 million in higher facility charges that will allegedly result from changes in referral patterns of existing and newly recruited Partners and SSH physicians (the so-called “provider mix” effect). The first assertion is based on the HPC’s incomplete and incorrect understanding of Partners’ payer contract terms, and therefore is merely speculation. The second assertion is based on an erroneous assumption regarding the likely sources of newly recruited physicians. Thus, neither so-called “finding” can be relied upon as a basis to draw any conclusion regarding the impact of the Transactions on Massachusetts healthcare costs.

In relation to this alleged unit price effect, even though the Preliminary Report acknowledges that there are physician growth caps in the Partners commercial payer contracts and admits that it has some uncertainty in its understanding of these contract provisions, HPC bases its assertion as to these increased health care costs on the simple statement that “there *appears (emphasis added)* to be room for new physicians to join at PCHI’s prices.”¹² In doing so, the HPC apparently assumed that the newly added Harbor and SSPHO physicians would automatically be assigned a Partners contract rate “slot” notwithstanding the fact that in each of Partners’ three major commercial payer contracts, the number of physicians in the network currently exceeds the number of such slots (i.e. number of physicians within applicable growth caps).

The Preliminary Report also ignores the fact that Partners has a long-standing process by which these rate slots are allocated across its entire physician network. Thus, there can be no assurance that any physicians who join the Partners network as a result of the Transaction will be allocated a slot under which they would receive reimbursement at Partners contract rates. HPC ignored or misinterpreted key aspects of the provisions of Partners’ commercial contracts that constrain Partners’ ability to give new physician groups (such as Harbor) access to Partners’ contracted physician rates.¹³

But even if Partners were to concede that the Harbor and/or SSPHO physicians would within a reasonable time gain access to Partners’ contract rate slots so that these specific physicians would arguably receive higher reimbursement for their services, the assertion by HPC that this would result in an increase in overall physician costs for the healthcare system is

¹² See text at page 30 and footnote 90 of the Preliminary Report.

¹³ HPC also asserted that Partners plans to develop a more tightly integrated network would also result in higher reimbursement as “affiliated” groups moved into “integrated” or “academic” rate slots and thus received higher Partners contract rates. See footnote 91 in the Preliminary Report. Again HPC overlooked the fact that under the relevant payer contract these rates slots are weighted so that as physicians occupy slots with higher reimbursement, the total number of Partners rate slots is decreased, thus holding the payers revenue neutral for these internal changes in rate slots allocations.

faulty because HPC has ignored the fact that Partners' payer contracts have been negotiated to reach an overall aggregate increase in physician revenue on a capped number of physicians. Thus, when individual physicians or groups are added to the Partners network, if they are allocated rate slots that result in higher reimbursement for them, the rate increases available to some other physicians in the network are limited to the payers' statewide fee schedule, which is their lowest reimbursement level.

In relation to the alleged provider mix effect, HPC asserts that existing physicians who are in the SSPHO (including Harbor) will alter their referral patterns and use higher cost Partners facilities (including BWH and SSH). Similarly, it asserts that the 27 primary care physicians that Partners and SSH will recruit pursuant to our proposed physician development initiative will be more inclined to use these higher cost Partners facilities. As to the first component of this alleged provider mix effect, we recognize that some referrals may shift to Partners AMCs as we seek to keep care within our system in order to provide more integrated and seamless care to our patients. That being said, we also expect to place a strong emphasis on keeping primary and secondary care in the community whenever possible, thereby generating substantial savings as we have done between BWH and Faulkner Hospital.¹⁴

As to the newly recruited physicians, the Preliminary Report erroneously assumes that all PCPs will be recruited from other provider systems within SSH's primary service area and that they are currently using other, lower-cost facilities. In fact, the physician recruitment initiative is intended to address SSH's secondary service areas, where analysis has demonstrated PCP shortages, thus suggesting that a substantial number of these newly recruited physicians will either come directly out of training or from outside of the service area. Moreover, HPC fails to acknowledge the possibility that placement of PCPs in these areas may actually bring down overall health care costs by reducing specialty and hospital services overuse resulting from a lack of primary care access. Finally as noted above, all of these Partners and SSH physicians, whether already in SSPHO or newly recruited to Partners and SSH, will be practicing in patient centered medical homes in support of the physician recruitment initiative's core goal of facilitating the cost savings and efficiency gains of PHM.

In sum, for the reasons described above the Preliminary Report's assertion that the Transactions will result in significant annual physician cost increases is based upon material misunderstandings of both the Partners payer contracts and the process and goals of the parties' proposed physician development efforts in the SSH service area.

D. The Transactions Will Not Increase Costs through Physician Office Facility Fees

The Preliminary Report describes in detail the practice of adding facility fees to physician group billing, with the conversion of freestanding office visits to outpatient hospital visits. Though not well documented in the Commonwealth of Massachusetts, this is a practice that can sometimes follow a hospital's acquisition of physician practices.¹⁵ We seek to correct any misimpression created by the HPC's speculation that the Harbor Transaction may result in

¹⁴ The impact of this work is described in more detail on page 4 of this Response.

¹⁵ Page 43, Preliminary Report

health care cost increases through facility fees.¹⁶ In fact, the BWPO and Harbor have no plans to institute facility fees for Harbor physician office visits.

II. THE HPC WRONGLY CONCLUDES THAT CORPORATE INTEGRATION OF THE PARTIES PRODUCES NO ADVANTAGE TO DELIVERY OF CARE

The HPC takes the position in its “Care Delivery Impact” findings that “given SSH and SSPHO’s historical strong quality performance and experience in managing populations through risk-based payments, there is no clear reason why corporate integration of the parties is instrumental to raising quality performance in the South Shore.”¹⁷ This conclusion misunderstands the parties in fundamental ways and fails to appreciate the important synergies that have led the parties to mutually pursue the Transaction.

The recent surge in provider network consolidation is driven in large part by small independent providers, including the physicians of the SSPHO, seeking larger networks in which to pool their risk as well as to leverage their IT and overhead costs. Small physician practices are also seeking the centrally coordinated resources of larger networks aimed at managing TME by coordinating high cost/high risk and chronic disease populations. Counter to the HPC position, this acquisition—focused on corporate integration—is the logical way to achieve this.

SSPHO has made limited investments in case management, IT/IS and other infrastructure necessary to manage risk that are typical for an organization of its size. Without Partners, SSH is constrained by limited resources from embarking on larger scale clinical and other integration initiatives necessary to support taking on deeper levels of risk. This acquisition gives SSH and SSPHO access to the capital resources needed to scale up PHM infrastructure and risk contracting volume. With complementary experience, skills and proven success at collaboration through over ten years of clinical affiliation, SSH and Partners are the ideal combination to achieve these goals in today’s evolving healthcare environment. It simply is not realistic to assume that SSPHO could implement the spectrum of PHM tactics being deployed today by Partners without Partners’ direct involvement and support, a fact that SSH and SSPHO leaders fully acknowledge.

Furthermore, acquisition gives SSH access to capital to fund the primary care and specialty care initiatives that are central to successful PHM. The Preliminary Report dismisses the need for physician recruitment and asserts that Partners and SSH did not provide to the HPC information indicating a shortage of PCPs or specialists in the South Shore region.¹⁸ This claim is wrong. SSH provided to the HPC a community need report authored by consultants Barlow-McCarthy that supports more than the net 27 new primary care physicians that SSH and Partners propose to recruit to the South Shore region. See **Appendix C** for further detailed discussion of SSH's objectives and goals for pursuing the Transaction.

¹⁶ Page 44, Preliminary Report

¹⁷ Page 54, Preliminary Report

¹⁸ Page 51, Preliminary Report

Finally, Partners and SSH are pleased that the Commonwealth recognizes that we deliver high quality care relative to other Massachusetts hospitals. However, we vigorously disagree with the HPC's position that given the independent high quality profiles of Partners and SSH, there is no supportable quality improvement rationale for the Transaction.

Put simply, there is no ceiling on quality. The measurement of quality is a nascent science and Partners is at its forefront. Partners measures literally hundreds of processes and outcomes beyond those included in publicly reported measures and will bring this experience, knowledge and infrastructure to SSH. Partners has been a national leader in developing measures and improving care, as evidenced by the hundreds of scholarly articles published by Partners researchers and measurement experts on the subject. Partners and SSH are committed to an ever-expanding view of quality.

III. THE HPC'S EVALUATION OF THE TRANSACTION'S IMPACT ON ACCESS FAILS TO CONSIDER THE PARTIES' CONTRIBUTION TO BEHAVIORAL HEALTH AND COMMUNITY ACCESS

The Preliminary Report's "Access Impact" findings as summarized in the Preliminary Report are limited to highlighting the similarity in Partners' and SSH's higher mix of commercially insured patients and lower mix of government payer populations. The HPC concludes that a combined SSH and Partners system would reflect similar payer mix patterns and seems to find the Transaction lacking because the parties do not expressly seek to increase their proportion of government payer patients. Hospitals serve the mix of people in their markets; they do not create that mix. Therefore, we fail to see the significance in these Access Impact findings.

We are also troubled by the Preliminary Report's dismissal of SSH and Partners' plans for increased access to primary care and behavioral health services as irrelevant to its assessment of the Transaction.¹⁹ A key element of the plan detailed in the affiliation agreement between Partners and SSH is the recruitment of primary care physicians to the South Shore and the development of patient-centered medical homes that will provide integrated primary and behavioral health care. Furthermore, Partners and SSH provided the HPC with detailed information regarding a number of Transaction work plans aimed at increasing behavioral health services for the patients served by SSH, including by embedding behavioral health services in medical homes throughout the South Shore community. The clear purpose of these initiatives is to increase convenient access by all members of the community to needed primary care and behavioral health services.

The HPC's apparent decision to overlook the benefits of these plans is especially troublesome given that it makes a point of characterizing SSH as providing "a smaller share of inpatient behavioral health services and a larger share of deliveries than other area hospitals."²⁰ We also question the HPC's decision to omit entirely any analysis of Partners' provision of behavioral health services, a decision that is somewhat cryptically attributed to the fact that

¹⁹ Page 54, Preliminary Report

²⁰ Page 53, Preliminary Report

Partners' McLean Hospital, a specialized psychiatric hospital, may affect the inpatient behavioral health mix at other Partners hospitals.²¹

Partners' behavioral health service line is a compelling demonstration of its commitment to improving patient access to much needed services. For example, while the Commonwealth of Massachusetts decreased its Department of Mental Health intermediate care capacity by 21% or 178 beds between FY 2009 and FY 2010, Partners increased its behavioral health inpatient capacity by 7%, or 23 beds. The North Shore Medical Center (a Partners community hospital, "NSMC") and McLean Hospital now have approximately 50 child/adolescent psychiatric beds under management and an array of residential, partial hospital and ambulatory services. NSMC also opened 20 specialized geriatric inpatient beds, and Partners has expanded its outpatient addiction treatment services, including the opening of the Massachusetts General Hospital's ("MGH") Addiction Recovery Management Service ("ARMS"), which is an outpatient treatment and recovery management service for ages 14 – 26.

Finally, McLean SouthEast ("MSE"), which currently has 25 adult inpatient beds, will expand to 30 beds and will facilitate care delivery in the South Shore region by providing the full continuum of behavioral health care, including residential and partial hospital care. Partners is also expanding the adolescent acute residential treatment ("ART") program at MSE from 20 to 22 beds, adding a new partial hospital and expanding its Massachusetts Child Psychiatry Project ("MCPAP") support to pediatricians and school nurses in the region. Through these initiatives, Partners will provide access to intensive and step down adult and adolescent services that are currently very limited in the South Shore region, and will otherwise augment SSH's psychiatric resources, facilitate integration across levels of psychiatric care as well as between psychiatric and medical care, improve the quality of care, and reduce ED utilization among behavioral health patients in the region.

Partners' commitment to expanding access to behavioral health services and its plans with SSH to expand behavioral health as part of the Transaction are important factors in Access Impact findings and the Preliminary Report's complete omission of this information is misleading.

IV. COMMUNITY SUPPORT

Over the past several months, the communities surrounding SSH have voiced overwhelming support for this vision of improved, more cost-effective care close to their homes. Community leaders, including elected officials, first responders, doctors, nurses, volunteers and concerned citizens have offered their endorsement and have expressed hope that this plan is realized. Attached in **Appendix D**, please find more than three dozen examples of support from Weymouth and surrounding communities for the HPC to review and consider.

²¹ Page 27, Preliminary Report

V. CONCLUSION: PARTNERS AND SSH SEEK TO ADVANCE THE COST AND QUALITY IMPERATIVES OF TODAY'S HEALTH CARE ENVIRONMENT

In conclusion, Partners and SSH jointly provide this Response to the Preliminary Report to reject the central findings of the HPC in its CMIRs of the Transactions. We believe that the Preliminary Report reaches the wrong conclusions and fails to properly characterize the intent and effects of the Transactions. We therefore restate our request that the HPC withdraw each of the Preliminary Report's three central findings regarding "Cost Impact," "Care Delivery Impact," and "Access Impact" of the Transactions and vote not to refer the Transactions to the Massachusetts Attorney General for further regulatory review.

Partners' and SSH's intentions and goals in seeking the Transaction are, in fact, the very same cost and quality imperatives underlying the HPC's enabling statute, Chapter 224. With the passage of Chapter 224, providers in the Commonwealth must, in particular, turn their focus to the cost and quality imperative and embrace further evolution of integrated delivery care systems to provide the best coordinated care possible for our patients. These public policy imperatives, along with the needs of patient populations, are catalysts for bold changes to pro-actively provide health care services in a more patient-centered manner and to moderate the rate of growth of health care expenditures. This will require the redesign of care across the full care continuum, including the redirection of resources to community based care and the development of new capabilities to deliver population health.

Partners and SSH have embraced these challenges and, in full alignment with the cost and quality imperative of Chapter 224, have developed a shared vision to redesign their delivery of health care through the implementation of a robust PHM model of care delivery. Implementation of our PHM vision will improve the availability and accessibility of care, enhance clinical offerings and yield economic and operational efficiencies, all of which will, in turn, result in the delivery of high quality, cost effective health care to all patients served in the South Shore and contribute to moderating the rate of growth in health care expenditures for the benefit of patients and employers.²²

Implementation of this vision will require substantial investment and considerable expertise in PHM. However, SSH lacks the financial resources and PHM expertise to execute the vision alone. While Partners has both the resources and expertise, it does not have the established presence, relationships and investments in the communities served by SSH to make this vision a reality.

Each organization provides elements that will be critical to the successful implementation of PHM on the South Shore, and only full integration—achieved through an

²² Similar synergies drive BWPO and Harbor in their mutual desire to consummate the Harbor Transaction. Harbor is an established physician group with a long history of successful risk contracting and experience deploying innovative PHM strategies such as disease management for diabetes and congestive heart failure, integrated multi-disciplinary care, utilization management and onsite use of urgent care as a less expensive alternative to emergency room services. With Partners' and Harbor's shared commitment to PHM, the combined experience, skills and resources of Partners and Harbor align in the Harbor Transaction.

acquisition—will enable the appropriate alignment of incentives and distribution of resources to facilitate success. As described above, Partners is redesigning our care delivery system to ensure our ability to conform to the cost growth mandates of Chapter 224. This Transaction would support and advance that commitment.

EXHIBIT A-2:

HARBOR MEDICAL ASSOCIATES' RESPONSE TO PRELIMINARY REPORT*

*At the request of Harbor Medical Associates, certain figures were redacted from its written response.



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January 14, 2014

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RE: Response of Harbor Medical Associates, P.C.
To Health Policy Commission Preliminary Report dated December 18, 2013
HPC-CMIR-2013-2 Concerning Proposed Acquisition of
Harbor Medical Associates, P.C. by Brigham & Women's Physician Organization

Dear Executive Director Seltz:

Harbor Medical Associates P.C. (Harbor) submits this response to the preliminary report dated December 18, 2013 in HPC-CMIR 2013-2 concerning the proposed acquisition of Harbor Medical Associates, P.C. by Brigham & Women's Physician Organization (BWPO) in accordance with M.G.L. c 6D, Section 13(f). For the multiple reasons stated in this response, the Health Policy Committee (HPC) should change its position in the preliminary report as it pertains to the Harbor/BWPO transaction (Harbor/BWPO Transaction) and NOT refer the Harbor/BWPO Transaction to the Attorney General for further review.

We submit to the HPC that the Harbor/BWPO Transaction is an important development for the South Shore region and a key step to transition the South Shore delivery system into full care coordination across the entire spectrum of care. After much thoughtful consideration and due diligence, Harbor has concluded that acquisition by the BWPO and integration into the Partners' system is the best way to meet the challenges of today's cost containment healthcare environment. The Harbor/BWPO Transaction will take Harbor's existing referral relationship with Partners, whereby Harbor's patients already receive three-quarters of their tertiary hospital services at Partners' academic medical centers, and transform it into the realm of full population management and accountable care. This transaction should be encouraged and supported, not referred for further regulatory review.

1. THE HPC HAS WRONGLY EQUATED THE FAR LARGER SSPHO WITH HARBOR AND HAS FAILED TO CONDUCT A COST AND MARKET IMPACT REPORT OF BWPO'S ACQUISITION OF HARBOR AS REQUIRED BY M.G.L. C. 6D.

The HPC in its preliminary report dated December 18, 2013 wrongly and impermissibly equated Harbor with the independent and much larger South Shore Physician Health Organization (SSPHO). Harbor has 65 physicians. According to the HPC preliminary report, SSPHO has 400 physicians. Using the HPC's own factual findings, Harbor physicians represent only 16.25% of the SSPHO. Clearly, Harbor is not the SSPHO and the SSPHO is not Harbor. Nor does Harbor have access to confidential information about the SSPHO so as to be in a position to confirm or rebut the HPC's many factual assertions about the SSPHO.

In its Executive Summary under the heading "Cost Profile" the HPC tellingly makes no mention of Harbor. Instead, it talks about Partners, SSH and SSPHO. The summary notes, "Partners and SSPHO have high total medical expenses (TME), due in part to high hospital prices." Harbor is not responsible for the TME of the independent SSPHO or the high hospital prices of the independent South Shore Hospital. If the Harbor/BWPO Transaction occurs, then as of January 1, 2015, Harbor physicians may no longer be subject to the SSPHO payor contracts. (That decision ultimately will be made by BWPO.) If the Harbor/BWPO transaction does NOT occur, Harbor physicians will still no longer be subject to the SSPHO payor contracts because Harbor will leave the SSPHO effective December 31, 2014 (contingent upon payer approvals). Harbor physicians are among many other physicians exiting the SSPHO. By the end of 2013, fifty-two (52) non-Harbor physicians will have withdrawn from the SSPHO since 2009. The 27 physicians of Health Care South alone left SSPHO as of the end of 2013.

Without knowing Harbor's TME and Harbor's market share for physician and ancillary services, the HPC has no legitimate factual basis for concluding as it does in its preliminary report that "... the proposed transactions between (*sic*) Partners, SSH and Harbor will increase health care spending, likely reduce market competition and result in increased premiums for employers and consumers." To the contrary, the HPC acknowledges on page 15, "Partners and SSH Receive Higher Prices Than Other Area Providers; Harbor/ SSPHO Does Not" and on page 16, "However, unlike the hospital prices described above, SSPHO (including Harbor) has not had high physician prices compared to area physician groups."

In footnote 39 on page 16 of the HPC preliminary report, the HPC notes, "... SSPHO's statewide relative prices ranged from the 24th percentile to the 73rd percentile, with prices from many payers in the low 40th percentile." Thus, even if the HPC were to use the SSPHO as a proxy for Harbor, which it cannot fairly or legally do, it is clear that Harbor does not meet the second criterion of M.G.L. c. 6D, Section 13 for referral to the attorney general because Harbor does not charge prices for its services that are higher, let alone materially higher, than the median prices charged by all other providers for the same services in the same market. The HPC's own chart on page 17 of the preliminary report shows the SSPHO as the second lowest among eight

competitors for “Relative Prices for PCHI and SSPHO Compared to other Area Physician Groups.” Clearly, Harbor does not have market power. Its below market rates demonstrate that Harbor lacks market power.

The HPC in its preliminary report says nothing about Harbor’s market share. Rather the preliminary report focuses exclusively on the market shares of Partners and SSH. M.G.L. c. 6D Section 13 requires as the very first factor for a CMIR to examine the provider organization’s market share within its primary service areas by major service category and within dispersed service areas. The HPC preliminary report completely fails to examine Harbor’s market share at all. For this reason among others, the HPC should change its position in the December 18, 2013 preliminary report and recommend no referral to the Attorney General’s office for further review.

2. THE HPC WRONGLY CONCLUDED BASED UPON SSPHO INFORMATION, NOT HARBOR INFORMATION, THAT THE BWPO/HARBOR TRANSACTION WOULD REDUCE COMPETITION FOR PHYSICIAN AND ANCILLARY SERVICES IN HARBOR’S MARKETPLACE AND FAILED TO MAKE ANY REQUIRED FINDING ABOUT HARBOR’S TME. IN FACT, ROBUST COMPETITION WITHIN THE PHYSICIAN AND ANCILLARY SERVICES MARKET WOULD STILL REMAIN.

With 65 physicians, Harbor successfully competes in its physician service marketplace with much larger physician organizations including Atrius, Steward HCN, BIDPO, NEQCA, other physicians in the SSPHO, Southeast Physicians Network and Signature Brockton PHO. (See the chart at top of page 17 of the HPC’s preliminary report.) Even after the Harbor/BWPO Transaction, a robust and highly competitive marketplace for physician and ancillary services will exist in Harbor’s service area. The HPC staff in its preliminary report simply failed to analyze the physician and ancillary service market in which Harbor competes.

The HPC in violation of the HPC’s obligation under M.G.L. c. 6D, failed to make any finding about Harbor’s Total Medical Expenses. The HPC admits in footnote 44 on page 19 of the preliminary report, “While we did not have access to TME data for Harbor specifically, it is one of the largest primary care groups in the SSPHO, responsible for about 29% of SSPHO’s HMO/POS member months according to data from one major payer.” Read that sentence critically. Harbor is not the largest primary care group in the 400 physician SSPHO. Other groups within the SSPHO are responsible for 71% of the SSPHO’s HMO/POS member months (more than twice as many as Harbor) and even that tangential information relates to data from only one major payer rather than the customary three major payers used in the rest of the HPC preliminary report. What would the data look like if all three major payers were included, rather than cherry picking only one payor?

Under Massachusetts General Laws c 6D, Section 13, Harbor is legally entitled to have its future professional course with BWPO be based upon real economic information about Harbor, not assumptions about the independent third party organization of the SSPHO of 400

physicians of whom only 65 or a mere 16.25% are Harbor physicians. The HPC staff took a shortcut when it conflated SSPHO with Harbor. This shortcut led to unreliable predictions of the consequences of BWPO's proposed acquisition of Harbor.

3. THE HEALTH POLICY COMMITTEE FAILED TO DETERMINE, AND CANNOT DETERMINE, THAT HARBOR'S PROPOSED MATERIAL CHANGE WOULD BE LIKELY TO RESULT IN A SIGNIFICANT IMPACT ON THE COMMONWEALTH'S ABILITY TO MEET THE HEALTH CARE COST BENCHMARK OR ON THE COMPETITIVE MARKET.

M.G.L. c. 6D, Section 13 sets forth the defined circumstances in which HPC may conduct a cost and market impact review as follows:

Within 30 days of receipt of a notice filed under the commission's regulations, the commission shall conduct a preliminary review to determine whether the material change is likely to result in a significant impact on the commonwealth's ability to meet the health care cost benchmark, established in section 9, or on the competitive market. If the commission finds that the material change is likely to have a significant impact on the commonwealth's ability to meet the health care cost growth benchmark, or on the competitive market, the commission may conduct a cost and market impact review under this section.

The Harbor/BWPO Transaction by itself will not have a significant impact on the Commonwealth's ability to meet the health care cost growth benchmark of 3.6%. The preliminary report concluded at page 35 that,

For example, if Harbor and the other approximately 350 SSPHO physicians (minus Healthcare South) all increased to PCHI prices, it would increase annual spending by the three major payors by \$50.9 million, which equates to a permanent increase in total medical spending (and thus premiums) in the South Shore region of approximately 2.9%.

Any increase in total medical spending attributable to the 27 to 42 primary care physicians whom SSH and Partners have plans to recruit cannot be attributed to BWPO's proposed acquisition of Harbor. Any increase in total medical expenses attributable to the other 335 SSPHO physicians also cannot properly be attributed to the Harbor/BWPO Transaction. Harbor asserts that the increase in total medical spending resulting from its acquisition by BWPO will be less than 1%, not 2.9%. Harbor estimates that if it were acquired by BWPO and in 2015 received Partners non-academic rates, Harbor would make up only 33% to 37% of the \$23 to \$26 million cost increase that the HPC claims in its preliminary report will result in the South Shore based on certain HPC assumptions and projections. The lion's share of the increase flows from the other non-Harbor SSPHO physicians contracting through Partners and from the primary care physicians whom the South Shore Hospital and Partners hope to recruit. Therefore, that lion's share of the increase cannot properly be attributed to the Harbor/BWPO Transaction.

Harbor's share of this alleged increase represents a TME increase of only 0.49%, i.e. the 0.46% noted on page 33 of the HPC preliminary report plus 0.03% for potential academic medical referral pattern change as calculated by Harbor. Given that the SSPHO has received average annual increases of only 2% for each of the past 8 years, this potential added increase amount of 0.49% falls well within the Commonwealth's cost increase benchmark of 3.6% per year. Certainly, by itself, the Harbor/BWPO Transaction does not affect the physician market concentration on the South Shore since the Harbor physicians already practice medicine in that same marketplace. Nor will adding 65 Harbor physicians to the 1600 physicians BWPO increase in any meaningful way Partners' bargaining leverage with insurers.

With regard to the impact on the competitive market, Harbor as part of the BWPO would still compete with Atrius, Steward HCN, BIDPO, NEQCA, other physicians in the SSPHO, Southeast Physicians Network and Signature Brockton PHO. (See the chart at top of page 17 of the HPC's preliminary report.) All of these organizations are much larger in their number of physicians than Harbor. The Harbor/BWPO Transaction will not have a significant adverse impact on the competitive market in which Harbor competes. As part of the larger BWPO, Harbor will be better equipped to compete more strongly with its larger competitors.

4. THE HEALTH POLICY COMMISSION CANNOT PROPERLY COUNT UNKNOWN FUTURE ACTION BY NON-HARBOR PHYSICIANS IN THE SSPHO IN THE MEASUREMENT OF ANY INCREASE OR DECREASE IN TOTAL MEDICAL SPENDING RESULTING FROM THE HARBOR/BWPO TRANSACTION.

The HPC found as a fact, "As SSPHO physicians join Partners, there will be changes in physician prices that increase total medical spending." (Preliminary report at page 30.) This bold speculation on the HPC's part cannot be true in Harbor's case until at the earliest January 1, 2015, more than a year from now. A lot can happen in the rapidly changing health care reform marketplace in the intervening year. Whether former Harbor physicians obtain Partners' rates in 2015 will depend upon future negotiations between Partners and the independent payors. Those negotiations have not yet occurred.

The HPC in its preliminary report goes so far as to speculate not just about Harbor or PCHI or even the SSPHO but about "how physicians from other systems may join Partners and begin receiving PCHI prices." Who are these physicians from other systems? Are they currently practicing medicine on the South Shore? The focus of the preliminary report is required to be upon Harbor and BWPO's proposed material change, not pure speculation about the future conduct of unknown non-Harbor and non-BWPO physicians from other systems in possibly other service markets. In short, the HPC failed to perform its statutorily assigned duty of analyzing the cost and material impact of the BWPO's proposed acquisition of Harbor.

5. THE HPC'S CONCLUSION THAT THE HARBOR/BWPO TRANSACTION WILL MAKE THE COMMERCIAL INPATIENT MARKET SIGNIFICANTLY MORE CONCENTRATED PLAINLY DOES NOT APPLY TO HARBOR.

The HPC concludes without explanation that, "The commercial inpatient market will become significantly more concentrated as a result of the proposed acquisitions." Harbor already refers nearly all of its patients for primary and secondary inpatient hospitalization to the nearby South Shore Hospital and more than 75% of its patients who need tertiary inpatient hospital services to Partners' hospitals. It would be far more accurate for the preliminary report to say that, as a result of BWPO's proposed acquisition of Harbor, the commercial inpatient market will not materially change. Harbor is an outpatient ambulatory care organization. As a result of the BWPO acquisition of Harbor, the commercial inpatient market will NOT become significantly more concentrated. It will continue to reflect the delivery of care today, but in a manner that optimizes integration of the delivery system to achieve the cost-containment goals of today's health care environment.

6. THE HPC FAILED TO CONSIDER THE IMPACT OF THE HARBOR/BWPO TRANSACTION IN THE ABSENCE OF THE PARTNERS/SSH ACQUISITION AND ERRONEOUSLY ASSUMED THAT, AFTER THE HARBOR/BWPO TRANSACTION, HARBOR WOULD RECEIVE ACADEMIC RATES RATHER THAN INTEGRATED RATES.

The HPC preliminary report is significantly flawed because it assumes only that both the Partners' acquisition of SSH and the BWPO acquisition of Harbor will occur. In fact, one transaction could occur without the other. These two separate transactions are in no way interdependent.

Given the HPC's strong objections to the Partners acquisition of SSH, the HPC's preliminary report should have considered what would happen in the Harbor marketplace if only the BWPO's acquisition of Harbor proceeded. Harbor submits that the financial impact of its acquisition by BWPO by itself would be dramatically less financially significant than that depicted in the HPC's flawed preliminary report about the SSPHO. By joining BWPO, Harbor would reduce its administrative overhead costs by \$█M per year. An expense reduction of approximately \$█M a year for a 65 physician group medical practice is substantial and should be strongly encouraged not discouraged. The Affordable Care Act and America's future competitiveness in the international marketplace demands that health care delivery becomes more efficient and cost effective. By joining forces with BWPO, Harbor will become administratively more efficient and cost effective.

The HPC in footnote 92 of the preliminary report again speculates that, "Because Harbor is joining an academic RSO of PCHI, it is possible their physicians will receive PCHI's slightly higher academic rates rather than its integrated rates." That erroneous speculation by the HPC is directly contradicted by Harbor's own submission to the HPC which states on page HAR0003 that, "Harbor does not expect that future payor contracts will compensate the new South Shore

Community Business Unit of the BWPO at academic medical physician rates.” The HPC staff has acknowledged that the HPC preliminary report was largely written BEFORE the HPC staff received or read Harbor’s 308 page informational submission. The HPC has no factual basis to assume that Harbor, a non-academic, multi-disciplinary group medical practice located in 8 suburban offices on the South Shore far from any academic medical center would receive PCHI academic rates.

The HPC preliminary report is further distorted because it erroneously accepts that, “The parties have stated they plan to recruit 27 to 42 new PCPs to their network over five years to support PHM [population health management] in the South Shore region.” Harbor has made no such statement. This recruitment plan does not apply to Harbor or BWPO at all. Harbor is a party to one of the two proposed transactions. Harbor would also like to note that physician recruitment is very difficult to achieve. To the best of Harbor’s knowledge, SSH has recruited few if any PCPs in any recent year. The HPC preliminary report simply accepts that Partners and SSH will succeed in recruiting the full 27 to 42 PCPs and then multiplies its economic effect based on the HPC’s own baseless and unsupported assumption that the new recruits will come from lower priced, non-Partners’ networks only within Massachusetts, rather than from other parts of the United States and abroad and from medical and surgical residency programs in Massachusetts and elsewhere.

7. THE HPC PRELIMINARY REPORT UNFAIRLY IGNORES THE ENORMOUS FINANCIAL SAVINGS IN TME IN MASSACHUSETTS THAT COULD BE ACHIEVED IF BWPO, PCHI AND OTHER PARTNERS AFFILIATES ADOPT HARBOR’S SUCCESSFUL POPULATION HEALTH MANAGEMENT METHODS.

Harbor diligently manages the care of its patients and has successfully reduced unnecessary hospitalizations, readmissions and inappropriate ER use by Harbor patients by establishing Harbor’s own Accountable Care Organization for Medicare patients, an urgent care center with extended hours, disease management programs for congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD) and diabetes mellitus (DM) and in-home visits to home-bound patients. The preliminary report completely ignores the enormous financial savings in TME in Massachusetts that could be achieved if Harbor helped Partners and PCHI reduce TME and succeed in global risk contracting as Harbor has done on the South Shore for the past decade.

In footnote 160 on page 54 of the HPC preliminary report, the HPC notes that, “For the 3 commercial payors that SSPHO contracts with, SSPHO has always been in a surplus condition.” Imagine the TME savings in our Commonwealth resulting from the collaboration of Partners with Harbor to capitalize on Harbor’s tried and true primary care methods of population health management and avoid the need for large annual health insurance premium increases. In short, the HPC report completely ignores the substantial potential for synergies between Harbor and Partners, which would enable Partners and Harbor to enhance their successful existing population health management platform and evolve it into new ideas and strategies for the future.

8. THE PROPOSED HARBOR/BWPO TRANSACTION MEETS NONE OF THE THREE STATUTORY CRITERIA REQUIRED FOR REFERRAL TO THE ATTORNEY GENERAL FOR FURTHER REVIEW.

M.G.L. c. 6D, Section 13(e) obligates the HPC to identify in its preliminary report any provider organization that meets all of three criteria and provides that, “The commission [HPC] shall refer to the attorney general its report on any provider organization that meets all 3 criteria under subsection (e).” (M.G.L. c. 6D, Section 13(f)). Harbor meets not one of these three criteria.

First, Harbor does not possess a dominant market share for the services it provides. As far as Harbor is aware, even after the Harbor/BWPO Transaction, Harbor as part of the BWPO expects not to have a dominant market share for physician services in Harbor’s marketplace.

Secondly, as the HPC report concedes with regard to the SSPHO, Harbor does not charge prices for its services that are higher, let alone materially higher, than the median prices charged by all other providers for the same services in the same market. For 2014, this circumstance will not change. Beginning in 2015, Harbor’s prices will depend upon future contract negotiations with payors.

Thirdly, Harbor does not have health adjusted total medical expenses that are higher, let alone materially higher, than the median total medical expense for all other providers for the same services in the same market. The HPC staff cannot and, with respect to Harbor, has not asserted otherwise.

9. THE HPC PRELIMINARY REPORT FAILED PROPERLY TO CONSIDER THE BENEFITS OF THE HARBOR/BWPO TRANSACTION AND HARBOR’S COMPELLING NEED TO ALIGN WITH A LARGER ORGANIZATION SUCH AS BWPO TO REMAIN COMPETITIVE IN A MARKETPLACE SERVED BY FAR LARGER ORGANIZATIONS THAN HARBOR.

Group medical practices are joining larger health care organizations throughout the United States for a variety of compelling reasons including:

- The need to reduce health care costs by enhancing patient care coordination across all settings, e.g. ambulatory care, inpatient and outpatient acute hospital services, rehabilitation hospitals, home care, hospice, nursing homes and in-home care
- The need to invest significant capital in intraoperative electronic health record systems, patient care analytics (so-called “Big Data”), informatics, practice management systems, patient data warehouses, patient portals and other technology

- The increasing day-to-day administrative complexity of operating a medical practice fully compliant with HIPAA, OSHA, Stark, Fraud and Abuse, and state and federal employment laws
- Increasing group practice overhead for financial, legal, human resources, real estate, and IT services
- Stagnant reimbursement for physician services, thereby eroding the value of Relative Value Unit (RVU) payments
- Uncertainty about CMS' long- term tolerance for physician owned in-office ancillary services such as imaging and laboratory services
- The strong preference of recent medical and surgical residents toward institutional employment rather than becoming stockholders of mid-sized group medical practices whose business they must manage as small business owners. National experts such as Michael Sachs, CEO of Sg2, predict that by 2015 (so next year) 80% of physicians in the U.S. will be employed by institutional providers or large group employers.
- The shortage of primary care physicians available for recruitment by mid-sized group practices in the U.S.
- Increasing downward budgetary pressures on health care expenditures as the U.S. population ages leading to a required slowing of health care spending increases to leave dollars to invest in education, public safety, defense, environmental protection and other important governmental functions.

Faced with these pressing challenges, the 25 Harbor shareholders have chosen to become employees of BWPO so that they can better coordinate their patients' care across all care settings. As noted above, nearly all of Harbor's patients receive their primary and secondary hospital services at South Shore Hospital and three-quarters of their tertiary hospital services at Partners' academic medical centers now. A decision by Harbor to join a network other than Partners would have hugely disrupted existing patient clinical relationships and would likely have led to fragmented rather than coordinated care.

The Massachusetts marketplace for physician services has consolidated dramatically since 2009. As part of BWPO, Harbor will be able to invest in and maintain in a cost effective manner the necessary infrastructure to manage large populations of patients in the value based, rather than volume based, health economy. By joining BWPO and adopting the EPIC electronic health record system that will shortly be in use at all Partners' hospitals, Harbor can better coordinate in real time patient care across all clinical settings. Harbor can reduce its overhead expenses by approximately \$1M per year by using Partners' administrative services and back office support, can enhance its disease management programs and positively affect patient health outcomes. Given the preference of recent medical graduates for larger institutional employers, being aligned with Partners' may enhance Harbor's ability to recruit much needed primary care physicians to work on the South Shore. By becoming a part of the much larger BWPO, Harbor will be better equipped to compete on a more even playing field against its much larger physician competitors such as Atrius, Steward, and BIDPO, among others.

CONCLUSION

The HPC should change its position in its preliminary report with respect to the proposed Harbor/BWPO Transaction and should not refer the BWPO/Harbor Transaction to the Attorney General for further review because the BWPO/Harbor proposed transaction does not meet all of the three statutory criteria for referral set forth in M.G.L. 6D, Section 13(e).

We respectfully ask that the Health Policy Commission and its staff hold this response in a confidential manner to the fullest extent permitted by Massachusetts law, including M.G.L. c. 6D and its applicable regulations. We ask further that if the Health Policy Commission or its staff plans to release any information pertaining to Harbor contained in this response that the HPC staff notify us a reasonable time in advance so as to give Harbor the opportunity to preserve confidential and proprietary information.

Respectfully submitted,

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January 14, 2014
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EXHIBIT B-1:

HPC ANALYSIS OF PARTNERS HEALTHCARE, BRIGHAM AND
WOMEN'S HOSPITAL, AND SOUTH SHORE HOSPITAL'S RESPONSE
TO PRELIMINARY REPORT

Exhibit B-1
HPC Analysis of Partners-SSH's Written Response to HPC Preliminary Report

This document analyzes and addresses the concerns contained in the January 17, 2014 response of Partners HealthCare System (Partners) and South Shore Hospital (SSH) to the Health Policy Commission's Preliminary CMIR Report (Written Response). Partners and SSH critiqued three areas of HPC analysis:

1. **Care Delivery Impact.** Partners' and SSH's principal concerns are that the HPC disregarded the changing health care environment and underestimated the scope of potential care delivery savings, and that contrary to the HPC's assessment, acquisition by Partners is necessary to achieve those care delivery savings.
2. **Cost Impact.** Partners and SSH are concerned that the HPC's market analysis is flawed and that its projections of cost increases due to increases in physician prices and changes in care referral patterns are based on flawed assumptions or reasoning.
3. **Access Impact.** Partners and SSH believe that the HPC fails to credit their plans for increased access to care.

We address each of these areas below.

I. Care Delivery Impact. While the HPC is firmly committed to advancing the benefits of care delivery transformation, here, we have not received adequate evidence showing how the proposed transactions are likely to drive overall performance improvements that achieve those benefits.

A. *The HPC is committed to an evidence-based approach to advancing care delivery reforms*

The Written Response characterizes the HPC as uninformed of the transformative potential of care delivery reforms. In fact, the HPC was chartered upon a commitment to "foster innovative health care delivery and payment models,"¹ and leads a spectrum of initiatives to advance population health management (PHM) and other care delivery reforms. A central focus of the HPC's \$120 million Community Hospital Acceleration, Revitalization, and Transformation Investment Program, as well as the HPC's certification programs for patient centered medical homes and accountable care organizations, is the evidence-based implementation of innovative care delivery models and coordinated, accountable care.² Similarly, the HPC's 2013 Cost Trends Report found there is significant opportunity to enhance the value of health care in Massachusetts by "promoting an efficient, high-quality health care delivery system in which providers efficiently deliver coordinated, patient-centered, high-quality health care."³

¹ MASS. GEN. LAWS ch. 6D, § 5 (2012).

² See MASS. GEN. LAWS ch. 6D, §§ 14 - 15 and MASS. GEN. LAWS ch. 29, § 2G GGG.

³ MASS. HEALTH POLICY COMM'N, 2013 COST TRENDS REPORT, PURSUANT TO M.G.L. C. 6D, § 8(G), ANNUAL REPORT, at 51 (Jan. 2014), available at <http://www.mass.gov/anf/docs/hpc/2013-cost-trends-report-full-report.pdf>.

Chapter 224 further dedicates the HPC to advancing this transformative potential by requiring that providers proposing to undertake significant changes provide measurable indicators of how those changes are likely to result in improved performance. While Partners and SSH point to select examples of positive implementation of PHM, the HPC's review must reflect the reality that success is not assured and that relevant data for how improved performance will be achieved, and the extent to which that performance is likely to translate into lower total medical spending, must be provided in support of potential transactions.

The HPC extensively reviewed the information the parties provided in support of the proposed transactions, and did not find concrete evidence of how they are likely to result in overall improved performance. The transaction documents describe changes that will increase payments to physicians, shift care to higher-priced providers, and double market share in the South Shore region, resulting in significant and quantifiable increases to total medical spending. As laid out in the Final Report and this document, the parties have failed to provide similarly concrete, data-driven projections of transaction-specific savings to offset these known costs, or to demonstrate how corporate integration of the parties is instrumental to achieving such savings. Our findings do not stand for the proposition that care delivery savings are unattainable, but that the parties here have not laid out sufficient evidence of how *these* transactions are likely to reduce overall spending, and result in savings that will be passed on to payers and, ultimately, employers and consumers. For this reason, the HPC finds that these transactions warrant further review, and refers the Final Report to the Attorney General's Office.

B. The parties have not shown how the proposed transactions are likely to result in overall increased efficiency

There are a number of ways in which the parties have failed to demonstrate that the benefits outweigh the burdens of these transactions. First, they have proposed engaging in conduct that creates significant burdens (e.g., significant increases in physician payments, shifting care to higher-priced providers, and doubling market share in the South Shore primary service area). To offset these burdens, the HPC sought evidence of superior performance that would be driven by the proposed acquisitions. The HPC considered evidence of overall performance on a variety of cost, quality, and access measures, as well as evidence of specific successes and new innovations that would arguably require a corporate acquisition to be implemented in the South Shore region. As detailed below and in the Final Report, the parties have failed to provide compelling evidence of either.

1. SSH and Harbor perform as well or better than Partners on measures of total cost and quality

As detailed in Section III.B of the Final Report, all three parties have achieved consistently high performance on a range of quality measures.⁴ Partners and SSH argue that

⁴ One important factor that may increase the likelihood of a beneficial quality impact from a transaction is substantial pre-merger clinical superiority of the acquiring party. See Patrick Romano & David Balan, *A Retrospective Analysis of the Clinical Quality Effects of the Acquisition of Highland Park Hospital by Evanston Northwestern Healthcare*, 18 *INTL. J. OF ECON. OF BUSINESS* 45 (2011) (“[P]re-merger quality differences suggest

their independent high quality profiles are not relevant to evaluating the potential of the transactions to drive further quality improvements. They state they “are committed to an ever-expanding view of quality” and “put simply, there is no ceiling on quality.”⁵ While we agree with Partners and SSH that there is no ceiling on quality, as detailed in Section III.B.2 of the Final Report, we have not received evidence of how Partners’ corporate ownership of SSH and Harbor is instrumental to improving that quality. General commitments to “an ever-expanding view of quality” must be paired with specific evidence to form a sound basis for distinguishing the merits of different transactions, including those more likely to result in meaningful quality improvement and those that are not.

Harbor and other South Shore Physician Hospital Organization (SSPHO) providers also deliver care more efficiently than Partners providers. As detailed in Section III.A of the Final Report, while SSPHO’s health status-adjusted total medical expense (TME) is higher than that of many local competitors, it is lower than Partners’. While the HPC credits Partners for pursuing PHM initiatives, those initiatives have not yet translated into superior efficiency performance in commercial contracts.

2. The parties do not provide an adequate evidentiary basis to support their claims of commercial savings, which raise methodological and substantive concerns

The data do not support the parties’ claim that the HPC wrongly omitted commercial savings in projecting the care delivery impact of the proposed transactions. While the future brings infinite potential, the parties have not provided credible evidence, either in their production that preceded the Preliminary Report or in the Written Response where they introduce new claims, that these acquisitions will drive measurable efficiencies for commercially-insured populations and that such savings will be passed along to employers and consumers.

In their production in advance of the Preliminary Report, the parties directed the HPC to review their performance under commercial risk contracts as evidence of the potential for the acquisitions to drive efficiencies in the care of commercial populations. Instead, that evidence shows that Harbor and SSH have had far more experience than Partners in managing care under risk contracts, and that Harbor and SSH significantly outperformed Partners in the leading risk contract cited by the parties, BCBS’s Alternative Quality Contract (AQC). As detailed in Section IV.B of the Final Report, “PCHI received a higher budget than SSPHO to care for a comparable patient population. Notwithstanding that PCHI’s budget was 8.7% larger than SSPHO’s, SSPHO outperformed PCHI, coming under its smaller budget by 7.1%, while PCHI came in under its larger budget by 0.7%.”

a. *Partners’ and SSH’s new claims lack necessary information to elevate them from speculative assertions to credible projections*

one hospital has something of value to impart to the other.”). Our review of the evidence indicates this factor is not present in these transactions, as neither party has substantial clinical superiority.

⁵ Exh. A-1, Partners-SSH Response, at 10.

In their Written Response, Partners and SSH submit new claims on potential commercial savings not previously provided to the HPC. Partners and SSH project that the totality of various PHM strategies that Partners plans to implement in the South Shore region will result in commercial savings of \$158.6 million over eight years (2016 to 2023), or an average of \$19.8 million a year.⁶ These figures do not contain the substantiation required to elevate speculative assertions to credible projections. For example, Partners and SSH do not provide any information regarding the scope of savings for individual PHM strategies cited, their underlying assumptions for per member savings projections, a timetable for implementation of strategies that could be tested for consistency with savings, or detail regarding how savings would be passed on to consumers. This substantiation is all the more critical here, where the rates of savings projected by Partners and SSH exceed even the most successful PHM savings rates reported to date.⁷ We find these high-level claims do not provide sufficiently compelling evidence that these transactions are likely to drive lower TME compared to South Shore providers' already more-efficient independent performance. At a minimum, these claims require further review.

b. Partners' and SSH's new claims raise methodological and substantive concerns

Partners' and SSH's claims also raise methodological and substantive concerns. In particular, several aspects of these claims are contradicted by the data, while the overall model relies on questionable assumptions.

First, potential savings must be compared to a meaningful baseline: the performance of South Shore providers independent of the transactions. We saw no evidence that Partners' and SSH's model credits South Shore providers with the care management expertise and abilities they have already developed, which have resulted in commercial TME that is *lower* than Partners'. Partners confirmed it developed per member savings assumptions without the benefit of SSPHO data.

Second, genuine savings must be netted against investments. Partners' and SSH's figures do not account for program investment costs or other upfront or supplemental spending, which the parties indicate are substantial. In addition, Partners' and SSH's model depends on unrealistic assumptions about the size and health of the relevant patient population that overstate the scope of potential savings. For example, leading research indicates that an appropriate patient panel size would likely be fewer than the 2,600 patients assumed by the parties. This means that the size of the patient population that Partners and SSH assume savings could apply

⁶ Exh. A-1, Partners-SSH Response, Appendix A, at A-8.

⁷ The parties' model assumes savings of approximately five percent of TME. Evidence from statewide performance in the AQC suggests that gross savings that average 2.8% of TME can be achieved compared to spending in non-participating groups. Zirui Song et al., *The 'Alternative Quality Contract,' Based on a Global Budget, Lowered Medical Spending and Improved Quality*, 31 HEALTH AFFAIRS, no. 8 (2012), available at <http://content.healthaffairs.org/content/early/2012/07/09/hlthaff.2012.0327.full.pdf+html>. Compared with other nationally recognized models, Partners' projected savings are also high. See, e.g., Robert Reid et al., *The Group Health Medical Home At Year Two: Cost Savings, Higher Patient Satisfaction, and Less Burnout for Providers*, 29 HEALTH AFFAIRS, no. 5, at 835-843 (2012), available at http://www.ncqa.org/portals/0/public%20policy/reid_-_pcmh_success_8.30.12.pdf (describing savings in the Seattle-based Group Health Cooperative's patient centered medical home model).

to may be overstated.⁸ Partners and SSH also assume that their commercial populations have similar risk profiles, and therefore similar opportunities for savings. However, data from the three major payers show that SSPHO's commercial population is healthier than PCHI's, and thus the scope of savings asserted for the higher-risk PCHI population is not necessarily translatable to the healthier SSPHO population.

In addition to these methodological concerns, several of Partners' and SSH's key claims about potential commercial savings are contradicted by the data. For example, they claim that these transactions are likely to result in substantial savings from bringing admissions rates at SSH in line with those at Newton-Wellesley Hospital (Newton-Wellesley).⁹ Data on admissions rates from the major payers contradicts this claim that SSH's admissions rates are higher than Partners' and that an acquisition by Partners would drive down admissions rates.¹⁰ The most recent data available from one major payer shows that SSPHO physicians had a *lower* admissions rate than PCHI physicians, including Newton-Wellesley physicians. This payer's data shows that SSPHO admitted patients at a rate of 58 admissions per 1,000 members, compared to 76 admissions per 1,000 members for all PCHI physicians and 78 per 1,000 members for Newton-Wellesley physicians. For another major payer, SSPHO again had lower admissions rates than PCHI (63 per 1,000 members versus 68 per 1,000 members).¹¹

Another source of savings Partners and SSH cite is increasing the amount of care kept in the community setting. Partners and SSH claim that, in line with the amount of secondary care that Partners has shifted from Brigham and Women's Hospital to Faulkner Hospital, these

⁸ See, e.g., Justin Altschuler et al., *Estimating a Reasonable Patient Panel Size for Primary Care Physicians With Team-Based Task Delegation*, 10 ANNALS FAM. MED., no. 5, at 396-400 (2012), available at <http://www.annfammed.org/content/10/5/396.full.pdf+html> (finding that a primary care team could reasonably care for a patient panel of between 1,387 and 1,947). See also AHRQ Innovations Exchange, *Service Delivery Innovation Profile: Medical Home Features Small Panels, Long Visits, Outreach, and Caregiver Collaboration, Leading to Less Staff Burnout, Better Access and Quality, and Lower Utilization* (2010), available at <http://www.innovations.ahrq.gov/content.aspx?id=2703> (examining a top performing patient centered medical home and finding increases in performance as panel size decreased to an average of 1,800 patients per physician). Rendering the panel size underlying the parties' projections consistent with leading research would reduce the parties' projected savings by an estimated 25% to 47%, or \$40 to \$74 million over the eight years.

⁹ Exh. A-1, Partners-SSH Response, at 5.

¹⁰ We reviewed 2011 and 2012 data available from two major payers (including the largest commercial payer) showing the admissions rate for the commercial patients under PCHI's and SSPHO's care. These data show precisely the number of patients under PCHI's and SSPHO's care, and precisely the number of admissions for those patients. Rather than using these data, Partners relied on a national database of insurance coverage information to estimate the number of patients under its care and then linked those estimates to general data on admissions for its hospitals. The figures in the Written Response accordingly do not reflect provider-specific admissions rates.

¹¹ We also examined risk-adjusted and case mix-adjusted admission rates and found trends that consistently contradict the parties' position that Newton-Wellesley has experienced lower admissions rates than SSH that could drive significant reductions in admissions post-transaction. Other aspects of the parties' admissions analysis also suffer from methodological flaws, even if one were to accept that the transactions would drive admissions reductions. Principally, in calculating potential savings from admissions reductions, the parties fail to net out the costs of additional ambulatory care needed to prevent hospitalizations, and they overestimate savings by assuming avoided admissions are of average cost (preventable hospitalizations are typically of lower complexity than the average admission and are thus of below average cost). See CTR. FOR HEALTH INFO. & ANALYSIS, *Preventable Hospitalizations - Data Appendix* (Aug. 2012), <http://www.mass.gov/chia/docs/cost-trend-docs/cost-trends-docs-2012/preventable-hospitalizations-appendix-a.pdf> (last visited Feb. 17, 2014) (finding that from 2008 to 2012, preventable hospitalizations were approximately 63% of the cost of non-preventable hospitalizations).

transactions have the potential to reduce costs by up to \$5 million per year by keeping more care at SSH.¹² Shifting clinically appropriate volume to lower-cost settings does represent a significant opportunity to reduce costs across the Commonwealth. However, Partners and SSH did not provide any data to substantiate their claim that significant levels of such savings are likely in the proposed transactions, while the HPC reviewed contrary evidence indicating there is low opportunity for such savings in these transactions.

First, common corporate ownership is not necessary to incentivize shifts in care to lower-cost settings. Global budget contracts create similar incentives for providers to shift care to the most cost-effective setting.¹³ SSPHO already participates in such risk contracts and faces these incentives. Further, patient flow data from two major payers indicate that South Shore providers perform very similarly to Partners providers, and already keep similar or greater levels of care in the community. In particular, we reviewed data for Newton-Wellesley and North Shore Medical Center (North Shore MC), the two providers Partners and SSH identify as the best comparators for projecting SSH's experience as a Partners hospital, both of which are much more similarly situated to SSH than Faulkner.¹⁴ These data show that SSPHO keeps inpatient care in the community at a rate similar to or higher than other Partners providers.¹⁵

In summary, we have not received adequate evidence showing how these transactions are likely to drive overall improvements to South Shore providers' performance, and thus refer these transactions and their associated claims to the Attorney General for further review.

II. Cost Impact. The HPC's market analysis and estimates of known cost increases are reliable, data-driven, and accurate.

A. The HPC's market analysis is sound, relevant, and consistent with applicable guidelines and precedent

1. The HPC's market analysis is methodologically sound and relevant to assessing competitive impact

¹² Exh. A-1, Partners-SSH Response, at 4.

¹³ As described in Section IV.B.2.b of the Final Report, there are examples of other provider models in the Commonwealth that offer alternative approaches to effectively coordinating care delivery.

¹⁴ There are several meaningful differences between Faulkner Hospital and SSH that render Faulkner a poorer comparator than Newton-Wellesley and North Shore MC for an analysis of potential volume shifts. These include proximity (Faulkner Hospital is about three miles from BWH, whereas Newton-Wellesley, North Shore MC, and SSH are all more than 10 miles from their Partners AMC affiliate), operational integration (Faulkner and BWH are more operationally integrated than other Partners community hospitals are with their AMC affiliate; e.g., Faulkner's clinical departments report to BWH's clinical chiefs, and Faulkner and BWH have joint board and quality oversight), and scope of services (Faulkner has a narrower scope of services than Newton-Wellesley, North Shore MC, or SSH, which hosts a level II trauma center and neonatal ICU). The dissimilarity between SSH and Faulkner and the more meaningful comparison of SSH to Newton-Wellesley and North Shore MC is reflected in the fact that only 3% of Faulkner's discharges have been for tertiary DRGs from 2009 to 2012, while for North Shore MC, Newton-Wellesley, and SSH, these DRGs represented 6-8% of discharges.

¹⁵ Data was available for two major payers, including the largest commercial payer, for 2010 to 2012. For both payers, SSPHO kept similar or greater amounts of inpatient care in the community at SSH than Newton-Wellesley and North Shore MC providers respectively kept at Newton-Wellesley Hospital and North Shore Medical Center.

Contrary to Partners' and SSH's claims, the HPC's market analysis of primary service areas (PSAs) is sound and relevant to assessing competitive impact. By construction, a PSA includes a set of consumers for whom the focal hospital is a viable choice. This is a highly relevant set of consumers. Analyzing where these consumers receive their care identifies different hospital options from the perspective of these consumers. An analysis of where residents in South Shore's PSA receive their care shows that SSH and Partners HealthCare System are the top two choices for inpatient care for these residents. This evidence, by itself, indicates the likelihood of substantial head-to-head competition between SSH and Partners, making it more difficult for either to raise prices to insurers serving this set of Massachusetts residents. Partners' acquisition of SSH would eliminate this competition, meaning it would be easier for Partners and SSH to raise their prices. Based on this market share analysis, it is likely that a full antitrust review, including a willingness to pay (WTP) analysis,¹⁶ would similarly find that SSH and Partners currently restrain each other's ability to raise prices to insurers.

The HPC's definition of a primary service area is not hindered by the fact that patients travel outside of the service area to obtain services or by the fact that there is no Partners hospital in the service area. Partners and SSH misunderstand the HPC's market share and concentration analysis; this analysis reflects the perspective of customer locations, not hospital locations. The market shares reported by the HPC show where *residents* in the South Shore PSA receive their care, regardless of the location of the provider. In so doing, the HPC's methodology gives appropriate weight to other providers located outside of the PSA and accounts for patients' willingness to travel outside of the PSA.¹⁷ The HPC's finding that a significant number of patients seek care at Partners' hospitals outside of the PSA, rather than suggesting a flaw in the PSA definition, indicates that Partners is a viable choice for these residents and currently a competitive constraint on SSH's ability to raise prices. This type of analysis based on customer locations is consistent with methods endorsed by the Federal Trade Commission (FTC) and Department of Justice (DOJ) in the *Horizontal Merger Guidelines*.¹⁸

¹⁶ In a WTP analysis, the more often members of a health insurance plan use a hospital, the greater the member's "willingness to pay" for that hospital to be in the health plan's network. If a patient never uses a hospital, the model would predict the patient has very low demand for that hospital and as such that hospital would not constrain the prices negotiated by the other, more desirable hospitals. Conversely, the more directly two hospitals compete, the more likely it is that each is the other's next best alternative and, as such, constrains prices in the hospital-insurer negotiation. See Final Report, at note 132.

¹⁷ Contrary to the parties' claims, the HPC's analysis does not ignore competition from other hospitals. Rather, the analysis weighs those hospitals in proportion to how frequently local residents choose those hospitals for their inpatient care. As shown in the Final Report at 25, area hospitals besides SSH collectively provide 19% of commercial inpatient discharges to residents of the South Shore PSA. In weighing the significance of that figure, it is important to note that these competing hospitals are not part of the same system, and thus none exercises the leverage of a single system with 19% market share. By contrast, PHS and SSH, once merged, would comprise a single system that controls 50% of the inpatient market in this region. Final Report at 16. That figure dwarfs the shares of every other competitor system. Moreover, the collective figure of 19% does not answer the central question of whether these other hospitals are sufficiently substitutable to the South Shore PSA population that a network excluding SSH and Partners would be equally attractive as a network excluding only SSH. Our analysis suggests that these hospitals would not be readily substitutable from the perspective of insurers and consumers.

¹⁸ U.S. DEPT. OF JUST. & FED. TRADE COMM'N: HORIZONTAL MERGER GUIDELINES, at 14-15 (Aug. 19, 2010), available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf> ("When the hypothetical monopolist could discriminate based on customer location, the Agencies may define geographic markets based on the location of the targeted customers When the geographic market is defined based on customer locations, sales made to those customers are counted, regardless of the location of the supplier making those sales.")

The HPC's market findings are also robust and transaction-specific. The HPC evaluated PSA market shares for three different constructions of the SSH PSA: a 75 percent service area based on HPC methodology; a similarly sized service area developed by SSH, described as its "primary service area"; and a 90 percent service area developed by SSH, described as its "secondary service area."¹⁹ In all three circumstances, the analysis shows substantial head-to-head competition between SSH and Partners, suggesting that a merger would have potential anti-competitive effects.

These effects are also transaction-specific. Contrary to Partners' and SSH's claims, the HPC's PSA methodology will not always result in high market shares for merging parties,²⁰ nor will it always imply large changes in concentration following their merger. For example, the same analysis of a merger between SSH and any of the other downtown academic medical centers would not yield concentration levels or changes in concentration as large as the ones for a merger between SSH and Partners. Nor would the same analysis yield comparable changes in concentration as a result of Partners' recent acquisition of Cooley Dickinson Hospital.

2. The HPC's market analysis is consistent with applicable guidelines and precedent

The HPC's use of PSAs for its market analyses is also consistent with the function of CMIRs, the HPC's statutory mandate, and relevant antitrust precedent and guidelines. One of the core functions of a CMIR is to determine those transactions that warrant further review by law enforcement agencies. CMIRs function as a screening tool to determine whether a transaction warrants further review – whether for antitrust or other concerns – "to protect consumers in the health care market."²¹ The HPC's market analyses are intended to complement and serve as a primer to, not fully replicate, the work of antitrust authorities. The HPC's use of PSAs robustly fulfills this screening function.

The HPC's approach is also consistent with antitrust guidelines, particularly those designed to test the competitive effect of transactions motivated by greater accountable care for patients (such as the current transactions). The FTC and DOJ have endorsed using analysis of PSA market shares as an initial screen to a full antitrust analysis. Specifically, their proposed guidelines for evaluating the competitive impact of accountable care organizations (ACOs) state: "As an initial step in determining whether an ACO is likely to raise competitive concerns, the Agencies will use a streamlined analysis that evaluates the ACO's share of services in each ACO participant's Primary Service Area ('PSA')."²² The antitrust agencies explained that while a

¹⁹ See Final Report, at 36-38 and notes 118, 120.

²⁰ In analyzing hospital PSAs throughout the state, the HPC found that a provider system's market share within its hospital PSAs can range from 6% to over 60%. This shows that, contrary to the parties' claims, the HPC's PSA methodology is not "structured from the outset in a way that can only produce erroneously high market shares, erroneously high market concentration, and lead to erroneous predictions of anticompetitive effects." Exh. A-1, Partners-SSH Response, at 6. Rather, higher shares properly reflect greater consumer use and preference for certain providers over others, and thus how directly different providers compete.

²¹ MASS. GEN. LAWS ch. 6D, § 13(h).

²² See FED. TRADE COMM'N & U.S. DEPT. OF JUST., PROPOSED STATEMENT OF ANTITRUST ENFORCEMENT POLICY REGARDING PARTICIPATING IN THE MEDICARE SHARED SAVINGS PROGRAM, at 5 (2011), available at <http://www.justice.gov/atr/public/guidelines/269155.pdf>.

PSA does not necessarily equate with “a relevant antitrust geographic market, it nonetheless serves as a useful screen for evaluating potential competitive effects.”²³

Moreover, the HPC’s market impact analyses are also consistent with the HPC’s statutory mandate. The CMIR statute directs the HPC to “examine factors relating to the provider or provider organization’s business and its relative market position,” including “the provider or provider organization’s size and market share *within its primary service areas*”, “the provider or provider organization’s impact on competing options for the delivery of health care services *within its primary service areas*” and “any other factors that the commission determines to be in the public interest.”²⁴ The HPC’s analysis of PSA-based market shares, market concentration, and competitive effects falls squarely within these factors.²⁵

B. The HPC reviewed and incorporated applicable contractual constraints in its analysis of increases in South Shore physician prices. If it had not, the annual \$15.8 million in increased physician payments reported in the Final Report would be a much higher annual impact of \$50.9 million.

Contrary to the parties’ assertions, the HPC reviewed and incorporated applicable contractual constraints with the top three payers in projecting an annual \$15.8 million in increased physician payments to Harbor and other SSPHO physicians as a result of the proposed transactions. Without these contractual constraints, “annual spending by the three major payers [would instead increase] by \$50.9 million.”²⁶ Partners’ and SSH’s Written Response omits important information about Partners’ payer contracts to suggest that payment increases for Harbor and other SSPHO physicians may not occur, or that if they occur, Partners will reduce payments for other physicians in its network. By focusing on the payers’ negotiated efforts to restrain growth in Partners’ physician payments, the parties sidestep two simple truths that undergird the HPC’s projections: (1) Partners has guaranteed increased compensation to Harbor physicians and (2) Partners correspondingly anticipates increased payments from the three major payers for Harbor’s services.²⁷

Transaction documents make clear that increased compensation for Harbor physicians is a central condition of acquisition by Partners. In its acquisition contract, Partners guarantees increased compensation to Harbor physicians for several years, and then guarantees for several more years average revenue per work relative value unit (a measure of physician productivity) that is pegged to BWPO’s average revenue. Correspondingly, in acquisition discussions, the

²³ 76 FED. REG. 67026, 67028 (Oct. 28, 2011), available at <http://www.gpo.gov/fdsys/pkg/FR-2011-10-28/pdf/2011-27944.pdf>.

²⁴ MASS. GEN. LAWS ch. 6D, § 13(d) (emphasis added).

²⁵ As further described in the Final Report, the HPC does not find that other market factors, such as payer steering, are sufficient to constrain market power in this transaction. The parties incorrectly claim that payer testimony contradicts the HPC’s findings regarding payer steering. Exh. A-1, Partners-SSH Response, Appendix B, at B-7. The parties describe payer testimony regarding *statewide* trends that do not necessarily reflect the experience in each Massachusetts region. Moreover, as noted in Section IV.A.3.c of the Final Report, the Partners-SSH transaction may inhibit future attempts by payers to deploy tiered and limited networks products in the South Shore area.

²⁶ Final Report, at 34.

²⁷ For example, in internal documents, Partners lists as a key component of its anticipated return on investment from the Harbor transaction the enhanced rates it expects to ramp up to for the three major payers for Harbor’s services.

parties agree to transition Harbor to Partners contracts with “the goal [of] creat[ing] a compensation mechanism that targets physician reimbursements to be similar to existing BWPO rates.”

Accordingly, in its Written Response, Harbor concedes that a cost impact of Partners’ proposed acquisition is the \$7.8 million in increased payments to Harbor physicians that the HPC reports.²⁸ For the two PCHI contracts with major payers whose current terms will still be in effect in 2015 (when Harbor joins PCHI), the HPC calculated the precise cost impact based on the known terms of those contracts. For the one major payer whose contract expires at the end of 2014, and whose new terms – including physician eligibility for enhanced rate slots – have not yet been negotiated, the HPC projected the cost impact of the parties’ stated intent to target rates for Harbor “similar to existing BWPO rates,” i.e., PCHI integrated rates. Given the operation of market leverage and Partners’ own expectation of “enhanced rates slots” for Harbor from all three payers, we believe this to be the more likely result of the pending contract negotiation, barring intervention by authorized agencies or perhaps a change in course by the parties themselves.

The Written Response raises two further arguments regarding the allocation of enhanced rate slots. First, it suggests that because Partners controls which physicians in its network are eligible for these slots, it is not the proposed transactions that trigger a cost impact. Partners argues that even in the absence of the transactions, it would delegate newly available slots to physicians in its network not currently paid enhanced rates, resulting - in any event - in an increase in costs. This argument sidesteps the fact that it is *these* transactions in which Partners has committed to increasing physician payments and allocating enhanced rate slots. The fact that parties could engage in other behavior that might also result in cost increases does not absolve the HPC of its responsibility to report accurately on the cost impact of the transactions before us.

Second, Partners suggests that enhanced rate slots only become available when physicians leave Partners for other providers, presumably at a net savings to the health care system, and thus replacing these physicians merely returns health care spending to the status quo ante. However, as explained in the Final Report, Partners’ growth caps are not universally fixed. Like all contract terms, they are subject to bargaining leverage and can increase over time as contracts are renegotiated. In fact, some contracts explicitly provide for growth in enhanced rate slots, providing PCHI a pre-negotiated increase in the number of enhanced rate slots for the term of the contract.²⁹ Even for contracts that maintain a fixed cap for the contract term, replacing physician groups can still result in net cost growth for the Commonwealth.³⁰ The Written Response suggests this type of cost growth will not occur because enhanced rate slots are “weighted” by physician rate type to be “revenue neutral.” However, this type of “weighting” is only true for one of PCHI’s contracts. For its other contracts, replacing affiliated groups with integrated or academic ones still raises the concern of net cost growth for the Commonwealth.

²⁸ See Exh. A-2, Harbor Response, at 4-5.

²⁹ See Final Report, at notes 96-97.

³⁰ This is because different PCHI groups are paid different rates, depending on whether the group is owned or affiliated, and whether it is considered an “academic” or “community” group. As Partners moves to a more tightly integrated model of ownership of most members of PCHI, groups leaving at lower “affiliated” rates may be replaced with owned groups paid at a higher “integrated” or even “academic” rate. Final Report at note 97.

The HPC’s projection of a total annual increase of \$15.8 million in physician spending is not only methodologically sound and substantively accurate, it is conservative in the following ways:

1. This figure only reflects increased spending for the three payers who account for 80% of the commercial market. The smaller commercial payers, who have less clout, may not be able to negotiate growth caps to constrain Partners in the way the larger payers do, and so may experience a more dramatic cost impact.
2. In modeling the cost impact of additional SSPHO physicians joining PCHI, we left unoccupied several hundred enhanced rate slots available for physicians to fill.
3. For all three payers, we did not model any growth cap increases after 2016, despite the fact that certain of these payers have experienced increases in PCHI growth caps over time.

C. The HPC’s analysis of the cost impact of shifting patient referral patterns is not dependent on where the parties recruit their new physicians

The HPC’s projected cost impact of the recruitment of 27 to 42 new primary care physicians to the combined Partners-South Shore system is not dependent on where the parties recruit these physicians. What matters is where these new physicians get their *patients*. Regardless of whether these physicians are recruited from within or outside the South Shore region, Partners and SSH have submitted documents showing that these 27 to 42 physicians will be filling their patient panels with local patients not currently cared for by SSH.³¹ This shift in local patients to SSH/SSPHO, which uses a higher-cost mix of facilities than other local providers, will cost the top three payers—and thus employers and consumers—an additional \$5.8 to \$9 million per year.³²

D. The parties’ commitment not to charge facility fees merits further review

In the Written Response, Partners and SSH state for the first time that they “have no plans to institute facility fees for Harbor physician office visits.”³³ This is an important update. Previously produced documents indicate that as of December 2013, the parties had not yet determined how they would approach billing for many Harbor services. In addition to physician office visits, Harbor provides an array of ancillary services, such as laboratory and imaging, and owns an ambulatory surgery center. As noted in the Final Report, it will be important to verify that billing for these ancillary and ambulatory surgery services, similar to billing for office visits, is included in the parties’ commitment not to charge facility fees and that the parties execute on

³¹ See, e.g., Exh. A-1, Partners-SSH Response, Appendix A, at A-8 (showing recruitment of physicians more than doubling SSH commercial patient lives over a seven year period, from 43,680 in 2016 to 104,520 in 2023). An expert report commissioned by SSH and reviewed by the HPC further indicates that a goal of the parties’ recruitment strategy is to shift more care to the combined Partners-South Shore system, and presents inconsistent results on the need for these new primary care physicians.

³² Final Report at 35.

³³ Exh. A-1, Partners-SSH Response, at 9.

their commitment. This is especially important given the well-documented trend in growth of facility fees,³⁴ and the contractual potential, once Partners owns SSH and Harbor, for added facility fees.

III. Access Impact. The HPC did not receive sufficient evidence to make a finding either way regarding changes in hospital payer mix or service mix as a result of the transactions

In the Written Response, Partners shares for the first time behavioral health plans that include expanding adult inpatient and adolescent residential treatment capacity at McLean SouthEast, and expanding Massachusetts Child Psychiatry Support to pediatricians and school nurses in the South Shore region. Partners is to be commended for its commitment to improving behavioral health access. As noted in the Final Report, however, the HPC did not receive sufficient evidence to make a finding either way regarding specific changes in access at SSH as a result of these transactions. While the parties have referenced their general commitment to behavioral health in connection with their plans for PHM, including integrating behavioral health services into patient centered medical homes, “they have not shared any specific plans to make service line changes at SSH, or to specifically increase SSH’s mix of behavioral health services. Accordingly, the HPC did not review information indicating that SSH’s service mix will change as a result of these transactions.”³⁵

Partners and SSH are also concerned that the HPC reported their payer mix, claiming that “hospitals serve the mix of people in their markets; they do not create that mix.”³⁶ But this is precisely the question the HPC examined. The HPC analyzed a common geographic area (a PSA) to report on the average mix of patients found in that market and how hospitals in that market served those patients. We found Partners’ and SSH’s hospitals do not serve the average mix of patients found in their respective markets; they serve an above-average commercial payer mix. As noted in the Final Report, one factor that could change this pattern of lower Medicaid mix is if Partners and SSH actively seek to increase their proportion of government payer patients. Partners and SSH have not provided evidence of any such specific plans to increase their mix of government payer patients.³⁷

IV. Conclusion.

Having reviewed the parties’ written responses and addressed their claims, we find there is no evidentiary basis to change our determination that further review of the transactions is warranted. Accordingly, the Final Report includes a referral of the transactions to the Attorney General for further review.

³⁴ See, e.g., MEDICARE PAYMENT ADVISORY COMMISSION, REPORT TO THE CONGRESS: MEDICARE PAYMENT POLICY at 51 (Mar. 2012), available at http://www.medpac.gov/documents/Mar12_EntireReport.pdf.

³⁵ Final Report. at 57.

³⁶ Exh. A-1, Partners-SSH Response, at 10.

³⁷ A final criticism raised by Partners is that the HPC did not analyze inpatient behavioral health services by Partners providers. The HPC intended no offense in this omission. We were simply unable to replicate this analysis for Partners because, unlike SSH, Partners owns inpatient behavioral health providers for which utilization data necessary to conduct the analysis is not collected.

EXHIBIT B-2:

HPC ANALYSIS OF HARBOR MEDICAL ASSOCIATES' RESPONSE
TO PRELIMINARY REPORT

Exhibit B-2
HPC Analysis of Harbor’s Written Response to HPC Preliminary Report

This document analyzes and addresses the concerns contained in the January 14, 2014 response of Harbor Medical Associates (Harbor) to the Health Policy Commission’s Preliminary CMIR Report (the Harbor Response). Harbor critiqued two principal areas of HPC analysis:

1. **Impact Analysis.** Harbor is concerned the HPC improperly analyzed the impact of the transactions before it. Harbor contends that properly considered, the HPC would not find a significant cost or market impact, and as such, lacks basis for referring the Harbor transaction to the Attorney General.
2. **Baseline Data.** Harbor complains the HPC did not include sufficient analysis of its data separate from that of South Shore Physician Hospital Organization (SSPHO).

We address each of these concerns below.

I. **Impact Analysis.** **The HPC accurately assessed the impact of the transactions before it, which properly resulted in a referral to the Attorney General.**

A. *The HPC properly considered the Harbor and SSH transactions together to assess the impact of the resulting expanded Partners system*

Harbor asserts the HPC should have considered Partners HealthCare System’s (Partners) acquisition of Harbor independently from Partners’ acquisition of Harbor’s affiliated hospital, South Shore Hospital (SSH). Considering these two transactions separately, and attempting to disaggregate negative effects into those driven more by hospital activities versus physician activities, ignores the parties’ interrelated objectives in undertaking the transactions, misrepresents the marketplace in which the transactions occur, and is inconsistent with the parties’ own view that we should consider their activities as interconnected and aligned in assessing their potential for achieving positive effects on care delivery. Partners has reinforced the interrelation of the transactions, repeatedly describing “tighter integration” and “alignment” of physicians with SSH and the Partners hospitals as “a key component to successful implementation” of population health management and its acquisition of SSH.¹ Because Harbor and SSH, who are already clinically aligned with one another and with Partners, are proposing to join the same system, considering these acquisitions concurrently properly allowed the HPC to assess the impact of the resulting provider organization. Each impact finding in the Final Report applies to the impact of the overall expanded provider organization, driven by both transactions.

B. *The HPC reasonably found the cost impact of Harbor physicians joining PCHI to be significant*

As described at length in Section II.B of Exhibit B-1, the HPC’s calculations of increased physician payments resulting from these transactions are sound, data-driven, and fully supported

¹ Application by South Shore Hospital, Inc. for Determination of Need under 105 C.M.R. 100.600-603 for Change in Ownership of South Shore Hospital, Attachment B, Affiliation Agreement, at Art. 5.9.1 (Dec. 28, 2012).

by the parties' own documents and the terms of the parties' contracts with payers.² In its Response, Harbor ultimately concedes this cost impact of its physicians joining Partners Community Healthcare Inc. (PCHI),³ and contends only that this permanent increase in spending of \$8 million per year for the three major payers, or 0.46% of total medical spending in the South Shore region, is not "significant." The HPC disagrees. First, as discussed in the preceding section, it would be contrary to the parties' own vision for these transactions to excise Partners' recruitment of Harbor from its overall plans to recruit significant numbers of South Shore physicians to support its population health management goals. Second, even if the HPC were to tease out a Harbor-specific impact, we find such a yearly, permanent increase to the three largest payers' total medical spending (and thus premiums⁴) from a single transaction *is* significant. As described in the Final Report, this transaction is anticipated to result in a 41.5% price increase for Harbor's services for the three largest commercial payers.⁵

C. The HPC appropriately considered the recruitment of additional physicians, and their associated costs, as an objective of both transactions

Harbor also contends that the HPC should not have analyzed plans to recruit additional physicians in connection with its acquisition by Partners.⁶ Harbor's position runs counter to its own transaction documents and those of the other parties. Harbor has stated an important purpose of this acquisition is to enable it to recruit additional physicians,⁷ while Partners' transaction documents similarly characterize the Harbor acquisition as part of its broader plans for physician recruitment to support its acquisition of SSH and its goals for population health management.⁸ We find that the parties' stated plans for physician recruitment are a central premise of these transactions and the parties' goals for population health management in the South Shore. Reporting on the cost impact of such physician recruitment is a proper exercise of the HPC's responsibility to report factually and comprehensively on the impact of proposed transactions before the agency.⁹

² Exh. B-1, at 9-11.

³ Exh. A-2, Harbor Response, at 4-5.

⁴ Payers would at some point raise premiums in an equivalent amount to cover this increase in medical spending, either for employer accounts in the South Shore area that use SSH and SSPHO services, or spread out across a broader actuarial pool across the state.

⁵ Final Report, at 31.

⁶ Exh. A-2, Harbor Response, at 4, 7.

⁷ For example, in confidential materials provided to the HPC, Harbor states a longer term goal of the transaction is to better enable Harbor to recruit additional primary care physicians, who may be attracted to joining the BWPO while practicing in a community setting.

⁸ For example, in internal documents, Partners notes that the Harbor acquisition fulfills a percentage of its numerical commitment to PCP and SCP recruitment made in connection with the SSH acquisition. *See also* Application by South Shore Hospital, Inc. for Determination of Need under 105 C.M.R. 100.600-603 for Change in Ownership of South Shore Hospital, Attachment B, Affiliation Agreement, at Exh. 4.10.1 (Dec. 28, 2012) (including a proposed affiliation agreement between Partners' and SSH's respective physician organizations, PCHI and SSPHO, in connection with Partners' proposed acquisition of SSH).

⁹ Harbor also argues that the Partners-Harbor transaction will not have a significant adverse impact on the competitive market, and will not impact the commercial inpatient market. Exh. A-2, Harbor Response, at 5, 6. As explained in Section I.A, considering separate impacts from these interrelated transactions would ignore the parties' stated objectives and misrepresent the marketplace in which these transactions are occurring. Moreover, as noted in the Final Report, given the scope of the parties' service offerings and the strength of Partners' and SSH's inpatient market share, we anticipate these transactions could result in competitive effects in additional product markets

D. The HPC accurately reported on the benefits and potential savings of the transactions based on the best available, well-vetted data provided in connection with this review

In its January 14 Response, Harbor raises new claims about administrative efficiencies from joining PCHI not previously provided to the HPC. Harbor then submitted supplemental production providing conflicting estimates of these efficiencies. These late produced claims raise methodological and substantive concerns that warrant further review. First, the fact that Harbor submitted conflicting claims over a three-week period raises questions as to the reliability of these claims. Second, Harbor has acknowledged that a reduction in Harbor’s administrative expenses does not necessarily translate into savings for consumers. Harbor has generally described reinvesting these funds into its practice, not negotiating lower payment rates from payers to pass on those efficiencies to consumers. Finally, even if the HPC were to assume these administrative efficiencies translate into savings for consumers, Harbor’s highest estimate of such savings, amounting to a few million dollars per year,¹⁰ does not approach offsetting the HPC’s conservative projections of known cost increases from increased physician payments and changes in care referral patterns (\$23 to \$26 million per year).

We address Harbor’s other claim concerning savings – that the HPC underestimated the scope of potential care delivery savings from these transactions – in depth in Part I of Exhibit B-1.¹¹

E. The HPC made ample findings to warrant referral to the Attorney General for further review

Contrary to Harbor’s claims, the HPC’s impact findings warrant referral of the Final Report to the Attorney General for further review. In claiming that Harbor meets none of the statutory criteria “required for referral” to the Attorney General,¹² Harbor misstates the law on two counts.

First, as a threshold matter, MASS. GEN. LAWS ch. 6D, § 13(f) sets forth the statutory criteria for a *mandatory* referral of a CMIR report to the Attorney General. The HPC may elect to refer a matter to the Attorney General for further review, regardless of whether it finds that a provider organization meets the three statutory triggers for mandatory referral. This is especially true given that the Attorney General retains all plenary authority to protect consumers in the health care market, as explicitly reserved in MASS. GEN. LAWS ch. 6D, § 13(i).

Second, in claiming that Harbor does not meet the statutory criteria for mandatory referral, Harbor incorrectly assumes that only its market share, prices, and TME are relevant to

beside the inpatient general acute care market we examined, such as the markets for outpatient and physician services in SSH’s primary service area. Final Report, at note 114.

¹⁰ See Harbor Response at 6 (at Harbor’s request, the precise figure was redacted from its written response).

¹¹ Harbor also criticizes the HPC for failing to address its “compelling reasons” for joining a larger provider organization. Conceding all of Harbor’s claimed business interests in seeking an alignment, it is still the HPC’s responsibility to report accurately and comprehensively on the impact of this chosen alignment, as we do in the Final Report.

¹² See Exh. A-2, Harbor Response, at 8.

the HPC's recommendation for further review. To the contrary, the review of a transaction properly considers each party to that transaction, both prior to and following the transaction. The HPC's review may thus examine the cost and market position of Harbor and Partners prior to the transaction, as well as the position of the combined Partners-Harbor entity post-transaction. Here, Harbor does not contend that Partners, either before or following the transaction, lacks dominant market share,¹³ materially higher prices,¹⁴ or materially higher TME,¹⁵ or that a combined Partners-Harbor entity would lack dominant market share, materially higher prices, or materially higher TME.

II. **Baseline Data.** The HPC reasonably assessed Harbor's baseline performance using the best available data.

Contrary to Harbor's claims, the HPC reasonably assessed Harbor's baseline performance using the best available data. In conducting its review, the HPC analyzed party production; data from market participants, including the three largest commercial payers; and publicly available information. None of these sources, including either the payers or Harbor, included data that allowed the HPC to reliably establish Harbor's TME disaggregated from that of SSPHO. Harbor constitutes a significant proportion of SSPHO,¹⁶ the managed care contracting organization through which Harbor contracts with payers. The HPC reasonably relied on this best available data in reporting on these transactions, and acknowledged data limitations appropriately.¹⁷

III. **Conclusion**

Having reviewed the parties' written responses and addressed their claims, we see no basis to change our determination that further review of the transactions is warranted. Accordingly, the Final Report includes a referral of the transactions to the Attorney General for further review.

¹³ The HPC found that Partners is the largest provider organization in Massachusetts, with the highest physician market share by revenue. Final Report, at Section III.A.4.

¹⁴ The HPC found that PCHI receives "higher prices than most other physician groups in the state." *Id.* at 14.

¹⁵ The HPC found that, "for one major payer, the health status adjusted TME of SSPHO and the PCHI practice groups operating on the South Shore were the highest in that region. AGO and CHIA data indicate that for the other two major payers, PCHI and SSPHO were two of the top three highest TME providers on the South Shore in 2011." *Id.* at 16.

¹⁶ Harbor is the largest local practice group within SSPHO by physician count. Final Report, at 7. In addition, the HPC received data from the largest commercial payer showing Harbor accounts for approximately 29% of SSPHO's HMO/POS membership. *Id.* at note 49.

¹⁷ Harbor also complains the HPC did not disaggregate its relative price data from SSPHO's. SSPHO is the contracting organization through which Harbor receives its rates from the three largest commercial payers, so the HPC's reporting of Harbor's rates as consistent with SSPHO's for these payers should be entirely uncontroversial.

EXHIBIT C:

EXPERT STATEMENTS BY ANALYSIS GROUP, FREEDMAN
HEALTHCARE, AND GORMAN ACTUARIAL

**Health Policy Commission Review of Partners Healthcare System's
Proposed Acquisitions of South Shore Hospital (HPC-CMIR-2013-1)
and Harbor Medical Associates (HPC-CMIR-2013-2):
Expert Statement**

Tasneem Chipty

My name is Tasneem Chipty. I am a Managing Principal of Analysis Group, Inc., an economic and business consulting firm headquartered in Boston, Massachusetts. I specialize in the fields of antitrust economics and econometrics. The first of these is the study of how markets function, including competitive interactions among firms and consumer demand, and the second is the application of statistical methods to economic problems. I have served on the faculties of The Ohio State University, Brandeis University, and the Massachusetts Institute of Technology, where I taught courses in microeconomics, industrial organization, antitrust and regulation policy, and econometrics. I am the author or coauthor of several academic articles studying the effects of horizontal and vertical integration on competition, negotiated prices, and consumer welfare. These articles, which apply statistical methods to economic problems, have been published in leading peer-reviewed journals including the *American Economic Review* and the *Review of Economics and Statistics*. I received my Ph.D. in Economics from the Massachusetts Institute of Technology in 1993 and my B.A. degree in Economics and Mathematics from Wellesley College in 1989.

In my consulting work, I have studied the competitive effects of nearly two dozen proposed or consummated mergers and acquisitions, including several healthcare transactions. As part of my work, I regularly employ tools of market definition, critical loss, and upward pricing pressure to assess unilateral competitive effects. Specifically, I have studied the likely effects of proposed transactions on changes in both horizontal and vertical competitive behavior, including changes in referral patterns, steering, and vertical foreclosure. I have also studied the likely effects of proposed transactions on prices in relevant markets. My analysis of these issues is grounded in the U.S. Department of Justice and Federal Trade Commission's joint *Horizontal Merger Guidelines*. For example, on behalf of the Department of Justice, I have evaluated the competitive effects of Southwest Airline's proposed acquisition of Airtran and the competitive effects of the proposed consolidation of two local daily newspapers in Charleston, West Virginia. Both of these matters involved an assessment of relevant antitrust markets where the impact of proposed transaction would likely be felt. In addition, I have served as a consultant to Northshore University HealthSystem (formerly Evanston Northwestern Health Corporation) in response to the Federal Trade Commission's post-merger investigation of the 2000 merger of Evanston Hospital and Highland Park Hospital in the Chicago area. I served as a consultant to Steward Health Care in assessing the competitive impact of its proposed acquisition of Morton Hospital in Massachusetts. More recently, I served as a consultant to private plaintiff Saint Alphonsus Medical Center in evaluating the likely competitive effect of St. Luke's Health System's acquisition of Saltzer Medical Group in the Boise, Idaho area.

I am retained by the Massachusetts Health Policy Commission as part of its Cost and Market Impact Review (CMIR) process to provide an initial assessment of the likely competitive effects of Partners HealthCare System's proposed acquisition of South Shore Hospital. It is my understanding that this analysis is not intended to substitute for a full antitrust review. Rather, it is intended to provide framing of the relevant issues to guide a recommendation for (or against) further antitrust review.

In a typical antitrust analysis, one often begins by evaluating whether certain consumers may be adversely affected by the proposed transaction. One can also undertake a more formal analysis to identify one or more relevant markets in which the effects of proposed transaction are likely to be felt. A finding of harm to even a subset of consumers or harm to competition in even one relevant market can be enough to raise serious concern about the competitive impact of the proposed transaction. A relevant market includes the narrowest set of products (or hospitals) and the narrowest geography in which a hypothetical monopolist over all hospitals could sustain a small but significant and non-transitory increase in price, or “SSNIP.” In this context, the willingness of consumers to switch to another hospital can provide pricing discipline, and the most likely candidate to discipline a particular hospital is that hospital’s next best substitute.

To this end, my analysis focuses on the likely impact of the proposed transaction on consumers living in the South Shore Hospital Primary Service Area (PSA), using information on patient-based market shares. That is, I study which hospitals patients in the South Shore Hospital PSA choose for a cluster of general acute care inpatient hospital services. Underlying these choices are patient preferences for hospitals based on geographic location, reputation, and medical need. As an initial screen, I perform a market share and concentration analysis that involves the calculation of the change in concentration resulting from the combination of Partners HealthCare System and South Shore Hospital. This analysis indicates that South Shore Hospital and Partners HealthCare System represent the first and second choice of patients living in the South Shore Hospital PSA, with about 26 percent of commercially insured patients choosing South Shore Hospital and about 24 percent choosing one of the Partners hospitals. It suggests that the two – South Shore Hospital and the Partners hospitals – are each other’s closest competitors for South Shore Hospital PSA residents and that the proposed transaction is likely to result in substantial concentration of the choices relied upon by this group of consumers. For these reasons, it is my opinion that the transaction warrants further antitrust scrutiny.

I have had an opportunity to review the parties’ response to the HPC’s Preliminary Report.¹ The parties attempt to discredit the HPC’s analysis by saying that “[a]ntitrust review of hospital mergers is governed by decades of relevant precedents applying well-established methodologies such as the DOJ-FTC Horizontal Merger Guidelines,”² and that “[u]nder all of those precedents and methodologies, the bedrock first principle of any antitrust analysis is a robust, reliable market definition produced by a rigorous process....”³ I disagree with the parties’ characterization for the following reasons:

1. The parties fail to understand that CMIRs are intended to be a *screening* tool to determine whether a transaction warrants further review.
2. HPC’s analyses are consistent with the Federal Trade Commission and Department of Justice guidelines for antitrust enforcement of Accountable Care Organizations. According to these guidelines, “[a]lthough a PSA does not necessarily constitute a

¹ Partners-SSH Response.

² *Id.* at B1.

³ *Id.* at 6 and B1.

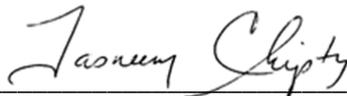
relevant antitrust geographic market, it nonetheless serves as a useful screen for evaluating potential competitive effects.”⁴

3. While market definition can prove to be a useful exercise, it is not the “bedrock first principle” of antitrust as the parties claim. According to the *Horizontal Merger Guidelines*, “[t]he Agencies’ analysis need not start with market definition. Some of the analytical tools used by the Agencies to assess competitive effects do not rely on market definition, although evaluation of competitive alternatives available to customers is always necessary at some point in the analysis.”⁵

The parties mischaracterize the HPC’s analysis, saying that it fails to account for the outflow of patients from the South Shore to the Boston-area hospitals. The HPC presents a market share analysis from the perspective of patient locations and, as such, includes in its calculations patients’ choice of hospital regardless of hospital location.⁶ In so doing, the HPC’s methodology gives appropriate weight to hospitals located outside of the PSA, and it accounts for patients’ willingness to travel outside of the PSA.

Based on my review, it remains my opinion that the South Shore Hospital PSA includes a highly relevant set of consumers – those for whom South Shore Hospital is a viable choice for acute inpatient care. An analysis of where they receive their care identifies the closest competitor hospitals to South Shore Hospital from the perspective of these consumers. This analysis shows that South Shore Hospital and Partners HealthCare System hospitals are the top two choices for both non-tertiary and tertiary inpatient care for residents in the South Shore Hospital PSA. This evidence by itself indicates the likelihood of substantial head-to-head competition between South Shore Hospital and Partners, making it more difficult for either to raise prices to insurers serving this set of Massachusetts residents. Partners’ acquisition of South Shore Hospital would eliminate this competition, with a corresponding potential for the parties to increase prices.

February 17, 2014



Tasneem Chifty, Ph.D.

⁴ Statement of Antitrust Enforcement Policy Regarding Accountable Care Organizations (ACO), 76 FED. REG. 67026, 67028 (Oct. 28, 2011), available at <http://www.gpo.gov/fdsys/pkg/FR-2011-10-28/pdf/2011-27944.pdf>.

⁵ See U.S. DEPT. OF JUST. & FED. TRADE COMM’N: HORIZONTAL MERGER GUIDELINES (Aug. 19, 2010) at ¶ 4, available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf> (emphasis added).

⁶ As the *Horizontal Merger Guidelines* explain, “[w]hen the hypothetical monopolist could discriminate based on customer location, the Agencies may define geographic markets based on the location of the targeted customers.” *Id.* at ¶ 4.2.2.

**Health Policy Commission Review of Partners Healthcare System's
Proposed Acquisitions of South Shore Hospital (HPC-CMIR-2013-1)
and Harbor Medical Associates (HPC-CMIR-2013-2):
Expert Statement**

John Freedman

My name is John Freedman, MD, MBA. I am the Founder and Principal of Freedman HealthCare, LLC (FHC), an independent healthcare consulting firm headquartered in Newton, Massachusetts. I am an internal medicine trained physician who specializes in care delivery reform and large scale health system transformation to create a more efficient health care system. I have served as the Medical Director for Quality at Kaiser Permanente in Colorado, and Medical Director for Specialty Services at the East Boston Neighborhood Health Center, overseeing 40 physicians in 16 specialties. As Assistant Vice President and Medical Director for Medical and Quality Management at Tufts Health Plan, I led one of the first public physician profiling efforts in the country—also one of the earliest episode-based physician profiling projects—and I helped define the plan's pay for performance program by engaging physician leaders from medical groups as well as the state medical association. I have additionally served as Associate Medical Director and faculty member of the Tufts Health Care Institute, as a lecturer at the Harvard School of Public Health, and as faculty at Boston University and Tufts Medical Schools. I am the author or coauthor of multiple reports and articles studying clinical quality improvement, utilization management and the effects of the insurance market on promoting value. I received my M.D. from the University of Pennsylvania in 1988 and completed my internship and residency in Internal Medicine at Boston University Medical Center in 1991; I received my MBA from the University of Louisville in 1993 and my A.B. degree in Biology from Harvard College in 1984.

In my consulting work, I have combined my ten years of clinical practice with expertise in performance improvement to help clients solve complex business, strategy, and implementation challenges. My expert team includes seasoned health data experts, care delivery providers, and health policy advisors who pioneered programs in Massachusetts and now bring their expertise across the country. I routinely employ tools and principles of quality measurement, quality improvement, business strategy, and utilization optimization to support providers and payers in care delivery reforms. For example, I have contributed to extensive market examinations in Massachusetts, including studies of the correlation of quality with price. I have served as the lead consultant to the Massachusetts Statewide Quality Advisory Committee in the development of a Standard Quality Measure Set. On behalf of the Massachusetts Office of the Attorney General – Health Care Division, I led analyses of health care quality in Massachusetts, including examination of key payer-led performance incentive plans as well as the measures and approaches employed by a broad array of providers. In addition, I currently serve as a consultant to the Group Insurance Commission, where I advise and facilitate efforts of the GIC and its six carriers to implement the aggressive cost saving and quality improvement goals of the Integrated Risk Bearing Organization initiative.

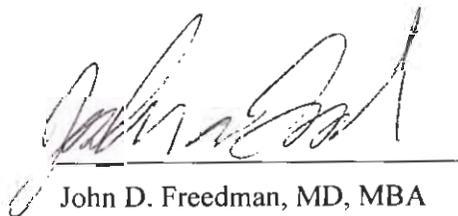
I am retained by Massachusetts Health Policy Commission to provide an assessment of the likely care delivery and quality impacts of Partners HealthCare System's Proposed Acquisition of South Shore Hospital and Harbor Medical Associates (collectively the "parties"). It is my understanding that this analysis is intended to provide an understanding of the parties' baseline performance and a directional assessment of the impacts of the

transaction on the parties' post-transaction abilities to meet the goals of the Commonwealth in reducing health care cost growth while improving quality and access. This review is intended to inform the Health Policy Commission's determination as to whether to recommend a full review of this transaction by key law enforcement authorities based upon factors specified in law as well as to provide policy-oriented commentary on the benefits or detriments of the transaction.

My team's analysis of the transactions before us focused on evaluation of three domains: 1) baseline performance of the parties on widely accepted quality measures; 2) historic performance of the parties in managing risk contracts, including both public payer and commercial insurance initiatives (analyzed in collaboration with HPC-engaged actuarial experts); and 3) projected care delivery impacts of the transactions. Our analysis of more than 120 quality measures suggests that the parties' performance did not materially vary from one another – both are high quality health systems. Our analysis of historic performance in programs such as the Blue Cross Blue Shield Alternative Quality Contract and the Pioneer Accountable Care Organization model suggest that the transaction could derive modestly better cost savings through care management of Medicare patients than the acquired parties would on its own. Based on the data provided by the parties on AQC performance, we did not find evidence of savings that could result for commercially insured populations as a result of the transaction. We also found that quality is not likely to be substantially influenced by this transaction – we did not find significant differences in quality between the parties that would indicate that this transaction will drive quality improvement, and all parties are, and are expected to continue to be, of high quality.

The response of the parties to the Preliminary CMIR Report provided new claims of potential commercial savings through population health management of more than \$158 million over eight years. These claims contain questionable methodological assumptions and lack substantiation, particularly historic experience, which I expect would underlie reliable projections. Our analyses for the Preliminary Report included extensive testing of methodological considerations and are based on detailed production, including the actual medical trend experience of the parties as a result of their PHM activities. I believe these analyses are a more realistic estimate of the potential savings from applying Partners' PHM experiences to the South Shore. I therefore do not recommend a change to the findings of the Preliminary Report.

February 18, 2014



John D. Freedman, MD, MBA

**Health Policy Commission Review of Partners Healthcare System's
Proposed Acquisitions of South Shore Hospital (HPC-CMIR-2013-1)
and Harbor Medical Associates (HPC-CMIR-2013-2)
Expert Statement**

Bela Gorman

I. Introduction

My name is Bela Gorman. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries and, since 2005, have been principal of Gorman Actuarial, LLC. I have over 20 years of actuarial experience in health care. My primary focus over the past 9 years has been assisting state governments with analyzing the impact of various health reform policies, including efforts at cost containment, on the insured markets. I have also spent time reviewing insurance carrier premium rates on behalf of state Insurance Departments and assisting various insurance carriers with pricing and financial forecasting. In addition to Massachusetts, my state clients have included New Hampshire, Maine, Rhode Island, Nevada, Wyoming, and Wisconsin. My insurance carrier clients range from large national carriers such as Humana to smaller carriers such as Geisinger Health Plan. From 1999-2004, I served as the Director of Actuarial Services at Harvard Pilgrim Health Care responsible for pricing and forecasting and prior to that held other actuarial and underwriting positions with other insurance carriers in the state.

The other actuary on the Gorman Actuarial Team is Jennifer Smagula. Jennifer is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. Jennifer has 15 years of actuarial experience. Over the past 3 years Jennifer's focus has been in modeling and analyzing the impacts of health care reform policies and assisting states with rate review. Prior to this, Jennifer was a director level actuary at Blue Cross and Blue Shield of Massachusetts focusing on pharmacy analysis and trend management. Jennifer has also worked for Harvard Pilgrim Health Care focusing on New Hampshire and Maine and Senior Product Pricing.

We have extensive experience with the Massachusetts market. In addition to having worked at the largest insurers in the state, we also provide actuarial and analytic expertise to several state agencies including the Massachusetts Attorney General's Office (AGO), the Massachusetts Division of Insurance (DOI), the Massachusetts Health Connector, and the Massachusetts Health Policy Commission (HPC). We were directly involved in developing the analytic framework for reporting total medical expenditure (TME) and relative price (RP). TME and RP are now commonly used provider financial metrics that are instrumental in our work and analyses for the HPC. We have supported and continue to support the AGO's work on examining health care cost trends and cost drivers, and also support the DOI on health insurer premiums. This requires us to work with the major insurance carriers in the state, providing us with insight into each carrier's approach to data as well as their data limitations. This knowledge is critical when the state's agencies rely so heavily on insurance carrier data to perform any financial analyses or modeling.

II. Scope of Work

Gorman Actuarial has been retained by the HPC to perform an analysis on the impact of Partners Health Care System's proposed acquisitions of South Shore Hospital and Harbor Medical Associates on TME. Projecting TME due to known or expected changes in the market is a common actuarial practice. Health insurance actuaries need to project TME in order to develop health insurer premiums that will be both adequate and not excessive. Actuaries use historical data to understand the impact of future market changes such as a provider transaction. In addition to reviewing historical data, actuaries also review known, expected changes in the market. By analyzing both historical data and expected future changes, actuaries can develop models that will adjust history to project the future.

III. Findings

Through this transaction we identified several expected changes that would impact TME. The principal areas that we analyzed for the HPC included the projected impact on TME due to: (1) increased physician prices; (2) shifting referral patterns of current South Shore doctors from less expensive hospitals to Partners Boston AMCs; and (3) recruitment of 27 to 42 new PCPs to the new Partners-South Shore system, with resulting changes in the site of care for patients cared for by these physicians. We also worked with HPC-engaged clinical experts to analyze the historic performance of the parties in managing risk contracts and to develop estimates of potential savings from expanding PHM initiatives to the South Shore population.

(1) Increased Physician Rates (“unit price”)

In examining the potential physician rate (“unit price”) increases, we reviewed current South Shore PHO revenue data, CHIA relative price data, and Partners payer contracts. We considered the growth cap for each of the top three payers and identified the number of Harbor and other South Shore PHO physicians who could potentially join each PCHI contract and receive the higher PCHI integrated rates. Based on these analyses, our projected increase to medical expenditures is \$15.8 million per year for the top three payers, which directly translates into an increase to premiums for consumers on the South Shore.

(2) Referral Pattern (“provider mix”) Impact for Existing South Shore Physicians

When we examined referral patterns of patients of current South Shore PHO physicians, we found that they were already using Partners hospitals at referral rates that came close to patients of Partners physicians affiliated with Newton-Wellesley Hospital and North Shore Medical Center (the two Partners community hospitals most similarly situated to SSH). We projected that there would be a limited shift in the care of South Shore PHO physicians' patients from competitor AMCs to the Partners AMC hospitals. We calculated that this limited shift in utilization would increase TME by \$1.6 million per year.

(3) Referral Pattern (“provider mix”) Impact for 27-42 New Physicians

We examined the cost impact of the parties’ recruitment of 27 to 42 new physicians. Our analysis is not dependent on where the parties recruit these new physicians, but where the new physicians obtain their patients. We estimated the cost of these patients’ care will increase by \$5.8 to \$9.0 million per year when the newly recruited physicians of the combined Partners-South Shore system begin to direct patients to the same mix of facilities that current South Shore PHO physicians are using.

(4) Potential Cost Savings

We also supported Freedman HealthCare’s work examining the potential cost savings of the transactions based on Partners’ historic performance in the Pioneer ACO, a Medicare High Cost Beneficiary Demonstration Project, and the Blue Cross Blue Shield Alternative Quality Contract (AQC). We supported their work by reviewing current cost and utilization data from the three largest commercial payers, settlement and quality reports from the AQC, and summary reports on the Pioneer ACO. We provided input to Freedman HealthCare on the potential assumptions to use in the cost savings estimate determined for the Pioneer ACO and peer reviewed costs savings estimates derived from the Medicare High Cost Beneficiary Demonstration Project. Our examination of the AQC suggests that savings would not be derived from the transaction because South Shore PHO already substantially outperforms Partners in this program.

IV. Party Responses

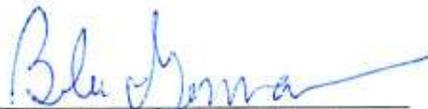
Both Jennifer Smagula and I have reviewed the Partners-South Shore response and the Harbor Medical Associates response and believe our analyses in the above areas are not impacted by the new information the parties have provided. Regarding increases in physician prices, true to the specifics of each payer contract, we modeled out the cost impact of a limited number of South Shore PHO physicians joining PCHI at integrated rates. If contract limitations such as the growth caps were not in place, the resulting yearly increase to medical expenditures would be \$50.9 million, rather than the \$15.8 million we presented in the Preliminary Report.

Our projected cost impact of the parties’ recruitment of new physicians will occur regardless of whether the physicians come from within or outside of the South Shore market. Our prediction that these new physicians will grow their patient panels from nearby patients currently not affiliated with SSH is consistent with data submitted by the parties showing plans to increase South Shore’s total patient population at a rate far faster than population growth.

The Partners-South Shore response includes new projections that the parties’ PHM initiatives will result in cost savings of \$158.6 million. The response does not include the substantiation we would expect for reliable projections, such as detail regarding the assumptions used to calculate this savings. Our analyses for the Preliminary Report were based on careful consideration of methodological concerns and rigorous analysis of detailed data from the parties

and from payers. The parties' response does not include the substantiation necessary for us to conduct a similarly rigorous analysis of their projections.

February 14, 2014



Bela Gorman, FSA, MAAA