

Submitted via email: [HPC-Testimony@state.ma.us](mailto:HPC-Testimony@state.ma.us)

September 8, 2014

David Seltz  
Executive Director  
Health Policy Commission  
Two Boylston Street, Sixth Floor  
Boston, MA 02116

Dear Mr. Seltz,

Enclosed please find written testimony submitted on behalf of Lahey Health System, Inc. in response to the questions of the Health Policy Commission in Exhibit B and questions of the Office of the Attorney General in Exhibit C, as requested in the letter dated August 1, 2014.

In addition, written testimony submitted on behalf of Lahey Clinic Foundation, Inc. and Lahey Hospital and Medical Center are enclosed in response to select questions not specifically addressed in the Lahey Health System, Inc. testimony, and posed by the Office of the Attorney General in Exhibit C.

I, Howard R. Grant, am legally authorized and empowered to represent Lahey Health System, Inc. and all subsidiary entities, for the purposes of this testimony, and this testimony is signed under the pains and penalties of perjury.

Sincerely,



Howard R. Grant, J.D., M.D.  
President and Chief Executive Officer  
Lahey Health System, Inc.

# Written Testimony Submission

On Behalf of Lahey Health System, Inc.  
and Subsidiaries

IN RESPONSE TO REQUEST FROM THE HEALTH POLICY  
COMMISSION (HPC) AND THE OFFICE OF THE ATTORNEY  
GENERAL (AGO)



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### Notes:

*As per discussion with HPC and AGO representatives, Lahey Clinic/LHMC is required to submit a separate response only to those questions not already addressed in the Lahey Health System, Inc. response submission.*

*All efforts were made to conform to prescribed character limits. However, given the need to specify and describe Attachments as well as combine Summary and Response elements for select questions, a slightly modified submission format was utilized. We thank you in advance for your flexibility.*



**1. CHAPTER 224 OF THE ACTS OF 2012 (C. 224) SETS A HEALTH CARE COST GROWTH BENCHMARK FOR THE COMMONWEALTH BASED ON THE LONG-TERM GROWTH IN THE STATE'S ECONOMY. THE BENCHMARK FOR GROWTH BETWEEN CY 2012- CY 2013 AND CY 2013-CY 2014 IS 3.6%.**

## SUMMARY

Efforts to meet cost growth benchmarks are part of a broader systematic and transformational approach. The approach centers on actively ensuring appropriate utilization at the most appropriate site within a high-value health care management and delivery system. To compensate for forgone FFS revenue in the short-term, enable infrastructure investments and maintain a conservative pricing philosophy, Lahey Health employs cost management measures.

The most potentially impactful policy changes regarding cost benchmarks would ensure equitable accountability for reducing spending and effectively reward providers and payers demonstrating an earnest commitment to doing so. Examples may include policies to mitigate short-term negative financial consequences of cost containment or maximize ability to execute innovative partnership and system redesign strategies with potential high-yield cost reduction implications.

## RESPONSE

**a) What trends has your organization experienced in revenue, utilization, and operating expenses from CY2010-CY2013 and year-to-date 2014? Please comment on the factors driving these trends.**

*See Attachment B1-a for detail. Data provided for all applicable years for Lahey Health (formed in May 2012). Data provided by fiscal year (October – September), following previous submission format. The same **seven months** of data (October to April) are provided for comparison purposes of FY2013 – FY2014.*

### REVENUE/EXPENSE TRENDS

#### FY2012 – FY2013

- Operating revenues and expenses each increased by approximately 2.0%

#### FY2013 – FY2014

- Operating revenues increased by 1.8% and operating expenses increased by 1.5%

### UTILIZATION TRENDS

#### FY2012 – FY2013

- IP discharge and ambulatory surgery volumes down slightly (decrease of 2.3% and 3.0%, respectively)
- ED and physician visit volume relatively flat (up 0.4% and 1.2%, respectively)
- Observation discharges, home care visits and behavioral health visits increased (up 8.7%, 14.6% and 28.9%, respectively)

#### FY2013 – FY2014

- ED visit and ambulatory surgery volumes relatively flat (down 1.1% and 0.3%, respectively)
- IP discharge and physician visit volumes up slightly (increase of 1.8% and 3.1%, respectively)
- Observation discharges, home care visits and behavioral health visits increased (up 12.5%, 7.1% and 7.2%, respectively)

### FACTORS DRIVING TRENDS

- Payor incentives to treat potential inpatients using observation beds
- IP utilization trends consistent with trends and teaching/AMC peers in MA; impacted by efforts to treat patients in lower-cost care settings



- Some patient postponement of care, particularly elective ambulatory surgery, and specifically patients with HDHPs<sup>1</sup>
- Efforts to decrease inappropriate ED utilization
- Growth of behavioral health and home health services programs

**b) What actions has your organization undertaken since January 1, 2013 to ensure the Commonwealth will meet the benchmark, and what have been the results of these actions?**

- Maintained a conservative pricing methodology, whereby prices are reevaluated annually resulting in:
  - Generally lower hospital and physician commercial prices compared to most relevant peers<sup>2</sup>
  - Modest, if any, increases in patient cost-sharing provisions
  - Minimal year-to-year price fluctuations
- Participated in more APM contracts, including addition/expansion of commercial risk-contracts, and participation in the MSSP and BCPI<sup>3</sup>
- Executed acquisition of Winchester Hospital to expand our network of high-quality facilities
- Embedded behavioral health resources and support staff into primary care sites, other community settings<sup>4</sup> and the ED
- Invested in infrastructure and HR to improve care and performance management capabilities
- Integrated/centralized/standardized clinical and corporate functions/policies

**c) What actions does your organization plan to undertake between now and October 1, 2015 to ensure the Commonwealth will meet the benchmark?**

**INNOVATIVE CARE DELIVERY**

- Finalize affiliation with VNAME<sup>5</sup> to provide comprehensive continuing care services and integrated home care, palliative care, and hospice care
- Enact system policies that most effectively incent coordination and care delivery in the highest-value setting
- Carry out network development strategies that deemphasize the hospital (and specifically the tertiary hospital) as the “hub”

**INFRASTRUCTURE INVESTMENTS**

- Execute system wide roll-out of Epic EHR platform by March 2015
- Implement *Phytel Outreach* patient engagement and population health management software across the Lahey Clinical Performance Network (LCPN)
- Hire incremental care managers focused on reducing inappropriate utilization and readmissions

<sup>1</sup> HDHP = High deductible health plan.

<sup>2</sup> CHIA Hospital Profiles and Databooks (2012 and 2013 data). LHMC peers are academic/teaching hospitals with comparable CMI. Beverly and Addison Gilbert Hospital peers are community hospitals located in the same or adjacent regions, of similar size and comparable CMI.

<sup>3</sup> MSSP = Medicare Shared Savings Program; BPCI = Bundled Payments for Care Improvement Initiative.

<sup>4</sup> For additional details, please see response to Exhibit B, Q11

<sup>5</sup> The Visiting Nurse Association of Middlesex-East.



**d) What systematic or policy changes would encourage or enable your organization to operate more efficiently without reducing quality?**

At a conceptual level, the most potentially impactful policy changes are referenced in the summary; more practical policy changes focused specifically on improving efficiency while maintaining high quality include:

- Requirements for more timely and comprehensive payer data, particularly for patients with chronic disease; increased overall transparency of payer data and reporting processes
- Increased funding to pilot innovative delivery redesign models
- Modifying health plan benefit design to encourage patient engagement
- Partial subsidization of primary care and care management resources to manage the chronically ill
- Limitations on health plan administrative retention and standardization requirements
- Incentives for payer/provider collaboration to build care management infrastructure

**2. C. 224 REQUIRES HEALTH PLANS TO REDUCE THE USE OF FEE-FOR-SERVICE PAYMENT MECHANISMS TO THE MAXIMUM EXTENT FEASIBLE IN ORDER TO PROMOTE HIGH QUALITY, EFFICIENT CARE DELIVERY.**

**SUMMARY**

Lahey Health aligned physicians<sup>6</sup> are currently engaged in four commercial and two government payor APM (see Attachment B2-a for detail). Some APM contracts are held at the local accountable care unit (ACU; NEPHO and Lahey) level and some at the LCPN level. Regardless of the specific contracting entity, LCPN provides centralized infrastructure and management services (see Attachment B2-b for detail) which facilitates success under APM contracts by enabling higher-value care delivery.

Having five years of BCBS AQC experience, examination of NEPHO ACU performance can most tangibly demonstrate the impact of APMs on practices, patterns and performance.

**RESPONSE**

**a) How have alternative payment methods (APMs) affected your organization's overall quality performance, care delivery practices, referral patterns, and operations?**

**QUALITY PERFORMANCE**

See Attachments B2-c – B2-j for quality dashboards for each ACU and LCPN overall (for all available years and APM contracts).

For the BCBS Alternative Quality Contract (AQC), the NEPHO ACU gate score increased from 3.1 in 2010 to 4.4 in the most recent year, with improvements across all indicators, and for preventative screenings and diabetes care measures in particular. The Lahey ACU has been in the BCBS AQC for one full year, so no trended data exists.

Similarly, given that the Lahey Clinical Performance Accountable Care Organization (LCPACO) has been in the MSSP for one full year, no trended data is available, though LCPACO did perform in the top percentile on the majority of indicators.

**REFERRAL PATTERNS**

Trended NEPHO ACU hospital referral data (see Attachment B2-k for detail) indicate that over time under APM contracts, referrals have shifted from higher-priced hospitals (including MGH, B&W) to lower-priced substitutes (primarily LHMC, but also BIDMC and TMC)<sup>7</sup>

<sup>6</sup> Excludes Winchester Hospital aligned (including but not limited to employed) physicians as full establishment of the Winchester ACU and overall integration into LCPN is not yet complete.

<sup>7</sup> MGH = Mass General Hospital; B&W = Brigham & Women's Hospital; BIDMC = Beth Israel Deaconess Medical Center; TMC = Tufts Medical Center.



## CARE DELIVERY PRACTICES AND OPERATIONS

LCPN has implemented infrastructure and care management tools/expertise to enable appropriate modification of care delivery and operational practices in furtherance of higher-value care.

- The LCPN data warehouse (via interfaces with practice EHRs and payer data feeds) facilitates identification of gaps in care and triggers patient outreach and engagement. The data warehouse also tracks and trends utilization and expenditures to help pinpoint unnecessary utilization, use of low-value providers/facilities and other cost-drivers, and enables subsequent programmatic intervention.
- LCPN contract with Dovetail Health (*see attachment B2-l for detail on Dovetail Health*) to create the Lahey Enhanced Care Program, which provides enhanced care management services for complex, high-risk Medicare ACO patients
- LCPN contract with Phytel Outreach (*see attachment B2-m for detail on Phytel Outreach*), an automated service that identifies patients in need of care and notifies them about recommended visits, test, procedures and other follow-up items

**b) Attach and discuss any analyses your organization has conducted on the implementation of APMs and resulting effects on your non-clinical operations (e.g., administrative expenses, resources and burdens). Please include the results of any analyses your organization has conducted on this issue, including both for your patients paid for under APMs and for your overall patient population.**

Lahey Health/LCPN does not routinely conduct analyses regarding the impact of APM implementation on non-clinical operations. Further, current accounting practices do not specifically parse out clinical from non-clinical operational expenses related to APM management.

In general, overall PM/PM costs have increased as the number of LCPN APM contracts has increased. One potentially noteworthy observation is that administrative costs (namely HR expenses) have not fluctuated year over year to the same degree that non-administrative costs have fluctuated, even with the addition of APM contracts. This being said, the administrative burden associated with responding to each annual payer request for clinical data is extensive.

### 3. PLEASE COMMENT ON THE ADEQUACY OR INSUFFICIENCY OF HEALTH STATUS RISK ADJUSTMENT MEASURES USED IN ESTABLISHING RISK CONTRACTS AND OTHER APM CONTRACTS WITH PAYERS.

#### SUMMARY

Accurately adjusting for the risk associated with health-status is critically important to facilitating success under any risk-contract. Currently used adjustment techniques represent a substantial improvement over past methods relying primarily on age and sex alone to estimate risk. However, current adjustments still do not capture a comprehensive physical and behavioral health risk profile at the population or sub-population level. Further, the statistical legitimacy of adjustments is significantly impacted by population size, and are less valid and reliable as size decreases. Finally, adjustments do not generally account for socioeconomic factors, which considerably influence health care status, decision-making and utilization tendencies.

#### RESPONSE

**a) Do health status risk adjustment measures sufficiently account for changes in patient population acuity, including in particular sub-populations or those with behavioral health conditions?**

From Lahey Health's perspective, adjustments insufficiently capture the comprehensive initial risk profile in addition to insufficiently capturing changes in risk or severity over time. Most notably, adjustments for health status do not adequately incorporate:

- Socioeconomic variables, including income and education levels





- Differences in plan benefits within a sub-population (e.g., whether a pharmacy component is included or whether provider and pharmacy coverage is through the same payer/plan)
- Conditions/risk factors specific to the pediatric sub-population
- Conditions/risk factors related to behavioral health issues (and substance abuse in particular)

**b) How do the health status risk adjustment measures used by different payers compare?**

There appears to be minimal variation in risk-adjustment formulas used by major commercial payers in the state and region. DxCG is the preferred risk profiling/risk assessment solution used by commercial payers in the Commonwealth. However, individual plans may choose to use or weight risk-adjustment results differently or incorporate risk-adjustments into contract terms in different ways. Finally, CMS risk adjustment methodologies, particularly relevant to Medicare Advantage (MA) plans, vary from those typically used by commercial payers and by CMS for non-FFS contracts – including differences in the data sets used, differences in the way the data is organized and use of condition-specific normalization factors.

**c) How does the interaction between risk adjustment measures and other risk contract elements (e.g., risk share, availability of quality or performance-based incentives) affect your organization?**

From the provider perspective, the importance of accurate risk adjustment and risk scoring increases with the type and degree of risk shared/assumed by the provider. Other factors, including the financial model of the contract, prescribed attribution methodology and breadth of services included, along with the actual risk-adjustment methodology used, create the overall picture of performance potential for each contract.

The more accurately health status is adjusted not only initially but continuously, the more accurately the resources consumed can be estimated and recalibrated for annual budgeting purposes. Effective budgeting requires LCPN/Lahey Health to understand what drives variability in expected vs. experienced outcomes and then appropriately direct the resources to manage and improve performance. Finally, accurate and comprehensive coding and documentation policies - both to generate realistic risk profiles and to manage risk – are critical.

**4. WHAT TYPES OF DATA ARE OR WOULD BE MOST VALUABLE TO YOUR ORGANIZATION IN THIS REGARD? IN YOUR RESPONSE, PLEASE ADDRESS (I) REAL TIME DATA TO MANAGE PATIENT CARE AND (II) HISTORIC DATA OR POPULATION-LEVEL DATA THAT WOULD BE HELPFUL FOR POPULATION HEALTH MANAGEMENT AND/OR FINANCIAL MODELING.**

### SUMMARY AND RESPONSE

Overall, health plans do not submit data to providers in a timely manner, with lag time on the order of 60 to 90 days. Further, data variables reported and format of submission varies by payer, and providers could more efficiently and effectively incorporate and leverage this data if practices were more standardized. Finally, reported payer data is not sufficiently comprehensive, and often does not include behavioral health utilization data or pharmacy claims data.

While clinical and utilization data is available immediately via EHR extraction for patients served within Lahey Health, this data provides a limited piece of the overall picture, as services not offered or not rendered by Lahey Health do not appear, nor does other related information (e.g., pharmacy utilization) that is crucial to designing comprehensive care management programs.

To effectively manage patient health, comprehensive and real-time access to all utilization data is needed. Ideally, this data would include both physical and behavioral health care utilization data, as well as pharmacy claims data, across all sites of care and all health plans.

### REVIEW OF MOST VALUABLE DATA NEEDS

**Real-time data for Lahey Health patients receiving care at a non-Lahey Health facility.** Lahey Health may not know for up to 90 days if a patient previously treated at Lahey Health is admitted to a non-Lahey





Health facility or uses a non-Lahey Health ED. Data lag is similar for information on site of post-acute discharge.

**Consistent access to behavioral health and substance abuse treatment data among plans.** Several plans do not distribute information related to behavioral health conditions, including substance abuse, that would facilitate better care plan development and care delivery decisions.

**Historic medical data and claims data for primary care patients.** For individuals who switch to a Lahey PCP from a non-Lahey PCP, medical data is only provided on a go-forward basis. Pharmacy claims data for PCP panels is also not adequately provided, even for longstanding Lahey PCP patients.

## 5. C. 224 REQUIRES HEALTH PLANS TO ATTRIBUTE ALL MEMBERS TO A PRIMARY CARE PROVIDER, TO THE MAXIMUM EXTENT FEASIBLE.

### SUMMARY

Lahey Health believes that the most accurate attribution methodology is to assign each patient to a PCP or medical specialist performing in a primary care capacity (e.g., gynecologist) and recommends this methodology for future attribution of all patients, regardless of health plan or plan type (e.g., HMO, PPO).

### RESPONSE

#### a) Which attribution methodologies most accurately account for patients you care for?

See summary statement above.

Medicare's use of claims methodology to attribute patients to groups based on plurality of visits works fairly well for the Medicare population given more frequent and consistent utilization patterns, but would not capture a large proportion of commercial patients using this methodology.

#### b) What suggestions does your organization have for how best to formulate and implement attribution methodologies, especially those used for payment?

Lahey Health suggests that individuals are prompted upon plan enrollment for both HMOs and PPOs to formally document the name of their PCP or another provider of choice. Additionally, enrollees should be prompted after a defined period of enrollment to either confirm PCP/provider of choice name or inform the plan of a change. Lahey Health believes that documenting the name of advanced practice clinicians, regularly used urgent care center providers and medical specialists is important, and that this information should be captured and used in attribution logic.

## 6. PLEASE DISCUSS THE LEVEL OF EFFORT REQUIRED TO REPORT REQUIRED QUALITY MEASURES TO PUBLIC AND PRIVATE PAYERS, THE EXTENT TO WHICH QUALITY MEASURES VARY ACROSS PAYERS, AND THE RESULTING IMPACT(S) ON YOUR ORGANIZATION.

### SUMMARY

Providing quality performance data to public and private payers is a time consuming and complex task, and payer data requirements are often in addition to data reporting requirements of other federal and state agencies. Though quality measures have become more consistent across payers (and between payers and other agencies), key challenges to efficient processes remain, and include:

- Persistence of measure variability across payers in addition to variability in performance thresholds across payers, even where measures are consistent
- Meeting commercial payer requirements to use EHRs as the sole source of patient outcome data in order to “receive credit” for performance under APMs



- Compounded by current infrastructure barriers at Lahey Health, namely multiple EMRs, that are still in the process of being integrated
- Conforming to CMS quality reporting requirements for which claims data is not deemed sufficient to evidence occurrence of an encounter

Specifics on quality measures reported, the associated administrative and other resource impacts, and barriers to efficient reporting are addressed in more detail below.

## RESPONSE

Specific **barriers** to efficient reporting processes and the impact on Lahey Health include:

- Commercial payers require Lahey Health providers to share **patient outcomes from EMR systems in order to receive “full credit”** for quality performance measures. Results chart data pulls are very time consuming and it is difficult for the organization to pull the information directly from the EMR, as outcomes are not always placed in the appropriate field.
- **For most quality measures, Medicare does not allow a claim for a service to count as evidence of the service.** This results in an extremely time consuming task of reviewing patient charts and manually uploading data into Medicare’s system.
- **Multiple EMRs within the Lahey Health system.** While Lahey Health is working to implement a system-wide EMR for its hospitals and most employed physician provider groups, our facilities and providers are currently not all on the same EMR, resulting in several different configuration for data to flow out of the EMR.

## REPORTING REQUIREMENTS SPECIFIC TO APM CONTRACTS

While there is overlap between quality measures reported for Medicare Shared Savings ACOs and commercial payers, the list of Medicare quality measures to establish performance standards is more comprehensive (*see Attachment B6-a*). Increasingly, commercial payers are relying on CMS measures, which streamlines data capture and reporting processes.

As shown in *Attachment B6-b*, overlap occurs between the largest commercial for four process measures and one diabetes outcome measure to assess physician performance. Additional measures, such as chlamydia screenings, antidepressant medication management, pediatric measures, and avoidance of antibiotic treatment in adults with acute bronchitis, are consistent between the BCBS AQC and Harvard Pilgrim Health Care QAP contracts, though Tufts Health Plan APM contracts do not require reporting these additional measures.

Despite improvements, opportunity remains to reduce variability in quality measures and performance thresholds used across payers. Specifically, Lahey Health would like to see more consistent measures and thresholds related to process and outcome quality data for control of diabetic patients.

## 7. AN ISSUE ADDRESSED BOTH AT THE 2013 ANNUAL COST TRENDS HEARING AND IN THE COMMISSION’S JULY 2014 COST TRENDS REPORT SUPPLEMENT IS THE COMMONWEALTH’S HIGHER THAN AVERAGE UTILIZATION OF INPATIENT CARE AND ITS RELIANCE ON ACADEMIC MEDICAL CENTERS.

### SUMMARY

Foundational Lahey Health principles related to reducing inappropriate inpatient utilization and improving appropriateness of inpatient care delivery setting are highlighted in response to Question 1 and referenced in multiple preceding and subsequent questions.

Available data/analytic substantiation regarding results is provided below. Analysis on this topic has focused almost exclusively on shifting care to the most appropriate setting within the system and reducing outmigration to Boston-based tertiary centers. Data examined includes trended tertiary transfer volume



from Beverly Hospital to LHMC, trended NEPHO hospital referral data, and trended LHMC volume from patients originating in the Winchester service area.

## RESPONSE

**a) Please attach any analyses you have conducted on inpatient utilization trends and the flow of your patients to AMCs or other higher cost care settings.**

*Tracked data on this topic have focused narrowly on legacy Northeast Hospitals and other former Northeast-aligned organizations (e.g., NEPHO) and utilization trends/patient flow between these entities and LHMC. Please reference previously noted Attachment B2-k for trended NEPHO hospital referral data and see Attachments B7-a and B7-b for ED transfer data from Beverly Hospital to tertiary facilities.*

**b) Please describe your organization's efforts to address these trends, including, in particular, actions your organization is taking to ensure that patients receive care in lower-cost community settings, to the extent clinically feasible, and the results of these efforts.**

Please refer to the response provided to Question 1 for information on Lahey Health efforts related to promoting appropriate and high-value care.

## OVERVIEW OF AVAILABLE RESULTS

- Improved retention of appropriate tertiary patients from the Lahey Health service area that historically out-migrated to relatively higher-priced Boston tertiary centers (*Please see attachments B7-a – B7-c*)
- Continuous reduction in the number of lower-acuity patients treated at capacity-constrained LHMC; now treated by Lahey Health community hospitals, as indicated by concurrent increases in LHMC CMI and volume/occupancy rates at community care sites (*Please see attachments B7-d – B7-e*)

## **8. THE COMMISSION FOUND IN ITS JULY 2014 COST TRENDS REPORT SUPPLEMENT THAT THE USE OF POST-ACUTE CARE IS HIGHER IN MASSACHUSETTS THAN ELSEWHERE IN THE NATION AND THAT THE USE OF POST-ACUTE CARE VARIES SUBSTANTIALLY DEPENDING UPON THE DISCHARGING HOSPITAL.**

## SUMMARY

Though no system wide mechanism exists to confirm, Lahey Health believes that there is variation in the utilization and site of post-acute care by hospital within our system, consistent with HPC findings.

While all Lahey Health hospitals track discharge disposition to post-acute care setting, the type and format of information tracked is variable. Our recently integrated system is working to standardize post-discharge protocols and develop the infrastructure and processes to support standardization. Once a system wide baseline and infrastructure are in place, we intend to adopt system wide case/care management policies and embed decision-support pathways to facilitate consistent and appropriate utilization.

We anticipate challenges when referring outside of Lahey, given limited access to price and quality information at point of referral/discharge, and limited information regarding utilization post-discharge.

To address anticipated challenges, Lahey Health is actively developing a robust network and service scope of non-acute care services. In addition and to better coordinate and manage the spectrum of long-term, continuing care and care transition services offered in our system, we recently initiated a strategic plan to integrate the operations of all non-acute care services.

## RESPONSE

**a) Please describe and attach any analyses your organization has conducted regarding levels of and variation in the utilization and site of post-acute care, as well as your efforts to ensure that patients are discharged to the most clinically appropriate, high-value setting.**

Lahey Health has not conducted any formal analyses to quantify the variability of post-acute utilization rates or post-acute sites of care across our system, as noted above.



## b) How does your organization ensure optimal use of post-acute care?

Lahey Health is currently piloting a customized case management model at LHMC, to be refined over time, with the ultimate intention of implementing system wide. To carry out this pilot, staffing for nurse case managers and clinical social workers was increased by 20+ FTEs. Increased staffing enabled individual case management interviews upon admission to proactively prepare for discharge. Interdisciplinary care teams work with patients and families to develop a customized care plan, updated throughout the inpatient stay and provided upon discharge. Multiple interview questions are focused on post-acute planning, and evaluate the need for and most appropriate site of post-acute care using the following factors:

- Social support system
- Accessibility
- Patient safety
- Insurance coverage
- Personal preference

Other efforts related to fostering appropriate use of post-acute care include:

- Streamlining and standardizing internal referral processes to all care settings, including post-acute sites, as part of an effort to reduce readmissions and promote seamless transitions of care
- Developing communication and information-sharing protocols between Lahey Health facilities and non-Lahey Health post-acute care providers

While our customized case management pilot and other efforts to improve appropriateness of post-acute care and selection of high-value care sites, our experience is that patients generally select post-acute providers based on health plan recommendations. More transparent price and quality data from both health plans and post-acute care providers would greatly improve effectiveness of efforts underway by acute care providers.

## 9. C. 224 REQUIRES PROVIDERS TO PROVIDE PATIENTS WITH REQUESTED PRICE INFORMATION. PLEASE DESCRIBE YOUR ORGANIZATION'S PROGRESS IN THIS AREA, INCLUDING THE NUMBER OF INDIVIDUALS THAT SEEK THIS INFORMATION AND IDENTIFY THE TOP TEN ADMISSIONS, PROCEDURES AND SERVICES ABOUT WHICH INDIVIDUALS HAVE REQUESTED PRICE INFORMATION. ADDITIONALLY, PLEASE DISCUSS HOW PATIENTS USE THIS INFORMATION, ANY ANALYSES YOU HAVE CONDUCTED TO ASSESS THE ACCURACY OF ESTIMATES PROVIDED, AND/OR ANY QUALITATIVE OBSERVATIONS OF THE VALUE OF THIS INCREASED PRICE TRANSPARENCY FOR PATIENTS.

### SUMMARY

In accordance with requirements, all members of Lahey Health provide patients with charge information upon request. However, given variability in charge masters across organizations, minimal knowledge of patient-specific cost sharing provisions, and often-unspecified procedure codes, it is unclear to what extent provided information supports more effective consumer decision-making.

We have implemented a formal business process to respond to any patient request related to charge information within the required two business days.

Lahey Health does not collect information regarding how patients use provided data, however, based on the type of information requested, we can infer that the information is intended to be used for comparative shopping. It is also reasonable to infer that requests are made by consumers incented to have greater sensitivity to price due to higher deductibles and/or higher cost sharing provisions

No formal analyses regarding accuracy of charges provided compared to actual costs incurred (by patients or health plans on behalf of enrollees) have been conducted to date.



Lahey Health recently purchased and is in the process of implementing software to better understand intended use of requested information, usefulness of information, whether consumers ultimately select Lahey Health, and if so, how provided estimates compared to actual costs.

## RESPONSE

**CY 2014 YTD LAHEY HEALTH  
PATIENT REQUESTED CHARGES DATA**

|    | Website Inquiries | Phone/In-Person Inquiries | Average Estimated Response Time |
|----|-------------------|---------------------------|---------------------------------|
| Q1 | N/A               | 850                       | 40 hours                        |
| Q2 | N/A               | 1,134                     | 33 hours                        |
| Q3 | N/A               | 1,355                     | 32 hours                        |
|    | N/A               | 3,339                     | 34 hours                        |

The formalized charge request response process was established as follows:

- Patients may request information in person or over the phone from a system financial counselor, who gathers information regarding the requested procedure or service
- Counselor collaborates with the appropriate department and financial team to develop the most accurate estimate possible
- Patient is notified of estimate promptly when information is available

Considerable progress has been made in responding to the steadily increasing number of requests, with response times improving each quarter of CY 2014.

The top ten requests include: office visit, screening colonoscopy, vasectomy, EKG, maternity services, lab tests, MRI, CT, ultrasound, and mammography.

**10. PLEASE DESCRIBE THE MANNER AND EXTENT TO WHICH TIERED AND LIMITED NETWORK PRODUCTS AFFECT YOUR ORGANIZATION, INCLUDING BUT NOT LIMITED TO ANY EFFECTS ON CONTRACTING AND/OR REFERRAL PRACTICES, AND ATTACH ANY ANALYSES YOUR ORGANIZATION HAS CONDUCTED ON THIS ISSUE. DESCRIBE ANY ACTIONS YOUR ORGANIZATION TAKEN IN RESPONSE TO TIER PLACEMENT AND ANY IMPACTS ON VOLUME YOU HAVE EXPERIENCED BASED ON TIER PLACEMENT.**

## SUMMARY AND RESPONSE

The concept of tiered and limited network products is highly aligned with the Lahey Health philosophy of incentivizing care delivery at high-value provider organizations. However, the lack of transparency of factors and formulas used to establish tiers - generally “black box” methodologies - generates skepticism about whether tiering truly reflects value. The fact that the same providers and facilities fall into different tiers for different payers incites doubt that tiering is completely objective. In addition, payers are generally unwilling to provide evidence or explanation for tiering results.

Given that tiers are determined on a relative basis – community hospitals compared to community hospitals, AMCs to AMCs – we regularly encounter instances in which LHMC is in a more favorable tier than our community hospitals, despite LHMC’s absolute cost being higher. This limits our ability to shift volume to the highest-value care setting within our system.

Finally, our experience suggests that tiering decreases continuity and patient-centeredness of care, generates unnecessary fragmentation, creates delays in care, and ultimately results in less satisfied patients.



The volume impact on Lahey Health has not been substantial to date though is difficult to isolate and quantify.

Lahey Health would be interested in collaborating with a payer partner to develop a transparent and consistent narrow network product that would genuinely and effectively incentivize referrals to demonstrably higher-value providers and account for the need to maintain care continuity.

**11. THE COMMISSION HAS IDENTIFIED THAT SPENDING FOR PATIENTS WITH COMORBID BEHAVIORAL HEALTH AND CHRONIC MEDICAL CONDITIONS IS 2-2.5 TIMES AS HIGH AS SPENDING FOR PATIENTS WITH A CHRONIC MEDICAL CONDITION BUT NO BEHAVIORAL HEALTH CONDITION. AS REPORTED IN THE JULY 2014 COST TRENDS REPORT SUPPLEMENT, HIGHER SPENDING FOR PATIENTS WITH BEHAVIORAL HEALTH CONDITIONS IS CONCENTRATED IN EMERGENCY DEPARTMENTS AND INPATIENT CARE.**

## SUMMARY

Lahey Health recognizes the substantial differences in caring for the sub-population with co-morbid physiological and behavioral health and resulting financial consequences. Lahey Health Behavioral Services works diligently to integrate physical and mental health services across the Lahey continuum and actively partners to better identify and manage inappropriate and/or excessive utilization. Efforts have focused on placing behavioral health experts and resources into non-behavioral health community-based settings to proactively mitigate inpatient and ED utilization.

Last year, Lahey Health Behavioral Services' assessment of children and adults in the community setting yielded positive results. For example, the community service agency teams of family therapists have, since program founding in 1999, worked with approximately 3,000 publicly insured families who have at least one child with significant behavioral or mental health conditions<sup>8</sup>. Also, placement of Lahey Health behavioral health specialists in local police stations to intervene in situations of psychiatric crisis likely to otherwise use ED care resulted in an estimated 50% of these individuals ultimately not utilizing ED services.<sup>9</sup>

*For additional detail related to Lahey Health behavioral health programs and anticipated expansion, please see Attachments B11-a and B11-b.*

## RESPONSE

**a) Please describe ways that your organization is collaborating with other providers to integrate physical and behavioral health care services and provide care across a continuum to these high-cost, high-risk patients.**

In addition to and as part of community-based partnerships cited in summary comments, Lahey Health and member entities:

- Provide care coordination staff and resources to partners managing co-morbid patients
- Have organized speakers bureau for behavioral health professionals to provide expertise and programming to PCPs, municipal health departments, and community groups
- Provide access to a psychiatric emergency mobile crisis team, providing 24/7, in-person care, referral support and care management resources

*For additional detail related to the programs highlighted above, please see Attachment B11-c.*

**b) Please discuss ways that your organization is addressing the needs of individuals to avoid unnecessary utilization of emergency room departments and psychiatric inpatient care.**

In addition to all above cited programs and efforts, Lahey Health has:

<sup>8</sup> Source data obtained from CSA program directors, headquartered in Haverhill and Beverly, 2014.

<sup>9</sup> Source data obtained from Danvers Police Department Jail Diversion Program, Report from third quarter, 2014.





- Utilized 138 detoxification beds and 18 crisis stabilization beds to avoid inpatient admission
- Created partial hospitalization programs within two IP psychiatric units that provide care on an OP basis and step-down care for those transitioning from the IP unit back to their homes
- Embedded behavioral health specialists in select primary care sites
- Launched a (pilot) self-management training program for high-risk co-morbid outpatients
- Developed a set of educational resources provided post-ED visit to identified high-risk individuals
- Developed a community service agency to assist publically-insured families access multiple levels of community-based pediatric behavioral health services
- Augmented post-discharge continuing care plans and tracking for inpatient psychiatric patients

*For additional detail, please see Attachment B11-d.*

**c) Please discuss successes and challenges your organization has experienced in providing care for these patients, including how to overcome any barriers to integration of services.**

Successes have hinged on improving real-time access to behavioral health experts and resources, and pursuing innovative approaches to integrating physical and mental health care services. Specific successes exemplifying these principles (in addition to all noted above) include:

- Fast-tracking certain identified dual-diagnosis psychiatric patients to dedicated detoxification beds
- On-call behavioral health specialists for ED consults
- Expanded deployment of the mobile crisis team
- Increased procedural consistency and frequency of psychopharmacological evaluations
- Launching a system wide behavioral health EHR (Netsmart) to be implemented in parallel with system wide physically health focused EHR (Epic)

Most notable barriers include:

- Limited funding for expansion or development of programmatic initiatives and for hiring and deploying behavioral health experts and resources
- Willingness or capacity of providers, particularly PCPS, to embrace behavioral health educational principles/practice resources
- Substantial infrastructure requirements related to communication, information sharing and coordination
- Navigating extensive regulatory requirements

*Please see Attachment B11-e for more detail.*

**d) Please describe your organization's willingness and ability to report discharge data.**

Lahey Health is willing and able to report discharge data, ED data, as well as historic and current Mobile Crisis Team encounter form data.

## **12. DESCRIBE YOUR ORGANIZATION'S EFFORTS AND EXPERIENCE WITH IMPLEMENTATION OF PATIENT- CENTERED MEDICAL HOME (PCMH) MODEL.**

### **SUMMARY**

Increasingly, Lahey Health employed and affiliated PCP practices are embracing and implementing the PCMH model, with a subset actively pursuing or achieving accreditation status.

Today, six Lahey Health employed or affiliated practices are NCQA accredited PCMHs and seven additional employed practices are in the process of pursuing/receiving accreditation status.





Lahey Health is in the first quarter of implementing a dedicated primary care strategic plan emphasizing system wide adherence to select PCMH principles, dedicating resources to supporting accreditation and implementing tracking mechanisms and metrics to assess the impact of PCMH principles on cost and quality.

## RESPONSE

### a) What percentage of your organization's primary care providers (PCPs) or other providers are in practices that are recognized or accredited as PCMHs by one or more national organizations?

Six percent of Lahey Health's employed PCP FTEs (including physicians and advanced practice clinicians from Lahey Burlington and Peabody, Lahey Community Group Practices, Northeast Medical Practices, and Winchester Practice Associates) are accredited Level III NCQA PCMHs.

WPA has an additional seven practices in the process of obtaining accreditation, with the intent to have three practices accredited in Fall 2014.

Additionally, three NEPHO practices are accredited, accounting for 24% of total NEPHO providers.

### b) What percentage of your organization's primary care patients receives care from those PCPs or other providers?

Seven percent of primary care patients in Lahey Health's employed practice panels, as measured by annual visits/encounters, receive care from NCQA accredited providers. *Note: Lahey Health does not routinely review encounter/visit or panel size data for aligned independent NEPHO practices.*

### c) Please discuss the results of any analyses your organization has conducted on the impact of PCMH recognition or accreditation, including on outcomes, quality, and costs of care.

Given the recent accreditation status of Lahey Health's PCMHs, we are just beginning to analyze outcomes. We are in process of identifying key quality and cost metrics and solidifying the approach for capturing performance data and tracking progress. We have already begun to capture data from all PCMH accredited sites related to out-of-network specialist referrals and adherence to post-discharge follow-up protocols.

Recently, WPA completed the first wave of reporting for one PCMH practice accredited in 2011. Performance data (from practice EMR; focus on prevention/chronic care measures) is summarized below:

- Improvement in preventative screening for breast cancer, colorectal, and cervical screenings by 12%, 18%, and 4%, respectively<sup>10</sup>
- Improvements in chronic and/or acute care clinical measures for diabetes HbA1c testing two times/year of 4%; blood pressure screening for hypertension improvements of 2% over two years; and depression screening improvements of 43%<sup>11</sup>

## 13. AFTER REVIEWING THE COMMISSION'S 2013 COST TRENDS REPORT AND THE JULY 2014 SUPPLEMENT TO THAT REPORT, PROVIDE ANY COMMENTARY ON THE FINDINGS PRESENTED IN LIGHT OF YOUR ORGANIZATION'S EXPERIENCES.

### SUMMARY AND RESPONSE

Generally, Lahey Health's perspectives on the regional and state market are consistent with HPC's July 2014 Supplement Report findings and conclusions; specific commentary for select Supplement Report theme areas are provided below.

<sup>10</sup> Source data obtained from athenaclinical. Data reported for Winchester Family Physicians from May 1, 2011 to May 21, 2013 and compared to August 8, 2012 to August 8, 2014. For data from 2012-2014: breast cancer screening data reported for 3,331 total patients, cervical cancer screening reported for 4,892 total patients age 21-64, and colorectal cancer screening reported for 3,339 total patients. For data from 2011-2013: breast cancer screening data reported for 3,175 total patients, cervical cancer screening reported for 4,946 total patients age 21-64, and colorectal cancer screening report for 3,450 total patients.

<sup>11</sup> Source data obtained from athenaclinical. Data reported for Winchester Family Physicians from June 2012 to June 2013 and compared to August 2013 to August 2014. From June 2012 to June 2013: depression screening data reported for 637 total patients; HbA1c screening data reported for 479 patients; blood pressure screening data reported for 246 patients. From August 2013 to August 2014: depression screening data reported for 893 total patients; HbA1c screening data reported for 480 patients; blood pressure screening data reported for 252 patients.



## FINDINGS

### *THEME A: SPENDING LEVELS AND TRENDS*

#### *A1: Unit Price Increases as the Primary Driver of Total Medical Expenditure Increases*

Lahey Health is comprised of relatively low-price facilities and providers. The increases in overall expenditures at the Commonwealth level are disproportionately impacted by the high and increasing market share of systems and provider organizations with higher-priced facilities and providers.

While systems and provider organizations are clearly accountable for decreasing spending levels, this responsibility is shared with payers and consumers. Unless and until there is broad-based payer willingness (and health system support) to implement effective value-based incentives and price transparency measures, consumers utilizing higher-priced (but not necessarily higher-value) facilities and providers will continue to subsidize consumers utilizing lower-priced facilities and providers.

#### *A2: Variability in Post-Acute Utilization and Care Setting*

A key strategic area of focus in 2014 and in 2015 with significant resources committed to improvement. See response to Question 8 for detail.

#### *A3: Costly Utilization of Co-Morbid Behavioral Health Population*

Lahey Health's Behavioral Services are particularly robust relative to peer organizations. Expansion of community-based programs to reduce inpatient and ED utilization have yielded demonstrable positive results to date. Lahey Health is hopeful that CHART Phase 2 monies are made available, in addition to continued and substantial system investments, to expand community outreach and innovative pilot programs. See response to Exhibit B, Question 11 for detail.

### *THEME B: DELIVERY SYSTEM TRENDS*

#### *B1: Unnecessary Outmigration to Boston*

A key reason for the formation of Lahey Health and continued system wide diligence to retain care locally and at the appropriate site of care within Lahey Health. HPC findings indicate that Lahey Health's service area socioeconomic profile is particularly susceptible to outmigration, though recognize and endorse the notion that all providers are responsible for minimizing the impact of socioeconomic factors on access to high quality and affordable health care across the Commonwealth.

#### *B2: Concentration of Commercial Inpatient Care*

Clearly increasing provider-side concentration requires vigilance to ensure open and value-based competition, though note that provider-side concentration remains less extreme than commercial payer concentration. Of particular concern is the excessive and increasing concentration of the largest organizations, both on the provider and payer side.

## CONCLUSIONS

Lahey Health concurs that the four opportunities to improve the health care system in Massachusetts identified by the HPC – **1.** Fostering a competitive and value-based market, **2.** Promoting and enabling the delivery of high-value care, **3.** Advancing APMs that are equitable and compel accountability, **4.** Facilitating better decision-making and performance by enhancing transparency and data availability - are logical and accurate priorities.

Lahey Health's actions have and will continue to remain aligned with capitalizing on all identified priority opportunities and anticipate that our peer organizations, payers, regulators and consumers will be held to demonstrating a similar commitment to transformative change.



- 1. PLEASE SUBMIT A SUMMARY TABLE SHOWING FOR EACH YEAR 2010 TO 2013 YOUR TOTAL REVENUE UNDER PAY FOR PERFORMANCE ARRANGEMENTS, RISK CONTRACTS, AND OTHER FEE FOR SERVICE ARRANGEMENTS ACCORDING TO THE FORMAT AND PARAMETERS PROVIDED AND ATTACHED AS AGO PROVIDER EXHIBIT 1 WITH ALL APPLICABLE FIELDS COMPLETED. PLEASE ATTEMPT TO PROVIDE COMPLETE ANSWERS. TO THE EXTENT YOU ARE UNABLE TO PROVIDE COMPLETE ANSWERS FOR ANY CATEGORY OF REVENUE, PLEASE EXPLAIN THE REASONS WHY. INCLUDE IN YOUR RESPONSE ANY PORTION OF YOUR PHYSICIANS FOR WHOM YOU WERE NOT ABLE TO REPORT A CATEGORY (OR CATEGORIES) OF REVENUE.**

*Please see Lahey Health Attachment C1-a.*

- 2. PLEASE EXPLAIN AND SUBMIT SUPPORTING DOCUMENTS THAT SHOW HOW YOU QUANTIFY, ANALYZE AND PROJECT YOUR ABILITY TO MANAGE RISK UNDER YOUR RISK CONTRACTS, INCLUDING THE PER MEMBER PER MONTH COSTS ASSOCIATED WITH BEARING RISK, SOLVENCY STANDARDS, AND PROJECTIONS AND PLANS FOR DEFICIT SCENARIOS. INCLUDE IN YOUR RESPONSE ANY ANALYSIS OF WHETHER YOU CONSIDER THE RISK YOU BEAR TO BE SIGNIFICANT.**

## RESPONSE

At present, there is no global Lahey Health/LCPN risk quantification or management methodology in place. That is, there is no systematic approach to quantifying or projecting aggregate risk capacity across all risk contracts held by Lahey Health, nor one to quantify or manage risk across all local ACUs comprising LCPN. We do, however, project risk-based contract performance at the contract-specific and local ACU-specific levels. Further, there is a standardized LCPN-wide funds flow methodology to manage surpluses and deficits resulting from risk-contract performance (*see Lahey Health Attachment C2-a*).

Given that the contract-specific and local ACU-level analyses currently conducted (referenced above and explained below) do not meet the definition of supporting documents requested, none have been submitted.

The contract and ACU specific analyses referenced above are undertaken as part of risk-contract negotiations in order to evaluate the financial feasibility of proposed PM/PM budgets and risk-sharing provisions, as well as to determine the right type of [and thresholds for] risk protection measures, including caps, stop loss insurance coverage and attachment points, and policies related to outliers. Scenario modeling is done to account for potential changes in population health status and utilization rates. Resulting financial performance projections (i.e., likelihood and amount of surplus; likelihood and degree of deficit) are used to modify budgets and embed appropriate risk protection elements. *Note: while the types of risk protection elements identified above are utilized, solvency standards have not yet been considered due to the historic sufficiency of Lahey Health financial reserves.*

As an example, for the most recently negotiated Lahey ACU BCBS AQC contract, financial performance projections indicated the need to establish surplus/deficit caps of approximately \$20.00-\$25.00 PM/PM, after risk sharing. In addition, stop loss coverage was instituted, at a cost of \$8.00 PM/PM.

Financial performance projections - namely estimates of the surplus/ (deficit) by risk arrangement – are documented and used to compare actual to projected performance over the course of a contract.

LCPN anticipates that both local ACUs – Lahey and NEPHO – will be deemed, as per the Division of Insurance regulatory standards, as bearing significant downside APM contract risk, given that that downside risk APMs are in place with each of the three major commercial insurers in the market.



**3. PLEASE EXPLAIN AND SUBMIT SUPPORTING DOCUMENTS THAT SHOW THE PROCESS BY WHICH (A) YOUR PHYSICIANS REFER PATIENTS TO PROVIDERS WITHIN YOUR PROVIDER ORGANIZATION AND OUTSIDE OF YOUR PROVIDER ORGANIZATION; AND (B) YOUR PHYSICIANS RECEIVE REFERRALS FROM WITHIN YOUR PROVIDER ORGANIZATION AND OUTSIDE OF YOUR PROVIDER ORGANIZATION. PLEASE INCLUDE A DESCRIPTION OF HOW YOU USE YOUR ELECTRONIC HEALTH RECORD AND CARE MANAGEMENT SYSTEMS TO MAKE OR RECEIVE REFERRALS, ANY TECHNICAL BARRIERS TO MAKING OR RECEIVING REFERRALS, AND ANY DIFFERENCES IN HOW YOU RECEIVE REFERRALS FROM OR MAKE REFERRALS TO OTHER PROVIDER ORGANIZATIONS AS OPPOSED TO YOUR PROVIDER ORGANIZATION.**

## RESPONSE

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*Please note that no relevant supporting documentation exists.*

Lahey Health is committed to providing the highest value care in the appropriate care setting. The system empowers each physician to make referral decisions based on unique patient needs and preferences, with the understanding that value and appropriateness must be considered. Unlike many other Boston-metro systems, Lahey Health does not set patient retention rate requirements.

Lahey Health providers make an effort to keep patient referrals within the system, where clinically appropriate, to maximize use of our relatively higher-value facilities and providers, and to minimize fragmentation of care. To facilitate internal referrals, an online referral process expedites insurance authorization. This process enhances communication of individual patient needs, as both referrer and referee may access the patient's medical record and associated notes.

A physician may also choose to refer a patient externally if services are unavailable or not readily accessible within the system. These referrals are facilitated and managed to the extent possible.

To facilitate efficient referrals to Lahey Health, particularly in the IP setting, a centralized, real-time referral management process is used, whereby a referral coordination team (approximately 10.0 FTEs system-wide) works with a designated physician leader on each campus to assess clinical appropriateness of care provision for that campus. This process enables external referring physicians to discuss patient needs directly with Lahey physicians. Currently, this process is carried out by phone.

Multiple barriers exist to effective referral management. Lahey Health continues to explore ways to mitigate these barriers to in order to maximize coordination, continuity and appropriateness of referrals. Regarding referral interface with payors, several barriers exist, namely no standardized processes or systems/software (all unique by health plan) to obtain authorizations. Lahey Health invests considerable administrative resources to appropriately navigate these disparate processes/systems.

**4. PLEASE EXPLAIN AND SUBMIT SUPPORTING DOCUMENTS THAT DESCRIBE HOW, IF AT ALL, INFORMATION ON COST AND QUALITY IS MADE AVAILABLE TO PHYSICIANS AT THE POINT OF REFERRAL WHEN REFERRING PATIENTS TO SPECIALTY, TERTIARY, SUB-ACUTE, REHAB, OR OTHER TYPES OF CARE. INCLUDE IN YOUR RESPONSE ANY TYPE OF INFORMATION ON COSTS OR QUALITY MADE AVAILABLE TO YOUR PHYSICIANS THROUGH ELECTRONIC HEALTH MANAGEMENT, CARE MANAGEMENT, DISEASE MANAGEMENT, LARGE CASE-MANAGEMENT OR OTHER CLINICAL MANAGEMENT PROGRAMS.**

## RESPONSE

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Price and quality information is not readily available real-time, at the point of referral, particularly for referrals to external organizations.

Lahey Health is working to develop value scorecards for our physicians to enhance appropriate decision-making; however, as noted, lack of transparent and accessible data from external organizations is a barrier. Despite barriers, the system has and will continue to make considerable efforts to obtain qualitative, in addition to quantitative, information on outside organizations to make the best referral decision for each patient.



- 2. FOR EACH YEAR 2010 TO PRESENT, PLEASE SUBMIT A SUMMARY TABLE SHOWING FOR EACH LINE OF BUSINESS (COMMERCIAL, GOVERNMENT, OTHER, TOTAL) YOUR INPATIENT AND OUTPATIENT REVENUE AND MARGIN FOR EACH MAJOR SERVICE CATEGORY ACCORDING TO THE FORMAT AND PARAMETERS PROVIDED AND ATTACHED AS AGO HOSPITAL EXHIBIT 2 WITH ALL APPLICABLE FIELDS COMPLETED. PLEASE SUBMIT SEPARATE SHEETS FOR PEDIATRIC AND ADULT POPULATIONS, IF NECESSARY. IF YOU ARE UNABLE TO PROVIDE COMPLETE ANSWERS, PLEASE PROVIDE THE GREATEST LEVEL OF DETAIL POSSIBLE AND EXPLAIN WHY YOUR ANSWERS ARE NOT COMPLETE.**

Lahey Clinic/LHMC provides trended margin information for inpatient and outpatient services by major payer category (*please see Lahey Clinic Attachment C2-a*), however we respectfully decline to provide information regarding revenue and margin by service category. This information is highly proprietary. Furthermore, because there are no standardized approaches or definitions, for example as to service category or cost/revenue allocation, any information provided would not be comparable across the industry and therefore would be of limited, if any use, to the AGO or the HPC. Lahey Clinic remains committed to transparency and is willing to work with the HPC and the AGO to provide appropriate safeguards of proprietary information and to assure that information provided addresses the purposes of its collection. This level of information is consistent with the data provided in the 2013 response.

- 4. PLEASE EXPLAIN AND SUBMIT SUPPORTING DOCUMENTS THAT SHOW HOW YOU ANALYZE AND TRACK THE VOLUME OF INPATIENT AND OUTPATIENT REFERRALS TO YOUR HOSPITAL AND THE ASSOCIATED REVENUE FROM THOSE REFERRALS BY PARTICULAR PHYSICIANS OR PROVIDER GROUPS. PLEASE INCLUDE A DESCRIPTION AND EXAMPLES OF HOW YOUR ORGANIZATION USES THIS INFORMATION.**

Lahey Clinic/LHMC respectfully declines to provide the information requested due to its highly proprietary nature. Lahey Clinic/LHMC remains committed to transparency and is willing to work with the HPC and the AGO to provide this information under appropriate safeguards regarding its use.

# Lahey Health Utilization Trends FY2012–YTD FY2014

| LAHEY HEALTH SYSTEM - OPERATING REVENUE, OPERATING EXPENSE, UTILIZATION STATISTICS |                                   |                |                |                   |  |            |                   |
|--|-----------------------------------|----------------|----------------|-------------------|--|------------|-------------------|
| \$ in 000's  |                                   | Fiscal<br>2012 | Fiscal<br>2013 | Change            | Year to Date April 30 (7 months)<br>2013 2014 Change |            |                   |
| Operating revenue  | <sup>1</sup>                      | \$ 1,475,233   | \$ 1,502,035   | \$ 26,802<br>1.8% | \$ 852,455   | \$ 867,447 | \$ 14,992<br>1.8% |
| Operating expenses   | <sup>1</sup>                      | \$ 1,422,884   | \$ 1,451,009   | \$ 28,125<br>2.0% | \$ 835,431   | \$ 848,305 | \$ 12,874<br>1.5% |
| <b>Utilization Statistics <sup>2</sup></b>   |                                   |                |                |                   |  |            |                   |
| Inpatient discharges   | <i>Acute hospitals</i>            | 42,933         | 41,930         | (1,003)           | 24,192   | 24,635     | 443               |
| Observation discharges   | <i>Acute hospitals</i>            | 12,257         | 13,324         | 1,067             | 7,716  | 8,683      | 967               |
| Ambulatory surgeries   | <i>Acute hospitals</i>            | 26,505         | 25,701         | (804)             | 14,980   | 14,932     | (48)              |
| Emergency visits   | <i>Acute hospitals</i>            | 118,270        | 118,781        | 511               | 66,720   | 65,983     | (737)             |
| Physician visits   | <i>Physician group</i>            | 1,177,466      | 1,191,262      | 13,796            | 684,984  | 706,390    | 21,406            |
| Skilled nursing occupancy  | <i>Skilled nursing facilities</i> | 89%            | 92%            | 3%                | 92%  | 92%        | 0%                |
| Home care new cases  | <i>Home health</i>                | 3,173          | 3,636          | 463               | 2,125  | 2,275      | 150               |
| Outpatient visits  | <i>Behavioral services</i>        | 1,296,104      | 1,670,860      | 374,756           | 785,131  | 841,702    | 56,571            |

# LAHEY HEALTH SYSTEM - OPERATING REVENUE, OPERATING EXPENSES

|                    |  | October - September<br>12 mos. |             | Change   |
|--------------------|--|--------------------------------|-------------|----------|
|                    |  | FY2012                         | FY2013      | Raw      |
| Operating Revenue  |  | \$1,475,233                    | \$1,502,035 | \$26,802 |
| Operating Expenses |  | \$1,422,884                    | \$1,451,009 | \$28,125 |

| UTILIZATION STATISTICS/TRENDS |                      | October - September<br>12 mos. |           | Change  |
|-------------------------------|----------------------|--------------------------------|-----------|---------|
| Type                          | Indicator            | FY2012                         | FY2013    | Raw     |
| Acute care hospitals          | Inpatient Discharges | 42,933                         | 41,930    | (1,003) |
| Acute care hospitals          | Observation Patients | 12,257                         | 13,324    | 1,067   |
| Acute care hospitals          | Ambulatory Surgeries | 26,505                         | 25,701    | (804)   |
| Acute care hospitals          | ED Visits            | 118,270                        | 118,781   | 511     |
| Physician practices           | Physician Visits     | 1,177,466                      | 1,191,262 | 13,796  |
| SNF                           | Occupancy Rate       | 89%                            | 92%       | 3%      |
| Home care                     | New Patients         | 3,173                          | 3,636     | 463     |
| Behavioral health services    | Outpatient visits    | 1,296,104                      | 1,670,860 | 374,756 |



## ATING EXPENSE, UTILIZATION STATISTICS

| nge     | October - April<br>7 mos. |           |          |         |
|---------|---------------------------|-----------|----------|---------|
|         |                           |           | Change   |         |
| Percent | FY2013                    | FY2014    | Raw      | Percent |
| 1.8%    | \$852,455                 | \$867,447 | \$14,992 | 1.8%    |
| 2.0%    | \$835,431                 | \$848,305 | \$12,874 | 1.5%    |

| nge     | October - April<br>7 mos. |         |        |         |
|---------|---------------------------|---------|--------|---------|
|         |                           |         | Change |         |
| Percent | FY2013                    | FY2014  | Raw    | Percent |
| -2.3%   | 24,192                    | 24,635  | 443    | 1.8%    |
| 8.7%    | 7,716                     | 8,683   | 967    | 12.5%   |
| -3.0%   | 14,980                    | 14,932  | (48)   | -0.3%   |
| 0.4%    | 66,720                    | 65,983  | (737)  | -1.1%   |
| 1.2%    | 684,984                   | 706,390 | 21,406 | 3.1%    |
| N/A     | 92%                       | 92%     | 0%     | N/A     |
| 14.6%   | 2,125                     | 2,275   | 150    | 7.1%    |
| 28.9%   | 785,131                   | 841,702 | 56,571 | 7.2%    |

| Payor/Plan                 | Type of APM       | Years in APM Contract                |   |  |
|----------------------------|-------------------|--------------------------------------|---|--|
|                            |                   | NEPHO ACU                            | Lahey ACU   | LCPN ACUs Combined                             |
| BCBS (HMO)                 | Budget Based Risk | 5 (2010 – 2014)                      | 3 (2012,13,14)  | 0<br><i>(combined contract beginning 1/15)</i> |
| Tufts (HMO)                | Budget Based Risk | 5 (2010 – 2014)                      | 3 (2012,13,14)  | 2 (2013, 2014)                                 |
| HPHC (HMO)                 | Budget Based Risk | 1 (2014)<br><i>(prior years P4P)</i> | 1 (2014)<br><i>(prior years P4P)</i>                                      | 1 (2014)                                       |
| Tufts (Medicare Preferred) | Budget Based Risk | 10 (2004 – 2014)                     | <i>Upside only:</i> 1 (2011)<br><i>Upside + downside:</i> 3 (2012 – 2014) | 0<br><i>(combined contract beginning 1/15)</i> |
| Medicare                   | Shared Savings    | 2 (2013,2014)                        | 2 (2013,2014)   | 2 (2013, 2014)                                 |
| Medicare                   | Bundled Payment   | 0                                    | 1 (2014)  | N/A  |

## **Lahey Clinical Performance Network (LCPN) Overview of Local and Centralized Services**

### **Quality Improvement:**

Lahey Clinical Performance Network utilizes quality improvement specialists across the system to help network physicians and their office staff achieve the highest quality of care for our patients and obtain the quality incentives within our managed care and ACO contracts.

LCPN utilizes claims data provided by the health plans to perform analyses to identify gaps in care. We create registries of patients who have not seen their primary care doctor during the year, those who need mammograms and colonoscopies and the tests that are critical for diabetics, those with chronic obstructive pulmonary disease and congestive heart failure as well as other chronic diseases and preventative screenings. With this information, our physicians are in a better position to keep their patients healthy. We have also contracted with a company, Phytel, whose primary focus is population health management. Patients receive an automated call based on care gaps that are identified from measures selected and tailored by LCPN medical leadership.

There are several specific responsibilities of LCPN's Quality Improvement Program. The responsibilities are:

1. Providing support to the practice for population management at the POD and practice level by tracking and monitoring individual process and outcome measures for eligible managed care patients who have chronic diseases.
2. Acts as a key resource to PCP practices for the management of registries of patients who have chronic diseases to ensure that they receive the required testing and medical management to promote optimal health and clinical outcomes.
3. Utilizes Athena (our external data warehouse) for quality registry management and provides timely performance reports to Leadership, Pod Leaders, and practices.
4. Coordinates the collection of data from physician practices. Completes required submissions, audits, and appeals with supporting clinical documentation as required.
5. Provides training and support to physicians, administrative staff and select office and clinical staff on the use of Phytel web-based application as well as Lahey Accountable Care Unit's home grown Health Maintenance Registry (HMR).
6. Acts as a key resource to PCPs and practices to understand the specifics of the quality measures within established contracts.

### **Care Management:**

LCPN structures our Care Management program to allow care management at the local level. Under the direction of the LCPN Chief Medical Officer the local units Care Managers work closely with our physicians to provide individualized support for patients, when they are hospitalized, in a skilled nursing or rehabilitation facility and for the chronically ill and frailest of patients in their homes. Case Managers are Registered Nurses or Licensed Social Workers (case specific) who work with physicians to

facilitate and coordinate the patient's discharge from the hospital. They ensure the patient is ready to be discharged, has a follow-up appointment with their primary care provider shortly after discharge and that the patient understands instructions about medicines, follow-up care, or whether home care services or equipment are needed. If home care services are needed, the Case Manager will arrange it. Patients discharged from the hospital to a skilled nursing facility will be followed by a Case Manager until discharge and at home, when needed.

LCPN has a comprehensive algorithm that identifies the highest risk patients amongst specific population, and assigns Case Managers based on the primary care provider to contact these patients. This enables the Case Manager to assess how the patient is doing at home, and identify if there are social as well as medical needs. The Case Managers communicate with the patient's physician, keeping them informed of how their patients are doing between doctor visits. Having these open lines of communication, as well as trusting relationships between provider and case manager, allows our Care Management Program to be extremely effective.

There are several specific responsibilities of LCPN's Care Management Program. The responsibilities are:

1. Letter and telephone call to patient to promote engagement and schedule initial assessment.
2. Comprehensive health assessment performed during a home visit or office visit.
3. Assessment, plan of care, and ongoing notes documented in Care Manager and patient's electronic medical record.
4. Interventions include counseling on diet, medication, self-care, lifestyle management, teaching of early warning signs of decompensation and how to access the appropriate level of care.
5. Care coordination includes referrals to disease management programs, community resources to meet the patient's and caregiver's needs, and assistance in accessing them efficiently.
6. Coordinates efforts of all health care providers who work with the patient and ensures that all providers are aware of the patient's medical status and care plan.
7. Follows patient between all sites and providers of care, focusing most intensively on transitions through hospitals, and keeping the primary care provider informed of the patient status.
8. Ongoing monitoring and follow up until patient has met goals and can be safely discharged.

LCPN has contracted with Dovetail to provide our Lahey Enhanced Care Program. Lahey Enhanced Care provides services to our highest complex risk ACO patients and engages them in their home and community. The program is tailored to each patient based on their need and support can be one month or several months. This program compliments our current care management program and assists in our goal to improve care and reduce unnecessary utilization.

### **Pharmacy Support:**

Clinical Pharmacists are another member of the LCPN team, working at the local risk unit level. Our Clinical Pharmacists provide information and advise physicians about alternative and less costly medications and educate physicians about new and existing drugs. Pharmacy costs and co-payments have increased substantially in recent years, with multiple payment tiers depending on the product and benefit design of the patient's insurance. Reviewing the medication information on an individual patient basis, our Pharmacist is able to suggest possible substitute medicines that will be as effective while costing less. The prescribing physician decides whether a different medicine would be appropriate for

the patient. This information is highly valued as another way to improve quality and control health care costs. Our Pharmacists work closely with physician leaders and medical directors and is significantly involved with the Quality Improvement and Care Management departments to develop new strategies to improve the quality of care.

### **Referral Management:**

LCPN offers a Referral Management Program. This program helps mitigate inappropriate out of network care which causes a break in the continuum of care and can be costly to patients and systems. LCPN has been successful in keeping routine care in our community hospitals and complex care in our tertiary hospital. This broad effort delivers assistance to practices by providing centralized practice management services at a lower cost and with more efficiency than the individual practice can. By opening this program up on a larger scale, offices are now able to utilize their staff in other areas that can have a positive impact on their practice.

The types of referrals that are being handled are:

1. In network specialist referrals
2. Prior Authorizations for non-contracting providers
3. Out of network requests
4. Routine non-physician referral requests such as physical therapy, etc.

Blue Cross Blue Shield of Massachusetts

NEPHO

Ambulatory Measures

| Measure  | Minimum Denominator Required | Minimum Threshold | Upper Threshold | Weight | NEPHO       |             |        |
|--|------------------------------|-------------------|-----------------|--------|-------------|-------------|--------|
|  |                              |                   |                 |        | Denominator | Performance | Points |
| <b>Clinical Process Measures <sup>1</sup></b>                        |                              | %                 | %               |        |             | %           |        |
| <b>Depression <sup>2</sup></b>                                       |                              |                   |                 |        |             |             |        |
| Acute Phase Rx   | 100                          | 65.3              | 80.0            | 1.0    | 117         | 67.5        | n/a    |
| Continuation Phase Rx  | 100                          | 49.6              | 70.0            | 1.0    | 117         | 49.6        | n/a    |
| <b>Diabetes</b>  |                              |                   |                 |        |             |             |        |
| HbA1c Testing (2X)   | 115                          | 69.9              | 83.2            | 1.0    | 773         | 72.8        | 1.9    |
| Eye Exams  | 140                          | 58.0              | 72.1            | 1.0    | 773         | 66.8        | 3.5    |
| Nephropathy Screening  | 97                           | 79.7              | 91.4            | 1.0    | 773         | 87.8        | 3.8    |
| <b>Cholesterol Management</b>  |                              |                   |                 |        |             |             |        |
| Diabetes LDL-C Screening   | 138                          | 85.3              | 93.8            | 1.0    | 773         | 91.7        | 4.0    |
| Cardiovascular LDL-C Screening                                       | 138                          | 85.3              | 93.8            | 1.0    | 213         | 92.0        | 4.2    |
| <b>Cancer Screening</b>  |                              |                   |                 |        |             |             |        |
| Breast Cancer Screening  | 91                           | 77.1              | 90.0            | 1.0    | 4,902       | 80.3        | 2.0    |
| Cervical Cancer Screening  | 148                          | 83.5              | 92.4            | 1.0    | 5,081       | 89.1        | 3.5    |
| Colorectal Cancer Screening (51 - 75)                                | 67                           | 65.2              | 83.3            | 1.0    | 5,726       | 69.9        | 2.0    |
| <b>Preventive Screening/Treatment</b>                                |                              |                   |                 |        |             |             |        |
| Chlamydia Screening  |                              |                   |                 |        |             |             |        |
| Ages 16-20   | 73                           | 45.9              | 63.7            | 0.5    | 549         | 67.6        | 5.0    |
| Ages 21-24   | 101                          | 50.1              | 67.3            | 0.5    | 531         | 65.4        | 4.6    |
| <b>Adult Respiratory Testing/Treatment</b>                           |                              |                   |                 |        |             |             |        |
| Acute Bronchitis *   | 75                           | 80.4              | 93.1            | *      | 158         | 44.9        | *      |
| <b>Medication Management</b>   |                              |                   |                 |        |             |             |        |
| Digoxin Monitoring   | 207                          | 83.9              | 91.6            | 1.0    | 34          | 91.2        | N/A    |
| <b>Pedi: Respiratory Testing/Treatment</b>                           |                              |                   |                 |        |             |             |        |
| Upper Respiratory Infection (URI)                                    | 86                           | 90.6              | 97.7            | 1.0    | 393         | 91.6        | 1.6    |
| Pharyngitis  | 13                           | 83.1              | 99.6            | 1.0    | 518         | 96.1        | 4.2    |
| <b>Pedi: Well-visits</b>   |                              |                   |                 |        |             |             |        |
| < 15 months  | 46                           | 91.8              | 99.3            | 1.0    | 262         | 92.0        | 1.1    |
| 3-6 Years  | 22                           | 85.5              | 99.2            | 1.0    | 1,128       | 94.1        | 3.5    |
| Adolescent Well Care Visits  | 27                           | 60.0              | 87.7            | 1.0    | 3,685       | 76.5        | 3.4    |
| <b>Clinical Outcomes Measures <sup>3</sup></b>                       |                              |                   |                 |        |             |             |        |
| <b>Diabetes</b>  |                              |                   |                 |        |             |             |        |
| HbA1c in Poor Control  | 10                           | 45.0              | 4.7             | 3.0    | 748         | 17.5        | 3.7    |
| LDL-C Control (<100mg)   | 17                           | 33.4              | 75.6            | 3.0    | 748         | 62.4        | 3.8    |
| Blood Pressure Control (<130/80)                                     | 114                          | 30.9              | 47.3            | 3.0    | 748         | 42.8        | 3.9    |
| <b>Hypertension</b>  |                              |                   |                 |        |             |             |        |
| Controlling High Blood Pressure (140/90)                             | 120                          | 71.6              | 82.5            | 3.0    | 1,646       | 71.3        | 0.0    |
| <b>Cardiovascular Disease</b>  |                              |                   |                 |        |             |             |        |
| LDL-C Control (<100mg)   | 17                           | 33.4              | 75.6            | 3.0    | 213         | 68.1        | 4.3    |
| <b>Patient Experiences (C/G CAHPS/ACES) - Adult <sup>4</sup></b>     |                              |                   |                 |        |             |             |        |
| Communication Quality  | 200                          | 91.0              | 98.0            | 1.0    | 798         | 93.7        | 2.6    |
| Knowledge of Patients  | 200                          | 80.0              | 95.0            | 1.0    | 794         | 88.6        | 3.3    |
| Integration of Care  | 200                          | 80.0              | 96.0            | 1.0    | 728         | 85.0        | 2.3    |
| Access to Care   | 200                          | 79.0              | 96.0            | 1.0    | 804         | 85.5        | 2.5    |
| <b>Patient Experiences (C/G CAHPS/ACES) - Pediatric <sup>4</sup></b> |                              |                   |                 |        |             |             |        |
| Communication Quality  | 200                          | 95.0              | 97.0            | 1.0    | 221         | 96.1        | 3.2    |
| Knowledge of Patients  | 200                          | 89.0              | 93.0            | 1.0    | 221         | 91.7        | 3.7    |
| Integration of Care  | 200                          | 85.0              | 91.0            | 1.0    | 91          | 90.9        | N/A    |
| Access to Care   | 200                          | 70.0              | 90.0            | 1.0    | 223         | 86.2        | 4.2    |
| <b>Total Weighted Points</b>   |                              |                   |                 |        |             |             | 112.1  |
| <b># of Measures (Weighted)</b>                                      |                              |                   |                 |        |             |             | 36.0   |
| <b>Score</b>   |                              |                   |                 |        |             |             | 3.1    |

**Notes:**<sup>1</sup> Source: BCBSMA CY 2010 data (with 4 months run-out) for Clinical Process measures.<sup>2</sup> Depression measures are reporting only for 2010. Measures will be weighted 1.0 in subsequent measurement periods.<sup>3</sup> Source: Outcome data collected from Group. Post appeal results.<sup>4</sup> Source: MHQP 2010 Survey data. Results based on all-payer data.

N/A: Does not meet Minimum Denominator Required. Excluded from scoring.

**Iue Cross Blue Shield of Massachusetts**  
**NEPHO**  
**Ambulatory Measures**

|   |                              |                   |                 |        |             | NEPHO       |        |  |
|---|------------------------------|-------------------|-----------------|--------|-------------|-------------|--------|--|
| Measure   | Minimum Denominator Required | Minimum Threshold | Upper Threshold | Weight | Denominator | Performance | Points |  |
| Clinical Process Measures <sup>1</sup>                        |                              |                   |                 |        |             |             |        |  |
| Depression  |                              |                   |                 |        |             |             |        |  |
| Acute Phase Rx  | 100                          | 65.3              | 80.0            | 1.0    | 141         | 73.1        | 3.1    |  |
| Continuation Phase Rx   | 100                          | 49.6              | 70.0            | 1.0    | 141         | 61.0        | 3.2    |  |
| Diabetes  |                              |                   |                 |        |             |             |        |  |
| HbA1c Testing (2X)  | 115                          | 69.9              | 83.2            | 1.0    | 624         | 74.0        | 2.3    |  |
| Eye Exams   | 140                          | 58.0              | 72.1            | 1.0    | 624         | 69.4        | 4.2    |  |
| Nephropathy Screening   | 97                           | 79.7              | 91.4            | 1.0    | 624         | 88.0        | 3.8    |  |
| Cholesterol Management  |                              |                   |                 |        |             |             |        |  |
| Diabetes LDL-C Screening                                      | 138                          | 85.3              | 93.8            | 1.0    | 624         | 92.8        | 4.5    |  |
| Cardiovascular LDL-C Screening                                | 138                          | 85.3              | 93.8            | 1.0    | 159         | 93.1        | 4.7    |  |
| Cancer Screening  |                              |                   |                 |        |             |             |        |  |
| Breast Cancer Screening                                       | 91                           | 77.1              | 90.0            | 1.0    | 4,069       | 83.7        | 3.1    |  |
| Cervical Cancer Screening                                     | 148                          | 83.5              | 92.4            | 1.0    | 4,767       | 86.1        | 2.2    |  |
| Colorectal Cancer Screening (51 - 75)                         | 67                           | 65.2              | 83.3            | 1.0    | 4,801       | 72.7        | 2.7    |  |
| Preventive Screening/Treatment                                |                              |                   |                 |        |             |             |        |  |
| Chlamydia Screening   |                              |                   |                 |        |             |             |        |  |
| Ages 16-20  | 73                           | 45.9              | 63.7            | 0.5    | 503         | 71.0        | 5.0    |  |
| Ages 21-24  | 101                          | 50.1              | 67.3            | 0.5    | 482         | 76.6        | 5.0    |  |
| Adult Respiratory Testing/Treatment                           |                              |                   |                 |        |             |             |        |  |
| Acute Bronchitis  | 30                           | 55.0              | 80.0            | 1.0    | 108         | 58.3        | 1.5    |  |
| Medication Management   |                              |                   |                 |        |             |             |        |  |
| Digoxin Monitoring  | 207                          | 83.9              | 91.6            | 1.0    | 29          | 82.8        | N/A    |  |
| Pedi: Respiratory Testing/Treatment                           |                              |                   |                 |        |             |             |        |  |
| Upper Respiratory Infection (URI)                             | 86                           | 90.6              | 97.7            | 1.0    | 372         | 94.9        | 3.4    |  |
| Pharyngitis   | 13                           | 83.1              | 99.6            | 1.0    | 440         | 95.7        | 4.1    |  |
| Pedi: Well-visits   |                              |                   |                 |        |             |             |        |  |
| < 15 months   | 46                           | 91.8              | 99.3            | 1.0    | 210         | 93.8        | 2.1    |  |
| 3-6 Years   | 22                           | 85.5              | 99.2            | 1.0    | 1,038       | 94.0        | 3.5    |  |
| Adolescent Well Care Visits                                   | 27                           | 60.0              | 87.7            | 1.0    | 3,269       | 76.9        | 3.5    |  |
| Clinical Outcomes Measures <sup>2</sup>                       |                              |                   |                 |        |             |             |        |  |
| Diabetes  |                              |                   |                 |        |             |             |        |  |
| HbA1c in Poor Control   | 10                           | 45.0              | 4.7             | 3.0    | 605         | 15.5        | 3.9    |  |
| LDL-C Control (<100mg)  | 17                           | 33.4              | 75.6            | 3.0    | 605         | 69.1        | 4.4    |  |
| Blood Pressure Control (<140/80)                              | 90                           | 46.0              | 64.5            | 3.0    | 605         | 61.3        | 4.3    |  |
| Hypertension  |                              |                   |                 |        |             |             |        |  |
| Controlling High Blood Pressure (140/90)                      | 120                          | 71.6              | 82.5            | 3.0    | 1,549       | 81.2        | 4.5    |  |
| Cardiovascular Disease  |                              |                   |                 |        |             |             |        |  |
| LDL-C Control (<100mg)  | 17                           | 33.4              | 75.6            | 3.0    | 159         | 78.6        | 5.0    |  |
| Patient Experiences (C/G CAHPS/ACES) - Adult <sup>3</sup>     |                              |                   |                 |        |             |             |        |  |
| Communication Quality   | 200                          | 91.0              | 98.0            | 1.0    | 333         | 93.7        | 2.6    |  |
| Knowledge of Patients   | 200                          | 80.0              | 95.0            | 1.0    | 332         | 89.8        | 3.6    |  |
| Integration of Care   | 200                          | 80.0              | 96.0            | 1.0    | 307         | 88.3        | 3.1    |  |
| Access to Care  | 200                          | 79.0              | 96.0            | 1.0    | 339         | 84.9        | 2.4    |  |
| Patient Experiences (C/G CAHPS/ACES) - Pediatric <sup>3</sup> |                              |                   |                 |        |             |             |        |  |
| Communication Quality   | 200                          | 95.0              | 97.0            | 1.0    | 221         | 96.1        | 3.2    |  |
| Knowledge of Patients   | 200                          | 89.0              | 93.0            | 1.0    | 221         | 91.7        | 3.7    |  |
| Integration of Care   | 200                          | 85.0              | 91.0            | 1.0    | 91          | 90.9        | N/A    |  |
| Access to Care  | 200                          | 70.0              | 90.0            | 1.0    | 223         | 86.2        | 4.2    |  |
| Total Weighted Points   |                              |                   |                 |        |             |             | 145.9  |  |
| # of Measures (Weighted)                                      |                              |                   |                 |        |             |             | 39.0   |  |
| Score   |                              |                   |                 |        |             |             | 3.7    |  |

**Notes:**

<sup>1</sup> Source: BCBSMA CY 2011 data (with 4 months run-out) for Clinical Process measures. Post-appeal result

<sup>2</sup> Source: Outcome data collected from Group. Post appeal results.

<sup>3</sup> Source: MHQP/BCBSMA 2011 Survey data for Adult. Pediatric based on 2010 results.

N/A: Does not meet Minimum Denominator Required. Excluded from scoring.

Products included: HMO/POS.



**HOSPITAL QUALITY AND SAFETY**  
**Clinical Process, Outcomes and Patient Experience Measures**

|   |                     |                   |                 | BEVERLY HOSPITAL CORPORATION |             |        |
|---|---------------------|-------------------|-----------------|------------------------------|-------------|--------|
|   | Minimum Denominator | Minimum Threshold | Upper Threshold | Denominator                  | Performance | Points |
| Clinical Process Measures <sup>1</sup>        |                     | %                 | %               | %                            |             |        |
| AMI   |                     |                   |                 |                              |             |        |
| ACE/ARB for LVSD                              | 39                  | 89.1              | 98.9            | 28                           | 96.0        | N/A    |
| Aspirin at arrival                            | 109                 | 98.3              |                 | 189                          | 99.0        | 5.0    |
| Aspirin at discharge                          | 63                  | 98.2              |                 | 124                          | 100.0       | 5.0    |
| Beta Blocker at discharge                     | 83                  | 98.5              |                 | 123                          | 100.0       | 5.0    |
| Smoking Cessation                             | 22                  | 93.1              | 99.9            | 21                           | 100.0       | N/A    |
| Heart Failure                                 |                     |                   |                 |                              |             |        |
| ACE LVSD                                      | 31                  | 87.3              | 98.9            | 106                          | 100.0       | 5.0    |
| LVS function Evaluation                       | 24                  | 95.1              | 100.0           | 387                          | 100.0       | 5.0    |
| Discharge instructions                        | 11                  | 71.4              | 98.5            | 242                          | 90.0        | 3.8    |
| Smoking Cessation                             | 20                  | 88.3              | 99.6            | 45                           | 100.0       | 5.0    |
| Pneumonia                                     |                     |                   |                 |                              |             |        |
| Flu Vaccine                                   | 15                  | 77.8              | 98.6            | 250                          | 95.0        | 4.3    |
| Pneumococcal Vaccination                      | 19                  | 76.0              | 97.4            | 395                          | 97.0        | 4.9    |
| Antibiotics w/in 6 hrs                        | 65                  | 95.6              | 99.8            | 416                          | 99.0        | 4.2    |
| Smoking Cessation                             | 12                  | 86.7              | 99.8            | 96                           | 97.0        | 4.2    |
| Antibiotic selection                          | 124                 | 87.4              | 95.4            | 228                          | 97.0        | 5.0    |
| Blood culture                                 | 91                  | 91.0              | 98.0            | 421                          | 97.0        | 4.4    |
| Surgical Infection                            |                     |                   |                 |                              |             |        |
| Antibiotic received                           | 28                  | 86.5              | 98.9            | 769                          | 99.0        | 5.0    |
| Received Appropriate Preventive Antibiotic(s) | 71                  | 94.1              | 99.4            | 771                          | 99.0        | 4.7    |
| Antibiotic discontinued                       | 28                  | 77.9              | 96.2            | 751                          | 99.0        | 5.0    |
| Clinical Outcomes Measures                    |                     |                   |                 |                              |             |        |
| In-Hospital Mortality- Overall                | 946                 | 2.15              | 0.88            | 20,990                       | 1.29        | 3.7    |
| Wound Infection                               | 9457                | 0.30              | 0.09            | 20,933                       | 0.06        | 5.0    |
| Select Infections due to Medical Care         | 4149                | 0.18              | 0.02            | 13,499                       | 0.03        | 4.8    |
| AMI after Major Surgery                       | 1310                | 0.55              | 0.10            | 1,741                        | 0.34        | 2.8    |
| Pneumonia after Major Surgery                 | 1129                | 1.57              | 0.60            | 1,677                        | 1.25        | 2.3    |
| PE/DVT after Major Surgery                    | 1007                | 0.93              | 0.22            | 2,379                        | 0.46        | 3.6    |
| Birth Trauma - injury to neonate              | 1130                | 0.20              | 0.01            | 2,031                        | 0.05        | 4.2    |
| Obstetrics Trauma-vaginal w/o instrument      | 651                 | 3.54              | 1.54            | 1,313                        | 1.29        | 5.0    |
| Patient Experiences (HCAHPS) <sup>1</sup>     |                     |                   |                 |                              |             |        |
| Nursing communication                         | 300                 | 72.6              | 81.2            |                              | 79.0        | 4.0    |
| MD communication                              | 300                 | 78.1              | 85.5            |                              | 79.0        | 1.5    |
| Responsiveness                                | 300                 | 58.4              | 76.4            |                              | 62.0        | 1.8    |
| Discharge planning                            | 300                 | 77.7              | 90.4            |                              | 85.0        | 3.3    |
| Total Points                                  |                     |                   |                 |                              |             | 117.5  |
| # of Measures                                 |                     |                   |                 |                              |             | 28     |
| Score   |                     |                   |                 |                              |             | 4.2    |

**Data sources:**

Clinical Process Measures: HHS - Hospital Compare for 12 months ending 3Q11.

Clinical Outcomes Measures: FY 2011: October 1, 2010 - September 30, 2011.

Patient Experience (HCAHPS): Hospital Compare for 12 months ending 3Q11.

**Notes:**

<sup>1</sup> Results reflect most recent data available through HHS - Hospital Compare.

N/A: Denominators do not meet minimum requirements. Measure excluded from scoring.

**Blue Cross Blue Shield of Massachusetts  
NEPHO  
2011 Aggregate Score**

|                         |     |
|-------------------------|-----|
| <b>Ambulatory Score</b> | 3.7 |
| <b>Hospital Score</b>   | 4.2 |
| <b>Aggregate Score</b>  | 4.0 |

**Blue Cross Blue Shield of Massachusetts**  
**NEPHO**  
**Ambulatory Process Measures**

| Measure  | Minimum Denominator Required | Minimum Threshold | Upper Threshold | Weight | NEPHO       |             |        |
|--|------------------------------|-------------------|-----------------|--------|-------------|-------------|--------|
|  |                              |                   |                 |        | Denominator | Performance | Points |
| <b>Clinical Process Measures<sup>1</sup></b>       |                              | %                 | %               |        |             | %           |        |
| <b>Depression</b>                                  |                              |                   |                 |        |             |             |        |
| Acute Phase Rx                                     | 100                          | 65.3              | 80.0            | 1.0    | 108         | 71.3        | 2.6    |
| Continuation Phase Rx                              | 100                          | 49.6              | 70.0            | 1.0    | 108         | 51.9        | 1.4    |
| <b>Diabetes</b>                                    |                              |                   |                 |        |             |             |        |
| HbA1c Testing (2X)                                 | 115                          | 69.9              | 83.2            | 1.0    | 553         | 84.1        | 5.0    |
| Eye Exams  | 140                          | 58.0              | 72.1            | 1.0    | 553         | 72.5        | 5.0    |
| Nephropathy Screening                              | 97                           | 79.7              | 91.4            | 1.0    | 553         | 92.6        | 5.0    |
| <b>Cholesterol Management</b>                      |                              |                   |                 |        |             |             |        |
| Diabetes LDL-C Screening                           | 138                          | 85.3              | 93.8            | 1.0    | 553         | 94.0        | 5.0    |
| Cardiovascular LDL-C Screening                     | 138                          | 85.3              | 93.8            | 1.0    | 132         | 90.2        | N/A    |
| <b>Cancer Screening</b>                            |                              |                   |                 |        |             |             |        |
| Breast Cancer Screening                            | 91                           | 77.1              | 90.0            | 1.0    | 3,732       | 84.2        | 3.2    |
| Cervical Cancer Screening                          | 148                          | 83.5              | 92.4            | 1.0    | 4,001       | 87.3        | 2.7    |
| Colorectal Cancer Screening (51 - 75)              | 67                           | 65.2              | 83.3            | 1.0    | 4,461       | 72.4        | 2.6    |
| <b>Preventive Screening/Treatment</b>              |                              |                   |                 |        |             |             |        |
| Chlamydia Screening                                |                              |                   |                 |        |             |             |        |
| Ages 16-20   | 73                           | 45.9              | 63.7            | 0.5    | 476         | 76.9        | 5.0    |
| Ages 21-24   | 101                          | 50.1              | 67.3            | 0.5    | 502         | 75.3        | 5.0    |
| <b>Adult Respiratory Testing/Treatment</b>         |                              |                   |                 |        |             |             |        |
| Acute Bronchitis                                   | 30                           | 55.0              | 80.0            | 1.0    | 73          | 74.0        | 4.0    |
| <b>Medication Management</b>                       |                              |                   |                 |        |             |             |        |
| Digoxin Monitoring                                 | 207                          | 83.9              | 91.6            | 1.0    | 25          | 80.0        | N/A    |
| <b>Pedi: Respiratory Testing/Treatment</b>         |                              |                   |                 |        |             |             |        |
| Upper Respiratory Infection (URI)                  | 86                           | 90.6              | 97.7            | 1.0    | 330         | 94.2        | 3.1    |
| Pharyngitis  | 13                           | 83.1              | 99.6            | 1.0    | 291         | 96.6        | 4.3    |
| <b>Pedi: Well-visits</b>                           |                              |                   |                 |        |             |             |        |
| < 15 months  | 46                           | 91.8              | 99.3            | 1.0    | 208         | 94.7        | 2.6    |
| 3-6 Years  | 22                           | 85.5              | 99.2            | 1.0    | 863         | 95.9        | 4.0    |
| Adolescent Well Care Visits                        | 27                           | 60.0              | 87.7            | 1.0    | 2,839       | 79.5        | 3.8    |
| <b>Clinical Outcomes Measures<sup>2</sup></b>      |                              |                   |                 |        |             |             |        |
| <b>Diabetes</b>                                    |                              |                   |                 |        |             |             |        |
| HbA1c in Poor Control (>9)                         | 10                           | 45.0              | 4.7             | 3.0    | 553         | 12.1        | 4.3    |
| LDL-C Control (<100mg)                             | 17                           | 33.4              | 75.6            | 3.0    | 553         | 70.9        | 4.6    |
| Blood Pressure Control (<140/80)                   | 90                           | 46.0              | 64.5            | 3.0    | 553         | 70.9        | 5.0    |
| <b>Hypertension</b>                                |                              |                   |                 |        |             |             |        |
| Controlling High Blood Pressure (140/90)           | 120                          | 71.6              | 82.5            | 3.0    | 1,319       | 87.5        | 5.0    |
| <b>Cardiovascular Disease</b>                      |                              |                   |                 |        |             |             |        |
| LDL-C Control (<100mg)                             | 17                           | 33.4              | 75.6            | 3.0    | 132         | 75.8        | 5.0    |
| <b>Patient Experiences - Adult<sup>3</sup></b>     |                              |                   |                 |        |             |             |        |
| Communication Quality                              | 200                          | 91.0              | 98.0            | 1.0    | 837         | 94.3        | 2.9    |
| Knowledge of Patients                              | 200                          | 80.0              | 95.0            | 1.0    | 837         | 89.3        | 3.5    |
| Integration of Care                                | 200                          | 80.0              | 96.0            | 1.0    | 767         | 88.6        | 3.2    |
| Access to Care                                     | 200                          | 79.0              | 96.0            | 1.0    | 603         | 86.0        | 2.6    |
| <b>Patient Experiences - Pediatric<sup>3</sup></b> |                              |                   |                 |        |             |             |        |
| Communication Quality                              | 200                          | 95.0              | 97.0            | 1.0    | 260         | 96.0        | 3.0    |
| Knowledge of Patients                              | 200                          | 89.0              | 93.0            | 1.0    | 260         | 93.1        | 5.0    |
| Integration of Care                                | 200                          | 85.0              | 91.0            | 1.0    | 119         | 92.5        | N/A    |
| Access to Care                                     | 200                          | 70.0              | 90.0            | 1.0    | 212         | 84.8        | 4.0    |
| <b>Total Weighted Points</b>                       |                              |                   |                 |        |             |             | 155.2  |
| <b># of Measures (Weighted)</b>                    |                              |                   |                 |        |             |             | 38.0   |
| <b>Score</b>                                       |                              |                   |                 |        |             |             | 4.1    |

**Notes:**

<sup>1</sup> Source: BCBSMA CY 2012 data (with 4 months run-out) for Clinical Process measures. Post-appeal results.

<sup>2</sup> Source: Outcome data collected from Group. Post appeal results.

<sup>3</sup> Source: MHQP/BCBSMA 2012 Survey data.

n/a: Not available or not applicable.

N/A: Does not meet Minimum Denominator Required. Excluded from scoring.

Products included: HMO/POS.

**HOSPITAL QUALITY AND SAFETY**  
**Clinical Process, Outcomes and Patient Experience Measures**

|   | Minimum<br>Denominator | Minimum<br>Threshold | Upper<br>Threshold | BEVERLY HOSPITAL<br>CORPORATION |                 |             |
|---|------------------------|----------------------|--------------------|---------------------------------|-----------------|-------------|
|   |                        |                      |                    | Denomina<br>tor                 | Perform<br>ance | Points      |
| <b>Clinical Process Measures<sup>1</sup></b>    |                        |                      |                    |                                 |                 |             |
| <b>AMI</b>                                      |                        |                      |                    |                                 |                 |             |
| Aspirin at discharge                            | 63                     | 98.2                 |                    | 134                             | 99.0            | 5.0         |
| <b>Heart Failure</b>                            |                        |                      |                    |                                 |                 |             |
| ACE LVSD  | 31                     | 87.3                 | 98.9               | 83                              | 99.0            | 5.0         |
| LVS function Evaluation                         | 24                     | 95.1                 | 100.0              | 384                             | 100.0           | 5.0         |
| Discharge instructions                          | 11                     | 71.4                 | 98.5               | 268                             | 94.0            | 4.3         |
| <b>Pneumonia</b>                                |                        |                      |                    |                                 |                 |             |
| Antibiotic selection                            | 124                    | 87.4                 | 95.4               | 279                             | 99.0            | 5.0         |
| Blood culture                                   | 91                     | 91.0                 | 98.0               | 508                             | 98.0            | 5.0         |
| <b>Surgical Infection</b>                       |                        |                      |                    |                                 |                 |             |
| Antibiotic received                             | 28                     | 86.5                 | 98.9               | 744                             | 99.0            | 5.0         |
| Received Appropriate Preventive Antibiotic(s)   | 71                     | 94.1                 | 99.4               | 744                             | 99.0            | 4.7         |
| Antibiotic discontinued                         | 28                     | 77.9                 | 96.2               | 732                             | 99.0            | 5.0         |
| <b>Clinical Outcomes Measures</b>               |                        |                      |                    |                                 |                 |             |
| Select Infections due to Medical Care           | 4149                   | 0.18                 | 0.02               | 13,575                          | 0.01            | 5.0         |
| Post-Op PE/DVT                                  | 1007                   | 0.93                 | 0.22               | 2,351                           | 0.34            | 4.3         |
| Birth Trauma - injury to neonate                | 1130                   | 0.20                 | 0.01               | 2,126                           | 0.09            | 3.3         |
| Obstetrics Trauma-vaginal w/o instrument        | 651                    | 3.54                 | 1.54               | 1,411                           | 1.70            | 4.7         |
| <b>Patient Experiences (HCAHPS)<sup>1</sup></b> |                        |                      |                    |                                 |                 |             |
| Nursing communication                           | 300                    | 72.6                 | 81.2               |                                 | 79.0            | 4.0         |
| MD communication                                | 300                    | 78.1                 | 85.5               |                                 | 78.0            | 0.0         |
| Responsiveness                                  | 300                    | 58.4                 | 76.4               |                                 | 65.0            | 2.5         |
| Discharge planning                              | 300                    | 77.7                 | 90.4               |                                 | 87.0            | 3.9         |
| <b>Total Points</b>                             |                        |                      |                    |                                 |                 | <b>71.7</b> |
| <b># of Measures</b>                            |                        |                      |                    |                                 |                 | <b>17</b>   |
| <b>Score</b>                                    |                        |                      |                    |                                 |                 | <b>4.2</b>  |

**Data sources:**

Clinical Process Measures: HHS - Hospital Compare for 12 months ending 3Q12.

Clinical Outcomes Measures: FY 2012: October 1, 2011 - September 30, 2012.

Patient Experience (HCAHPS): Hospital Compare for 12 months ending 3Q12.

**Notes:**

<sup>1</sup> Results reflect most recent data available for settlement through HHS - Hospital Compare.

n/a: Data not available.

N/A: Denominators do not meet minimum requirements. Measure excluded from scoring.

**Blue Cross Blue Shield of Massachusetts  
NEPHO  
2012 Aggregate Score**

|                         |     |
|-------------------------|-----|
| <b>Ambulatory Score</b> | 4.1 |
| <b>Hospital Score</b>   | 4.2 |
| <b>Aggregate Score</b>  | 4.2 |

\*

| NEPHO Quality Scorecard |
|-------------------------|
| NEPHO                   |
| Measure Year 2013       |

| COMPOSITE GATE SCORE |
|----------------------|
| 4.48                 |

| Row Labels                                 | MINIMUM THRESHOLD | MAXIMUM THRESHHOLD | WEIGHT | COMPLIANT | POPULATION | RATE   | MAX SCORE | WEIGHTED POINTS |
|--|-------------------|--------------------|--------|-----------|------------|--------|-----------|-----------------|
| <b>Clinical Process Measures</b>           |                   |                    |        |           |            |        |           |                 |
| <b>Adult Respiratory Testing/Treatment</b> |                   |                    |        |           |            |        |           |                 |
| Acute Bronchitis                           | 55.00%            | 80.00%             | 1      | 57        | 81         | 70.37% | 5.0       | 3.46            |
| <b>Cancer Screening</b>                    |                   |                    |        |           |            |        |           |                 |
| Breast Cancer Screening                    | 77.10%            | 90.00%             | 1      | 2,126     | 2,522      | 84.30% | 5.0       | 3.23            |
| Cervical Cancer Screening                  | 83.50%            | 92.40%             | 1      | 2,461     | 2,755      | 89.33% | 5.0       | 3.62            |
| Colorectal Cancer Screening                | 65.20%            | 83.30%             | 1      | 2,387     | 3,153      | 75.71% | 5.0       | 3.32            |
| <b>Chlamydia Screening</b>                 |                   |                    |        |           |            |        |           |                 |
| Ages 16-20                                 | 45.90%            | 63.70%             | 0.5    | 317       | 371        | 85.44% | 2.5       | 2.50            |
| Ages 21-24                                 | 50.10%            | 67.30%             | 0.5    | 297       | 387        | 76.74% | 2.5       | 2.50            |
| <b>Cholesterol Management</b>              |                   |                    |        |           |            |        |           |                 |
| Cardiovascular LDL-C Screening             | 85.30%            | 93.80%             | 1      | 79        | 84         | 94.05% | 0.0       | 0.00            |
| Diabetes LDL-C Screening                   | 85.30%            | 93.80%             | 1      | 351       | 374        | 93.85% | 5.0       | 5.00            |
| <b>Depression</b>                          |                   |                    |        |           |            |        |           |                 |
| Acute Phase Rx                             | 65.30%            | 80.00%             | 1      | 47        | 74         | 63.51% | 0.0       | 0.00            |
| Continuation Phase Rx                      | 49.60%            | 70.00%             | 1      | 33        | 74         | 44.59% | 0.0       | 0.00            |
| <b>Diabetes</b>                            |                   |                    |        |           |            |        |           |                 |
| Eye Exams                                  | 58.00%            | 72.10%             | 1      | 276       | 374        | 73.80% | 5.0       | 5.00            |
| HbA1c Testing (2X)                         | 69.90%            | 83.20%             | 1      | 331       | 374        | 88.50% | 5.0       | 5.00            |
| Nephropathy Screening                      | 79.70%            | 91.40%             | 1      | 353       | 374        | 94.39% | 5.0       | 5.00            |
| <b>Pedi: Respiratory Testing/Treatment</b> |                   |                    |        |           |            |        |           |                 |
| Pharyngitis                                | 83.10%            | 99.60%             | 1      | 319       | 323        | 98.76% | 5.0       | 4.80            |
| Upper Respiratory Infection                | 90.60%            | 97.70%             | 1      | 264       | 273        | 96.70% | 5.0       | 4.44            |
| <b>Pedi: Well-visits</b>                   |                   |                    |        |           |            |        |           |                 |
| < 15 months                                | 91.80%            | 99.30%             | 1      | 178       | 185        | 96.22% | 5.0       | 3.36            |
| 3-6 Years                                  | 85.50%            | 99.20%             | 1      | 723       | 748        | 96.66% | 5.0       | 4.26            |
| Adolescent Well Care Visits                | 60.00%            | 87.70%             | 1      | 1,980     | 2,385      | 83.02% | 5.0       | 4.32            |
| <b>Clinical Outcomes Measures</b>          |                   |                    |        |           |            |        |           |                 |
| <b>Cardiovascular Disease</b>              |                   |                    |        |           |            |        |           |                 |
| CV LDL-C Control (<100mg)                  | 33.40%            | 75.60%             | 3      | 67        | 84         | 79.76% | 15.0      | 15.00           |
| <b>Diabetes</b>                            |                   |                    |        |           |            |        |           |                 |
| Blood Pressure Control (140/80)            | 46.00%            | 64.50%             | 3      | 253       | 374        | 67.65% | 15.0      | 15.00           |
| DM HbA1c Control (<= 9)                    | 55.00%            | 95.30%             | 3      | 329       | 374        | 87.97% | 15.0      | 12.82           |
| DM LDL-C Control (<100mg)                  | 33.40%            | 75.60%             | 3      | 246       | 374        | 65.78% | 15.0      | 12.21           |
| <b>Hypertension</b>                        |                   |                    |        |           |            |        |           |                 |
| Controlling High Blood Pressure (140/90)   | 71.60%            | 82.50%             | 3      | 724       | 865        | 83.70% | 15.0      | 15.00           |

**Blue Cross Blue Shield of Massachusetts**

**Lahey**

**Ambulatory Measures**

|   |                              |                   |                 |        |             | Lahey       |        |
|---|------------------------------|-------------------|-----------------|--------|-------------|-------------|--------|
| Measure   | Minimum Denominator Required | Minimum Threshold | Upper Threshold | Weight | Denominator | Performance | Points |
| <b>Clinical Process Measures <sup>1</sup></b>       |                              |                   |                 |        |             |             |        |
| <b>Depression</b>                                   |                              |                   |                 |        |             |             |        |
| Acute Phase Rx                                      | 100                          | 65.3              | 80.0            | 1.0    | 132         | 67.4        | 1.6    |
| Continuation Phase Rx                               | 100                          | 49.6              | 70.0            | 1.0    | 132         | 53.0        | 1.7    |
| <b>Diabetes</b>                                     |                              |                   |                 |        |             |             |        |
| HbA1c Testing (2X)                                  | 145                          | 71.4              | 83.2            | 0.25   | 814         | 71.9        | 1.2    |
| Eye Exams   | 134                          | 60.7              | 72.1            | 1.0    | 814         | 68.7        | 3.8    |
| Nephropathy Screening                               | 104                          | 82.8              | 91.4            | 1.0    | 814         | 85.7        | 2.3    |
| <b>Cholesterol Management</b>                       |                              |                   |                 |        |             |             |        |
| Diabetes LDL-C Screening                            | 155                          | 87.9              | 93.8            | 0.25   | 814         | 87.0        | 0.0    |
| Cardiovascular LDL-C Screening                      | 155                          | 87.9              | 93.8            | 0.25   | 216         | 85.2        | 0.0    |
| <b>Cancer Screening</b>                             |                              |                   |                 |        |             |             |        |
| Breast Cancer Screening                             | 150                          | 80.8              | 90.0            | 1.0    | 4,273       | 86.0        | 3.3    |
| Cervical Cancer Screening                           | 148                          | 83.5              | 92.4            | 1.0    | 4,362       | 84.1        | 1.3    |
| Colorectal Cancer Screening (51 - 75)               | 67                           | 65.2              | 83.3            | 1.0    | 5,953       | 69.4        | 1.9    |
| <b>Preventive Screening/Treatment</b>               |                              |                   |                 |        |             |             |        |
| Chlamydia Screening                                 |                              |                   |                 |        |             |             |        |
| Ages 16-20  | 51                           | 54.2              | 77.2            | 0.5    | 118         | 38.1        | 0.0    |
| Ages 21-24  | 93                           | 59.0              | 75.8            | 0.5    | 311         | 57.6        | 0.0    |
| <b>Adult Respiratory Testing/Treatment</b>          |                              |                   |                 |        |             |             |        |
| Acute Bronchitis                                    | 30                           | 55.0              | 80.0            | 1.0    | 263         | 19.4        | 0.0    |
| <b>Pedi: Respiratory Testing/Treatment</b>          |                              |                   |                 |        |             |             |        |
| Upper Respiratory Infection (URI)                   | 101                          | 93.3              | 97.7            | 1.0    | 36          | 91.7        | N/A    |
| Pharyngitis   | 24                           | 90.1              | 99.6            | 1.0    | 40          | 82.5        | 0.0    |
| <b>Pedi: Well-visits</b>                            |                              |                   |                 |        |             |             |        |
| < 15 months   | 46                           | 91.8              | 99.3            | 1.0    | 10          | 100.0       | N/A    |
| 3-6 Years   | 109                          | 89.3              | 99.2            | 1.0    | 75          | 94.7        | N/A    |
| Adolescent Well Care Visits                         | 45                           | 63.6              | 87.7            | 1.0    | 741         | 73.1        | 2.6    |
| <b>Clinical Outcomes Measures</b>                   |                              |                   |                 |        |             |             |        |
| <b>Diabetes</b>                                     |                              |                   |                 |        |             |             |        |
| HbA1c in Poor Control                               | 99                           | 20.4              | 8.7             | 3.0    | 811         | 17.4        | 2.0    |
| LDL-C Control (<100mg)                              | 132                          | 52.7              | 67.7            | 3.0    | 811         | 56.2        | 1.9    |
| Blood Pressure Control (<140/80)                    | 90                           | 46.0              | 64.5            | 3.0    | 811         | 45.0        | 0.0    |
| <b>Hypertension</b>                                 |                              |                   |                 |        |             |             |        |
| Controlling High Blood Pressure (<140/90)           | 147                          | 69.5              | 81.7            | 3.0    | 1,519       | 63.9        | 0.0    |
| <b>Cardiovascular Disease</b>                       |                              |                   |                 |        |             |             |        |
| LDL-C Control (<100mg)                              | 69                           | 65.7              | 83.4            | 3.0    | 216         | 73.1        | 2.7    |
| <b>Patient Experiences - Adult <sup>2</sup></b>     |                              |                   |                 |        |             |             |        |
| Communication Quality                               | 200                          | 91.0              | 98.0            | 1.0    | 755         | 94.3        | 2.9    |
| Knowledge of Patients                               | 200                          | 80.0              | 95.0            | 1.0    | 755         | 89.3        | 3.5    |
| Integration of Care                                 | 200                          | 80.0              | 96.0            | 1.0    | 713         | 89.0        | 3.3    |
| Access to Care                                      | 200                          | 79.0              | 96.0            | 1.0    | 483         | 83.0        | 1.9    |
| <b>Patient Experiences - Pediatric <sup>2</sup></b> |                              |                   |                 |        |             |             |        |
| Communication Quality                               | 200                          | 95.0              | 97.0            | 1.0    | 121         | 98.7        | N/A    |
| Knowledge of Patients                               | 200                          | 89.0              | 93.0            | 1.0    | 121         | 95.9        | N/A    |
| Integration of Care                                 | 200                          | 85.0              | 91.0            | 1.0    | 68          | 94.0        | N/A    |
| Access to Care                                      | 200                          | 70.0              | 90.0            | 1.0    | 95          | 92.1        | N/A    |
| <b>Total Weighted Points</b>                        |                              |                   |                 |        |             | 50.2        |        |
| <b># of Measures (Weighted)</b>                     |                              |                   |                 |        |             | 30.75       |        |
| <b>Score</b>  |                              |                   |                 |        |             | 1.6         |        |

**Notes:**

<sup>1</sup> Source: BCBSMA CY 2012 data (with 4 months run-out) for Clinical Process measures. Post-appeal results.

<sup>2</sup> Source: Outcome data collected from Group. Post-appeal results.

<sup>3</sup> Source: MHQP/BCBSMA 2012 Survey data.

n/a: Not available or not applicable.

N/A: Does not meet Minimum Denominator Required. Excluded from scoring.



**HOSPITAL QUALITY AND SAFETY (HIMs)**  
**Clinical Process, Outcomes and Patient Experience Measures**

|  |        |                     |                   |                 | LAHEY CLINIC HOSPITAL |             |        |
|--|--------|---------------------|-------------------|-----------------|-----------------------|-------------|--------|
|  | Weight | Minimum Denominator | Minimum Threshold | Upper Threshold | Denominator           | Performance | Points |
| Clinical Process Measures                        |        |                     |                   |                 | %                     |             |        |
| AMI  |        |                     |                   |                 |                       |             |        |
| Aspirin at discharge                             | 1.0    | 39                  | 98.0              |                 | 625                   | 100.0       | 5.0    |
| Heart Failure                                    |        |                     |                   |                 |                       |             |        |
| ACE LVSD   | 1.0    | 71                  | 94.0              | 98.0            | 58                    | 97.0        | N/A    |
| LVS function Evaluation                          | 1.0    | 70                  | 98.0              |                 | 290                   | 100.0       | 5.0    |
| Discharge instructions                           | 1.0    | 23                  | 92.0              | 98.0            | 220                   | 99.0        | 5.0    |
| Pneumonia  |        |                     |                   |                 |                       |             |        |
| Antibiotic selection                             | 1.0    | 124                 | 87.0              | 95.0            | 52                    | 96.0        | N/A    |
| Blood culture                                    | 1.0    | 113                 | 94.0              | 98.0            | 85                    | 98.0        | N/A    |
| Surgical Infection                               |        |                     |                   |                 |                       |             |        |
| Antibiotic received                              | 1.0    | 115                 | 97.0              | 98.0            | 409                   | 99.0        | 5.0    |
| Received Appropriate Preventive Antibiotic(s)    | 1.0    | 183                 | 98.0              |                 | 410                   | 99.0        | 5.0    |
| Antibiotic discontinued                          | 1.0    | 96                  | 96.0              | 98.0            | 397                   | 98.0        | 5.0    |
| Received appropriate VTE prophylaxis             | 1.0    | 48                  | 96.0              | 98.0            | 385                   | 100.0       | 5.0    |
| Recommended VTE prophylaxis ordered              | 1.0    | 37                  | 97.0              | 98.0            | 385                   | 100.0       | 5.0    |
| Cardiac w/controlled post-op blood glucose       | 1.0    | 349                 | 95.0              | 98.0            | 128                   | 98.0        | N/A    |
| On BB prior to arrival and during peri-op period | 1.0    | 38                  | 96.0              | 98.0            | 226                   | 100.0       | 5.0    |
| Urinary Catheter Removed                         | 1.0    | 20                  | 88.0              | 98.0            | 210                   | 100.0       | 5.0    |
| Hospital Outpatient Measures                     |        |                     |                   |                 |                       |             |        |
| Antibiotic received                              | 1.0    | 36                  | 92.0              | 98.0            | 301                   | 94.0        | 2.3    |
| Received Appropriate Preventive Antibiotic(s)    | 1.0    | 81                  | 95.0              | 98.0            | 681                   | 99.0        | 5.0    |
| Clinical Process Total Points                    |        |                     |                   |                 |                       |             | 57.3   |
| # of Measures                                    |        |                     |                   |                 |                       |             | 12     |
| Score  |        |                     |                   |                 |                       |             | 4.8    |
| Clinical Outcomes Measures                       |        |                     |                   |                 |                       |             |        |
| Central Venous Catheter-Related BSI              | 1.0    | 6320                | 0.05              | 0.00            | 12,362                | 0.03        | 2.6    |
| PE/DVT after Major Surgery                       | 1.0    | 1776                | 0.90              | 0.32            | 8,342                 | 0.68        | 2.5    |
| Obstetrics Trauma-vaginal w/o instrument         | 0.5    | 716                 | 2.41              | 0.90            | n/a                   | n/a         | n/a    |
| OB Trau - Vag w Instru                           | 0.5    | 129                 | 17.26             | 7.68            | n/a                   | n/a         | n/a    |
| Post-operative Respiratory Failure               | 1.0    | 899                 | 0.87              | 0.18            | 4,607                 | 1.56        | 0.0    |
| Accidental Puncture or Laceration                | 1.0    | 3,146               | 0.15              | 0.02            | 21,303                | 0.53        | 0.0    |
| Iatrogenic Pneumothorax, Adult                   | 1.0    | 17,756              | 0.03              | 0.01            | 19,361                | 0.06        | 0.0    |
| Mortality AMI w/o Transfers                      | 1.0    | 226                 | 8.43              | 3.38            | 359                   | 5.57        | 3.3    |
| Clinical Outcome Total Points                    |        |                     |                   |                 |                       |             | 8.4    |
| # of Measures                                    |        |                     |                   |                 |                       |             | 6      |
| Score  |        |                     |                   |                 |                       |             | 1.4    |
| Patient Experiences (HCAHPS)                     |        |                     |                   |                 |                       |             |        |
| Nursing communication                            | 1.0    | 300                 | 73.0              | 81.0            |                       | 79.0        | 4.0    |
| MD communication                                 | 1.0    | 300                 | 78.0              | 86.0            |                       | 82.0        | 3.0    |
| Responsiveness                                   | 1.0    | 300                 | 58.0              | 76.0            |                       | 63.0        | 2.1    |
| Discharge planning                               | 1.0    | 300                 | 78.0              | 90.0            |                       | 87.0        | 4.0    |
| Patient Experience Total Points                  |        |                     |                   |                 |                       |             | 13.1   |
| # of Measures                                    |        |                     |                   |                 |                       |             | 4      |
| Score  |        |                     |                   |                 |                       |             | 3.3    |
| Overall Score Total                              |        |                     |                   |                 |                       |             | 9.5    |
| # of Measure Categories                          |        |                     |                   |                 |                       |             | 3      |
| Final Score                                      |        |                     |                   |                 |                       |             | 3.2    |

**Data sources:**

Clinical Process Measures: HHS - Hospital Compare for 12 months ending 3Q12.

Clinical Outcomes Measures: FY 2012: October 1, 2011 - September 30, 2012.

Patient Experience (HCAHPS): Hospital Compare for 12 months ending 3Q12.

**Notes:**

<sup>1</sup> Results reflect most recent data available for settlement through HHS - Hospital Compare.

n/a: Data not available.

**Lahey Quality Scorecard**

(Multiple Items)

Measure Year - 2013

**COMPOSITE GATE SCORE**

2.04

| Row Labels                                 | MINIMUM THRESHHOLD | MAXIMUM THRESHHOLD | WEIGHT | COMPLIANT | POPULATION | RATE  | MAX SCORE | WEIGHTED POINTS |
|--|--------------------|--------------------|--------|-----------|------------|-------|-----------|-----------------|
| <b>Clinical Process Measures</b>           |                    |                    |        |           |            |       |           |                 |
| <b>Adult Respiratory Testing/Treatment</b> |                    |                    |        |           |            |       |           |                 |
| Acute Bronchitis                           | 55.00%             | 80.00%             | 1      | 53        | 140        | 37.9% | 5.0       | 0.00            |
| <b>Cancer Screening</b>                    |                    |                    |        |           |            |       |           |                 |
| Breast Cancer Screening                    | 80.80%             | 90.00%             | 1      | 3,484     | 3,964      | 87.9% | 5.0       | 4.08            |
| Cervical Cancer Screening                  | 83.50%             | 92.40%             | 1      | 3,372     | 4,025      | 83.8% | 5.0       | 1.12            |
| Colorectal Cancer Screening                | 65.20%             | 83.30%             | 1      | 4,169     | 5,579      | 74.7% | 5.0       | 3.11            |
| <b>Chlamydia Screening</b>                 |                    |                    |        |           |            |       |           |                 |
| Ages 16-20                                 | 54.20%             | 77.20%             | 0.5    | 71        | 123        | 57.7% | 2.5       | 0.81            |
| Ages 21-24                                 | 59.00%             | 75.80%             | 0.5    | 200       | 318        | 62.9% | 2.5       | 0.96            |
| <b>Cholesterol Management</b>              |                    |                    |        |           |            |       |           |                 |
| Cardiovascular LDL-C Screening             | 87.90%             | 93.80%             | 0.25   | 188       | 207        | 90.8% | 1.3       | 0.75            |
| Diabetes LDL-C Screening                   | 87.90%             | 93.80%             | 0.25   | 668       | 746        | 89.5% | 1.3       | 0.53            |
| <b>Depression</b>                          |                    |                    |        |           |            |       |           |                 |
| Acute Phase Rx                             | 65.30%             | 80.00%             | 1      | 77        | 108        | 71.3% | 5.0       | 2.63            |
| Continuation Phase Rx                      | 49.60%             | 70.00%             | 1      | 57        | 108        | 52.8% | 5.0       | 1.62            |
| <b>Diabetes</b>                            |                    |                    |        |           |            |       |           |                 |
| Eye Exams                                  | 60.70%             | 72.10%             | 1      | 545       | 746        | 73.1% | 5.0       | 5.00            |
| HbA1c Testing (2X)                         | 71.40%             | 83.20%             | 0.25   | 552       | 746        | 74.0% | 1.3       | 0.47            |
| Nephropathy Screening                      | 82.80%             | 91.40%             | 1      | 667       | 746        | 89.4% | 5.0       | 4.07            |
| <b>Pedi: Respiratory Testing/Treatment</b> |                    |                    |        |           |            |       |           |                 |
| Pharyngitis                                | 90.10%             | 99.60%             | 1      | 29        | 33         | 87.9% | 5.0       | 0.00            |
| Upper Respiratory Infection                | 93.30%             | 97.70%             | 1      | 33        | 37         | 89.2% | 0.0       | 0.00            |
| <b>Pedi: Well-visits</b>                   |                    |                    |        |           |            |       |           |                 |
| < 15 months                                | 91.80%             | 99.30%             | 1      | 12        | 14         | 85.7% | 0.0       | 0.00            |
| 3-6 Years                                  | 89.30%             | 99.20%             | 1      | 65        | 76         | 85.5% | 0.0       | 0.00            |
| Adolescent Well Care Visits                | 63.60%             | 87.70%             | 1      | 506       | 686        | 73.8% | 5.0       | 2.69            |
| <b>Clinical Outcomes Measures</b>          |                    |                    |        |           |            |       |           |                 |
| <b>Cardiovascular Disease</b>              |                    |                    |        |           |            |       |           |                 |
| CV LDL-C Control (<100mg)                  | 65.70%             | 83.40%             | 3      | 147       | 207        | 71.0% | 15.0      | 6.60            |
| <b>Diabetes</b>                            |                    |                    |        |           |            |       |           |                 |
| Blood Pressure Control (140/80)            | 46.00%             | 64.50%             | 3      | 374       | 746        | 50.1% | 15.0      | 5.68            |
| DM HbA1c Control (<= 9)                    | 79.60%             | 91.30%             | 3      | 608       | 746        | 81.5% | 15.0      | 4.95            |
| DM LDL-C Control (<100mg)                  | 52.70%             | 67.70%             | 3      | 412       | 746        | 55.2% | 15.0      | 5.02            |
| <b>Hypertension</b>                        |                    |                    |        |           |            |       |           |                 |
| Controlling High Blood Pressure (140/90)   | 69.50%             | 81.70%             | 3      | 1,031     | 1,452      | 71.0% | 15.0      | 4.48            |

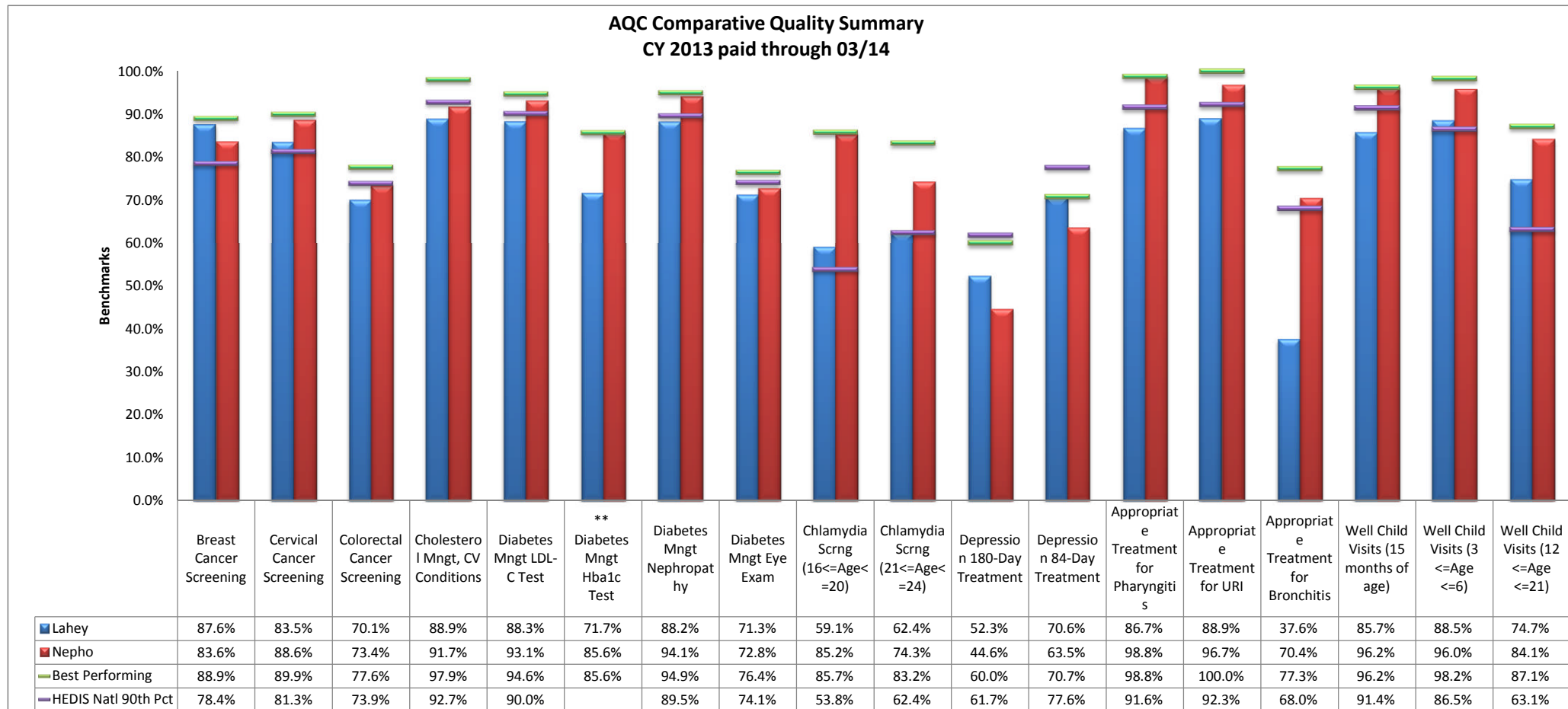
\* Final Composite Gate Score is determined by BCBSMA and would include Patient Experience Scores not reflected here.

 Print Date  
8/13/2014

LAHEY CLINICAL PERFORMANCE NETWORK

AQC QUALITY MEASURES

Time Period: CY 2013



**Note:**

\* 2013 Quality Compass 90th %tile - The benchmark data contained in this graph is Quality Compass 2013

\*\* 2013 Hedis 90th %tile is not available for Diabetes Management HbA1c (2X) Testing

LAHEY CLINICAL PERFORMANCE NETWORK  
ACO: 2013 Quality Performance Report  
Run on 8/01/2014

| DOMAINS                             |  | Actual Performance | WEIGHTS |
|-------------------------------------|--|--------------------|---------|
| PATIENT/CAREGIVER EXPERIENCE        |  | 91.4%              | 25%     |
| CARE COORDINATION/PATIENT SAFETY    |  | 59.6%              | 25%     |
| PREVENTIVE HEALTH                   |  | 84.1%              | 25%     |
| CHRONIC MEASURES/AT RISK POPULATION |  | 88.2%              | 25%     |
| <b>QUALITY PERFORMANCE SCORE</b>    |  | <b>80.8%</b>       |         |

| PATIENT/CAREGIVER EXPERIENCE                 | Pay-for-Performance<br>(4) | Measure Test Name | LCPN   | ACO Quality<br>Measure<br>Benchmarks | Quality<br>Earned Points | Possible<br>Points |
|--|----------------------------|-------------------|--------|--------------------------------------|--------------------------|--------------------|
| Timely Care and Appointments <sup>(3)</sup>  | P                          |                   | 85.30% | 80 %tile                             | 1.85                     | 2.00               |
| Provider Communication <sup>(3)</sup>        | P                          |                   | 94.04% | 90 %tile                             | 2.00                     | 2.00               |
| Patient Ratings of Providers <sup>(3)</sup>  | P                          |                   | 92.43% | 90 %tile                             | 2.00                     | 2.00               |
| Access to Specialist <sup>(3)</sup>          | P                          |                   | 83.07% | 80 %tile                             | 1.85                     | 2.00               |
| Health Promotions & Education <sup>(3)</sup> | P                          |                   | 62.23% | 90 %tile                             | 2.00                     | 2.00               |
| Shared Decision Making <sup>(1)</sup>        | P                          |                   | 72.18% | 30 %tile                             | 1.10                     | 2.00               |
| Health & Functional Status <sup>(1)</sup>    | R                          |                   | 74.20% | 90 %tile                             | 2.00                     | 2.00               |
| <b>Total Points</b>                          |                            |                   |        |                                      | <b>12.80</b>             | <b>14.00</b>       |

| CARE COORDINATION/PATIENT SAFETY               | Pay-for-Performance<br>(4) | Measure Test Name               | LCPN   | ACO Quality<br>Measure<br>Benchmarks | Quality<br>Earned Points | Possible<br>Points |
|--|----------------------------|---------------------------------|--------|--------------------------------------|--------------------------|--------------------|
| Risk Standardized All Condition Readmissions   | R                          |                                 | 15.27% | 90 %tile                             | 2.00                     | 2.00               |
| ASCA: COPD and Asthma <sup>(3)</sup>           | P                          |                                 | 1.36%  | <30%tile                             | -                        | 2.00               |
| ASCA: CHF <sup>(3)</sup>                       | P                          |                                 | 1.35%  | <30%tile                             | -                        | 2.00               |
| Med Reconciliation @D/C                        | P                          | ACO12-Medication Reconciliation | 79.66% | 70 %tile                             | 1.70                     | 2.00               |
| Screening for Fall Risk                        | P                          | ACO13-Fall Risk Screening       | 23.08% | 40 %tile                             | 1.25                     | 2.00               |
| % PCP Quality for EHR Incentive <sup>(2)</sup> | P                          |                                 | 82.59% | 70 %tile                             | 3.40                     | 4.00               |
| <b>Total Points</b>                            |                            |                                 |        |                                      | <b>8.35</b>              | <b>14.00</b>       |

| PREVENTIVE HEALTH                          | Pay-for-Performance<br>(4) | Measure Test Name                 | LCPN   | ACO Quality<br>Measure<br>Benchmarks | Quality<br>Earned Points | Possible<br>Points |
|--|----------------------------|-----------------------------------|--------|--------------------------------------|--------------------------|--------------------|
| Influenza Immunization                     | P                          | ACO14-Influenza Immunization      | 59.08% | 60 %tile                             | 1.55                     | 2.00               |
| Pneumococcal Vaccination                   | P                          | ACO15-Pneumococcal Vaccination    | 57.24% | 50 %tile                             | 1.40                     | 2.00               |
| Adult Weight Screen & f/u                  | P                          | ACO16-BMI & Follow-Up             | 63.66% | 50 %tile                             | 1.40                     | 2.00               |
| Tobacco Use Assessment & Intervention      | P                          | ACO17-Tobacco Use Screening       | 90.95% | 90 %tile                             | 2.00                     | 2.00               |
| Depression Screening                       | P                          | ACO18-Depression Screening        | 9.95%  | 30 %tile                             | 1.10                     | 2.00               |
| Colorectal Cancer Screening <sup>(1)</sup> | R                          | ACO19-Colorectal Cancer Screening | 52.15% | 90 %tile                             | 2.00                     | 2.00               |
| Mamography Screening <sup>(1)</sup>        | R                          | ACO20-Breast Cancer Screening     | 78.43% | 90 %tile                             | 2.00                     | 2.00               |
| % Adults w/BP measured <sup>(1)</sup>      | R                          | ACO21-BP                          | 76.20% | 90 %tile                             | 2.00                     | 2.00               |
| <b>Total Points</b>                        |                            |                                   |        |                                      | <b>13.45</b>             | <b>16.00</b>       |

| AT RISK POPULATION   | Pay-for-Performance<br>(4) | Measure Test Name                              | LCPN          | ACO Quality<br>Measure<br>Benchmarks | Quality<br>Earned Points | Possible<br>Points |
|--|----------------------------|--|---------------|--------------------------------------|--------------------------|--------------------|
| Diabetes: HbA1c Control <=8  | P                          | ACO22-HbA1c <8.0                               | 78.86%        |                                      |                          |                    |
| Diabetes: LDL < 100  | P                          | ACO23-LDL-C <100mg/dL                          | 60.33%        |                                      |                          |                    |
| Diabetes: BP < 140/90  | P                          | ACO24-BP <140/90                               | 70.55%        |                                      |                          |                    |
| Diabetes: Tobacco Non-use  | P                          | ACO25-Tobacco Non-Use                          | 77.91%        |                                      |                          |                    |
| Diabetes: Aspirin Use  | P                          | ACO26-Daily Aspirin or Antiplatelet Medication | 79.86%        |                                      |                          |                    |
| % of Beneficiaries with diabetes who met all of the above criteria |                            | <b>Diabetes Composite Score</b>                | <b>28.98%</b> | <b>70%tile</b>                       | <b>1.70</b>              | <b>2.00</b>        |
| Diabetes: Mellitus : HbA1c <=9                                     | P                          | ACO27-HbA1c <=9.0                              | 85.04%        | 80 %tile                             | 1.85                     | 2.00               |
| HTN: BP Control  | P                          | ACO28-BP <140/90                               | 67.10%        | 50 %tile                             | 1.40                     | 2.00               |
| IVD: Complete Lipid & LDL<100                                      | P                          | ACO29-LDL-C <100mg/dL                          | 64.63%        | 70 %tile                             | 1.70                     | 2.00               |
| IVD: Asp/Antithrombotic  | P                          | ACO30-Aspirin or Other Antithrombotic          | 86.62%        | 70 %tile                             | 1.70                     | 2.00               |
| HF: LVSD Beta Blocker Therapy <sup>(1)</sup>                       | R                          | ACO31-Beta-Blocker Therapy                     | 85.22%        | 90 %tile                             | 2.00                     | 2.00               |
| CAD Drug Therapy - Lower LDL <sup>(1)</sup>                        | R                          | ACO32-Lipid Control                            | 81.53%        |                                      |                          |                    |
| CAD ACE/ARB Therapy <sup>(1)</sup>                                 | R                          | ACO33-ACE Inhibitor or ARB Therapy             | 74.07%        |                                      |                          |                    |
| % of Beneficiaries with CAD who met all of above criteria:         |                            | <b>CAD Composite Score</b>                     | <b>73.64%</b> | <b>90%tile</b>                       | <b>2.00</b>              | <b>2.00</b>        |
| <b>Total Points</b>  |                            |  |               |                                      | <b>12.35</b>             | <b>14.00</b>       |

|   |              |              |
|---|--------------|--------------|
| <b>Maximum possible points per domain</b> | <b>46.95</b> | <b>58.00</b> |
|---|--------------|--------------|

Notes:

(1). For 2014 these measures will be reporting only, meaning we will receive the full quality points for reporting.

(2). EHR points doubled (currently at 50%tile scoring)

(3). The data for these measures will come from Medicare and therefore the earned quality points shown above are estimates on performance and not actual performance

## Tertiary Admission Admissions

| Case(s)<br>ProviderName                             | CalendarYear   |                |                |                | Grand Total    |
|---|----------------|----------------|----------------|----------------|----------------|
|   | 2011           | 2012           | 2013           | 2014           |                |
| LAHEY CLINIC HOSPITAL                               | 47.46%         | 59.43%         | 57.14%         | 66.67%         | 55.36%         |
| MASS GENERAL HOSPITAL                               | 15.25%         | 11.32%         | 18.68%         | 3.33%          | 13.91%         |
| NORTH SHORE MEDICAL CENTER                          | 11.02%         | 9.43%          | 6.59%          | 3.33%          | 8.70%          |
| BETH ISRAEL DEACONESS MEDICAL CENTER, INC           | 5.93%          | 4.72%          | 5.49%          | 10.00%         | 5.80%          |
| BRIGHAM AND WOMENS                                  | 11.86%         | 4.72%          | 8.79%          | 6.67%          | 8.41%          |
| HALLMARK HEALTH SYSTEM                              | 0.00%          | 1.89%          | 0.00%          | 0.00%          | 0.58%          |
| NEWTON WELLESLEY HOSPITAL                           | 0.85%          | 1.89%          | 0.00%          | 0.00%          | 0.87%          |
| METROWEST MEDICAL CENTER                            | 0.85%          | 1.89%          | 0.00%          | 0.00%          | 0.87%          |
| WINCHESTER HOSPITAL                                 | 0.85%          | 1.89%          | 0.00%          | 0.00%          | 0.87%          |
| TUFTS MEDICAL CENTER                                | 1.69%          | 1.89%          | 2.20%          | 3.33%          | 2.03%          |
| BOSTON MEDICAL CENTER                               | 1.69%          | 0.94%          | 1.10%          | 0.00%          | 1.16%          |
| CATHOLIC MEDICAL CENTER                             | 0.85%          | 0.00%          | 0.00%          | 0.00%          | 0.29%          |
| NEW ENGLAND BAPTIST HOSPITAL                        | 0.00%          | 0.00%          | 0.00%          | 3.33%          | 0.29%          |
| BETH ISRAEL DEACONESS HOSPITAL MILTON INC           | 0.85%          | 0.00%          | 0.00%          | 0.00%          | 0.29%          |
| DANA FARBER CANCER INSTITUTE                        | 0.85%          | 0.00%          | 0.00%          | 0.00%          | 0.29%          |
| STEWART ST ELIZABETHS MEDICAL CENTER OF BOSTON, INC | 0.00%          | 0.00%          | 0.00%          | 3.33%          | 0.29%          |
| <b>Grand Total</b>                                  | <b>100.00%</b> | <b>100.00%</b> | <b>100.00%</b> | <b>100.00%</b> | <b>100.00%</b> |

Tertiary Admission Admissions

# Lahey Enhanced Care

Kathleen T. Sheehan, MS, BSN, RN-BC, CH-GCN  
Director of Ambulatory and Transitional Case Management

Andrew Levitsky, Pharm.D, M. Ed, BCPS  
Manager of ACU Pharmacy Services

Patrice Horgan, RN, MSN, NEA-BC  
Dovetail Health



# Lahey Enhanced Care Overview

- ❖ LCPN contracting with *Dovetail Health* to provide enhanced care management services for complex, high-risk Medicare ACO patients only
- ❖ This service will be referred to as *Lahey Enhanced Care*
- ❖ Enhanced services will include:
  - In home visits by pharmacists and nurses
  - Transitional (30 days post discharge) and longitudinal follow-up (several months)
  - Overseen by LACU Director of Case Management (Kathleen Sheehan) and LACU Pharmacy Manager (Andrew Levitsky)
- ❖ Implementation date – 6/26
- ❖ E-Mail blast was sent to PCPs on 6/24 describing program details
- ❖ Additional educational sessions will be scheduled as needed

# Program Overview

## What is the Program?

- Targeted at complex, high-risk patients
- Engage them in the home and community
- Tailored program for each patient based on need
- Patient support can be 1 month or several months
- Goal to improve care and reduce unnecessary utilization

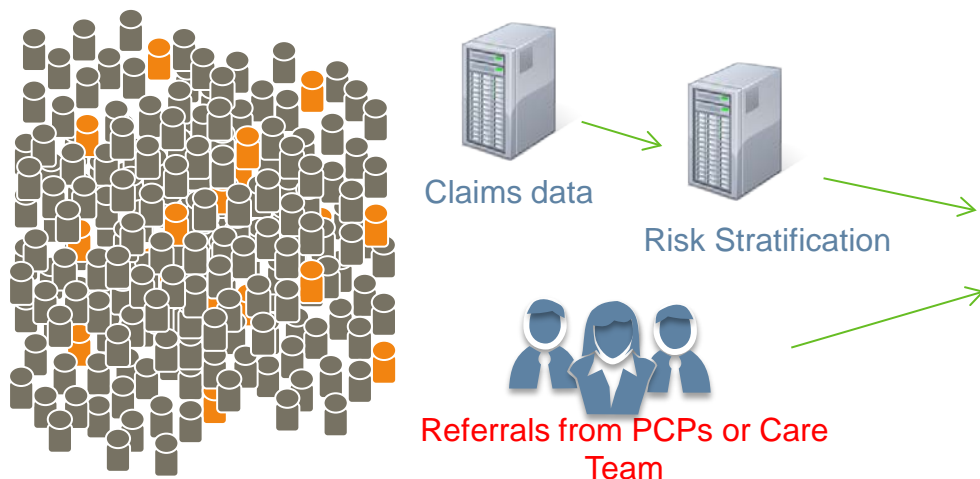
## Key Elements

- Holistic approach, with strong medication focus
- Designed to integrate with and extend Lahey team
  - Clinicians and materials are branded as Lahey Health Enhanced Care
- Capturing and leveraging “Last Mile” of data from the home

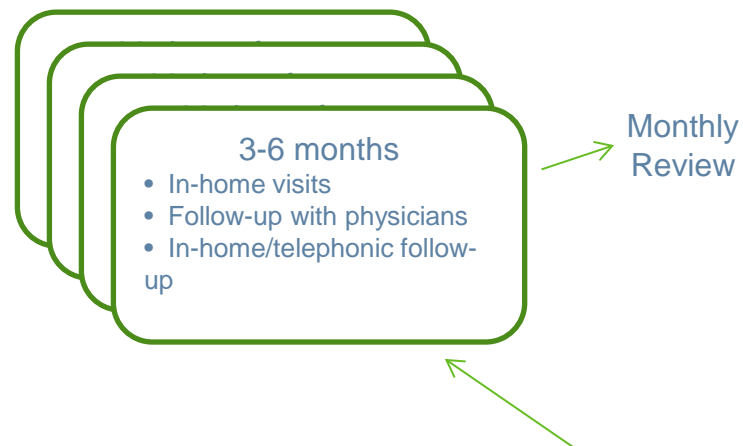
# Program Process Flow

Longitudinal

## Patient Selection & Enrollment



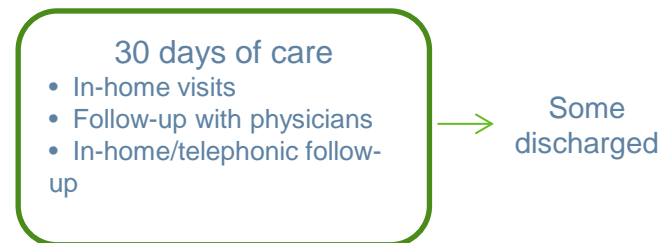
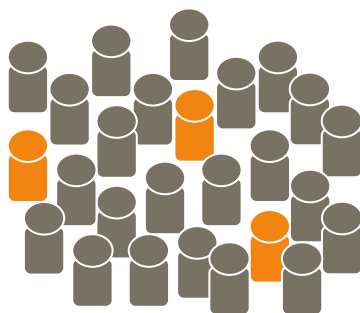
## Program Intervention



Transition



Referrals from Care Managers and Hospital Discharge Reports



Some Patients Referred to Longitudinal Program

# Focus of Initial Clinical Visit

Assess and help patients take the right medications tailored to their needs through analysis of their specific:

- Co-morbid conditions
- Goals of care
- Preferences for taking medications
- Ability to adhere to the prescribed regimen

Special focus on specific and non-specific geriatric syndromes in relationship to adverse drug reactions

Assess broader needs beyond medications to identify barriers and develop a holistic plan of care

# Communication and Collaboration

## Patient

- Detailed care plan is printed in the home and left with the patient and caregiver(s)
- Patients are supported throughout their time in the program with telephone calls and follow-up visits as needed

## Physicians and Care Team

- After the initial home visit, the care plan is shared with the PCP
- Clinician will call PCP (or specialist) to discuss:
  - Discrepancies or concerns regarding the patient's care plan and/or medications
  - Simplify or optimize medication regimen
- Case conferencing with external care team members
- Ongoing communication and collaboration with PCP and other care providers throughout program to ensure continuity of care

# Lahey Enhanced Care Pre-enrollment Workflow

## ❖ Patient Selection

- Post hospital discharge using risk stratification criteria (pulled by the ACU). *Only Medicare ACO patients meeting high risk selection criteria will be enrolled. PCPs will receive fax notification from Lahey Enhanced Care informing them of the intent to enroll their patient in the program.*
- PCP referral using the *Lahey Enhanced Care Referral form* (via fax). *Patients must be Medicare ACO and meet one or more of the criteria specified on the form. PCP will receive faxed confirmation that the referred patient has been enrolled in the program*
- *Referral's will be vetted through Director of ATCM and Pharmacy Manager to avoid duplication of services with Lahey ATCM*

# Lahey Enhanced Care Post-enrollment Workflow

- ❖ Communication Process (after a home visit)
  - Individual sites will receive a Lahey Enhanced Care Plan by fax, which will include recommendations from the pharmacist or nurse that made the home visit
  - Once received, the care plan should be reviewed by the physician, completed and faxed to the number provided
  - After completion, the care plan should be filed for scanning
  - Scanned Care Plans will be filed in A Chart under ATCM notes
  - ***PCPs will be contacted by phone for urgent matters***



# Ambulatory Case Manager Role

- Weekly/Bi-weekly or Monthly case conference meetings with Director, Pharmacy Manager & ATCM to discuss cases
- 90 day meeting for all cases that will be referred back to Lahey ATCM for warm hand-off
- ATCM will follow these patients as needed after discharge from Lahey Enhanced Care Program

*The Leader in Physician-Led Population Health Improvement*



# Lahey Clinical Performance Network

## Phytel Outreach Product Overview

May 14<sup>th</sup>, 2014

# What is Phytel Outreach?

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- **An automated service that identifies patients in need of care and notifies them about recommended visits, test, procedures and other follow-up items.**

# How Does Phytel Outreach Work?

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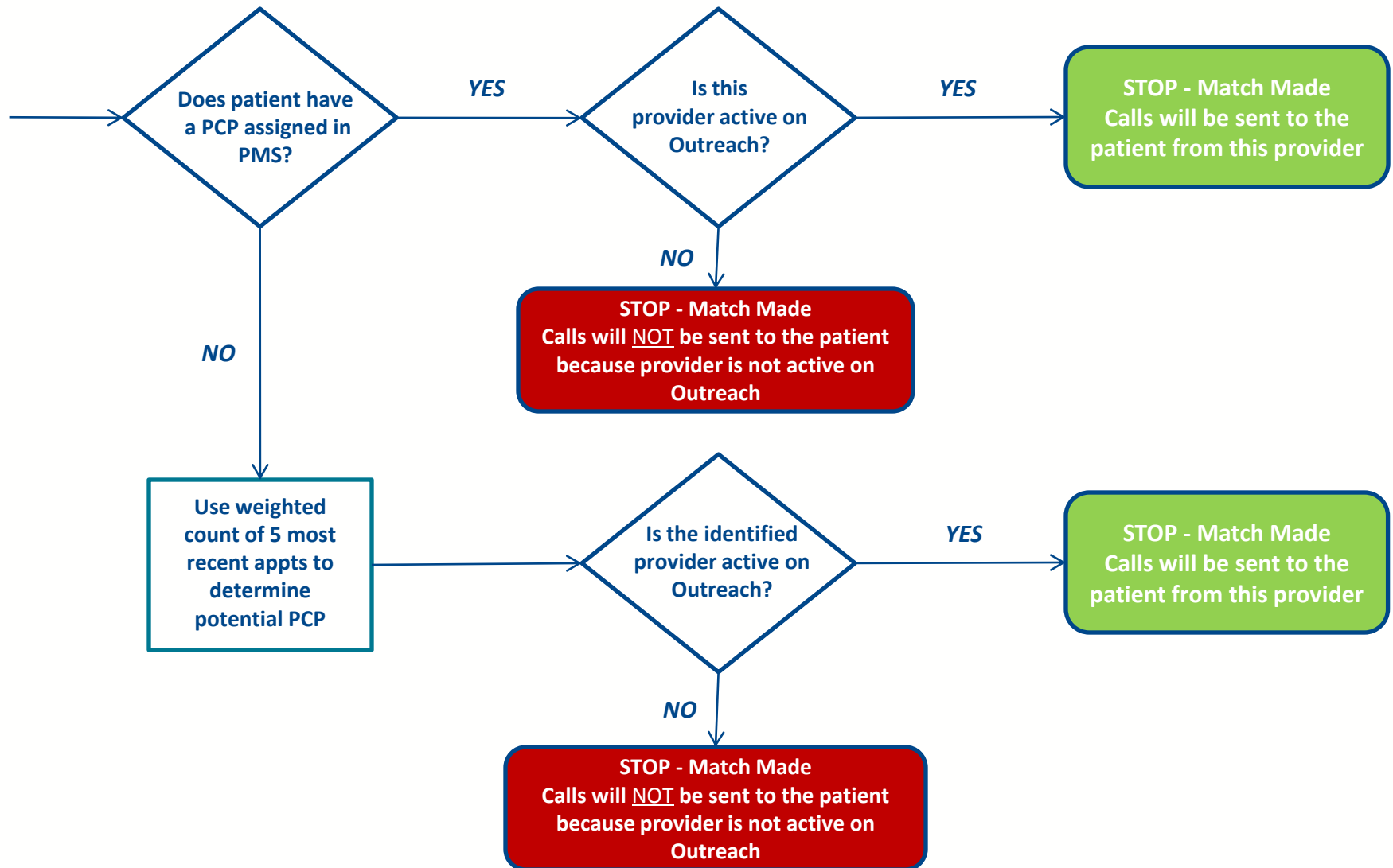
- **BUILD** a Patient Registry using data from the Practice Management System (ICD-9, CPT, Appointments).
- **IDENTIFY** patients who are out of compliance with annual care or management of their chronic condition
- **NOTIFY** the patient to call the clinic and schedule an appointment
- **TRACK** to ensure the patient books an appointment in response to the recall
- **MEASURE** the effects of our outreach efforts

# Phytel Outreach Process Timeline

---

- **Weekly**
  - Rebuild Patient Outreach Registry  
“Weekly Snapshot: All Patients”
- **Daily**
  - Appointment/Demographic Import
  - ICD9/CPT Import
  - Release Calls to Non-Compliant Patients
    - Monday – Friday: 2pm to 7pm
    - No calls on Saturday, Sunday or Federal Holidays

# PCP Specified or Weighted Recent Appointments



# Phytel Outreach: Message Script

---

Lahey Health Primary Care <Clinic Name> has a health reminder for <Patient name>.

Our records indicate that it is time for you to return to our office for a follow up visit. \*

Please call us to schedule an appointment at <Phone Number>.  
Press 1 to replay this message. Thank you. We look forward to seeing you.



# Successful vs. Unsuccessful Delivery and Call Quality

---

- **Our successfully delivered call rate is 97% vs. the industry standard of 90%**
- **An unsuccessful delivery response would result from an early disconnection, Dialing Error, invalid phone number, hang up or busy line**
- **Some call quality issues cannot be avoided**
  - Loud background noise
  - Multiple voicemail boxes
  - Poor cell reception / dropped calls
  - Language barrier
  - Elderly / hearing impaired

# Maximum Communication Attempts

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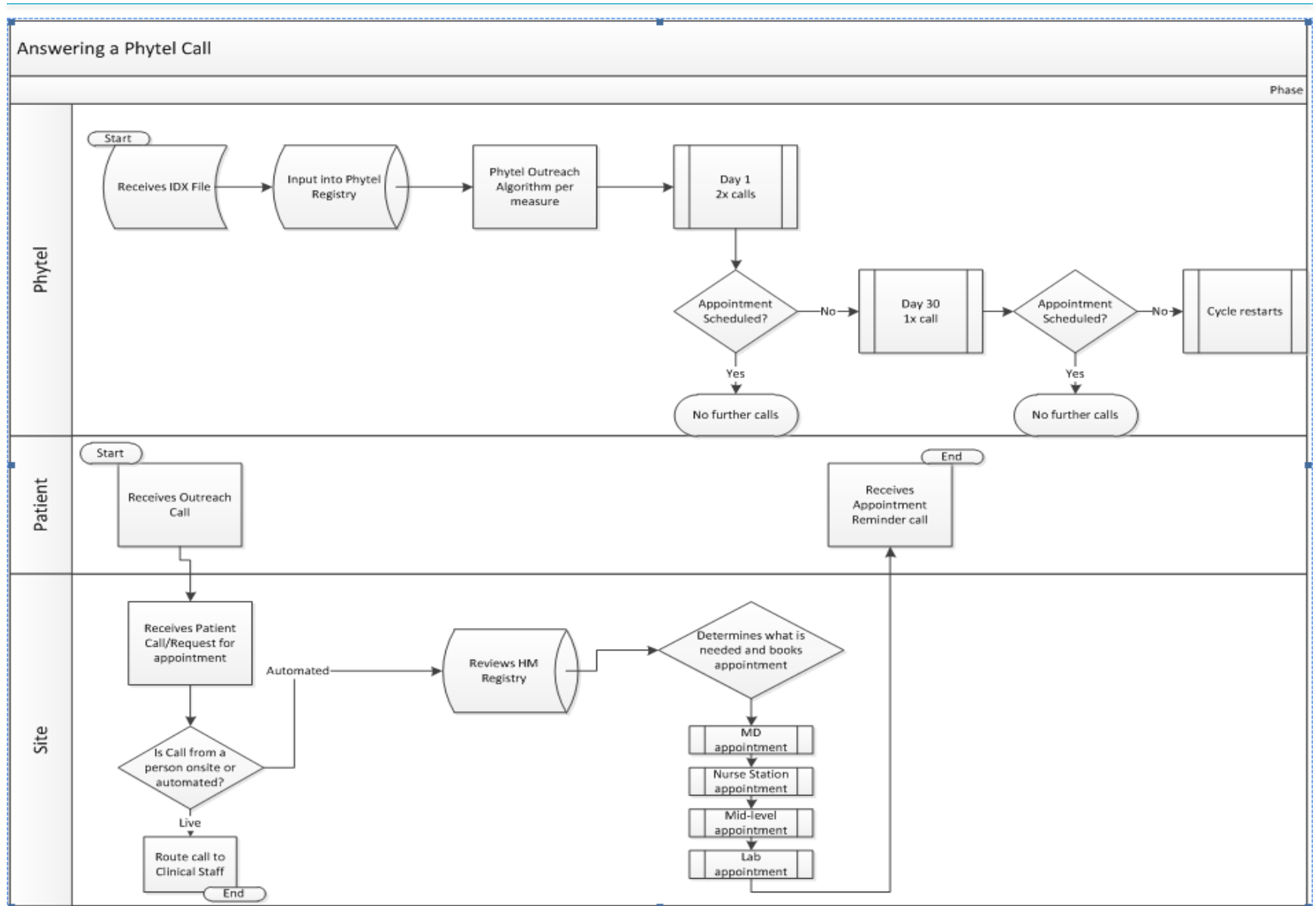
- **Maximum number of Outreach calls in 1 day is 2.**
  - 2 attempts in a day at 3 hour intervals
- **We will wait at least 1 month before attempting another Outreach communication.**
  - If the patient hasn't scheduled an appointment, the patient would be eligible for a second Outreach call.
- **If no appointment is made after the first cycle of calls (3 total), the patient will not be contacted for 1 month.**
  - At that point, the patient would be available for another call cycle

# Identifying Patients Not to Call

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- **No Call Flag**
  - Patient who have requested to not receive automated calls
- **Deceased Patients**

# Who will be interacting with these patients?





# Lahey Clinical Performance Network

## Phytel Outreach Product Overview

May14<sup>th</sup>, 2014

Table 1. Measures for Use in Establishing Quality Performance Standards that ACOs Must Meet for Shared Savings

| ACO #                                   | Domain                               | Measure Title  | NQF Measure #/<br>Measure Steward | Method of<br>Data Submission             | P4P<br>Phase-in<br>PY1 | P4P<br>Phase-in<br>PY2 | P4P<br>Phase-in<br>PY3 |
|---|--------------------------------------|--|-----------------------------------|--|------------------------|------------------------|------------------------|
| <b>AIM: Better Care for Individuals</b> |                                      |  |                                   |  |                        |                        |                        |
| 1.                                      | Patient/Caregiver<br>Experience      | CAHPS: Getting Timely Care, Appointments, and Information  | NQF #5,<br>AHRQ                   | Survey                                   | R                      | P                      | P                      |
| 2.                                      | Patient/Caregiver<br>Experience      | CAHPS: How Well Your Doctors Communicate   | NQF #5<br>AHRQ                    | Survey                                   | R                      | P                      | P                      |
| 3.                                      | Patient/Caregiver<br>Experience      | CAHPS: Patients' Rating of Doctor  | NQF #5<br>AHRQ                    | Survey                                   | R                      | P                      | P                      |
| 4.                                      | Patient/Caregiver<br>Experience      | CAHPS: Access to Specialists   | NQF #5<br>AHRQ                    | Survey                                   | R                      | P                      | P                      |
| 5.                                      | Patient/Caregiver<br>Experience      | CAHPS: Health Promotion and Education  | NQF #5<br>AHRQ                    | Survey                                   | R                      | P                      | P                      |
| 6.                                      | Patient/Caregiver<br>Experience      | CAHPS: Shared Decision Making  | NQF #5<br>AHRQ                    | Survey                                   | R                      | P                      | P                      |
| 7.                                      | Patient/Caregiver<br>Experience      | CAHPS: Health Status/Functional Status   | NQF #6<br>AHRQ                    | Survey                                   | R                      | R                      | R                      |
| 8.                                      | Care Coordination/<br>Patient Safety | Risk-Standardized, All Condition Readmission: <sup>1</sup><br>Ambulatory Sensitive Conditions Admissions:<br>Chronic Obstructive Pulmonary Disease or Asthma in Older Adults<br>(AHRQ Prevention Quality Indicator (PQI) #5) | CMS                               | Claims                                   | R                      | R                      | P                      |
| 9.                                      | Care Coordination/<br>Patient Safety | Ambulatory Sensitive Conditions Admissions:<br>Congestive Heart Failure<br>(AHRQ Prevention Quality Indicator (PQI) #8)  | NQF #275<br>AHRQ                  | Claims                                   | R                      | P                      | P                      |
| 10.                                     | Care Coordination/<br>Patient Safety |  | NQF #277<br>AHRQ                  | Claims                                   | R                      | P                      | P                      |
| 11.                                     | Care Coordination/<br>Patient Safety | Percent of Primary Care Physicians who Successfully Qualify for an EHR Program Incentive Payment   | CMS                               | EHR<br>Incentive<br>Program<br>Reporting | R                      | P                      | P                      |

(continued)

<sup>1</sup> We note that this measure has been under development and that finalization of this measure is contingent upon the availability of measures specifications before the establishment of the Shared Savings Program on January 1, 2012.



Table 1. Measures for Use in Establishing Quality Performance Standards that ACOs Must Meet for Shared Savings (cont.)

| ACO #                                     | Domain                               | Measure Title  | NQF Measure #/<br>Measure<br>Steward    | Method of<br>Data<br>Submission | P4P<br>Phase-in<br>PY1 | P4P<br>Phase-in<br>PY2 | P4P<br>Phase-in<br>PY3 |
|---|--------------------------------------|--|---|---------------------------------|------------------------|------------------------|------------------------|
| 12.                                       | Care Coordination/<br>Patient Safety | Medication Reconciliation: Reconciliation After Discharge from an Inpatient Facility | NQF #97<br>AMA-<br>PCPI/NCOA            | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 13.                                       | Care Coordination/<br>Patient Safety | Falls: Screening for Fall Risk   | NQF #101<br>NCOA                        | GPRO Web<br>Interface           | R                      | P                      | P                      |
| <b>AIM: Better Health for Populations</b> |                                      |  |   |                                 |                        |                        |                        |
| 14.                                       | Preventive Health                    | Influenza Immunization (Claims allowed)  | NQF #41.<br>AMA-PCPI                    | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 15.                                       | Preventive Health                    | Pneumococcal Vaccination (Claims allowed)  | NQF #43<br>NCOA                         | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 16.                                       | Preventive Health                    | Adult Weight Screening and Follow-up   | NQF #421<br>CMS                         | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 17.                                       | Preventive Health                    | Tobacco Use Assessment and Tobacco Cessation Intervention                            | NQF #28<br>AMA-PCPI                     | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 18.                                       | Preventive Health                    | Depression Screening   | NQF #418<br>CMS                         | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 19.                                       | Preventive Health                    | Colorectal Cancer Screening (Claims allowed)   | NQF #34<br>NCOA                         | GPRO Web<br>Interface           | R                      | R                      | P                      |
| 20.                                       | Preventive Health                    | Mammography Screening  | NQF #31<br>NCOA                         | GPRO Web<br>Interface           | R                      | R                      | P                      |
| 21.                                       | Preventive Health                    | Screening for High Blood Pressure  | CMS                                     | GPRO Web<br>Interface           | R                      | R                      | P                      |
| 22.                                       | At Risk Population -<br>Diabetes     | Diabetes Composite (All or Nothing Scoring): Hemoglobin A1c Control (<8 percent)     | NQF #729<br>MN Community<br>Measurement | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 23.                                       | At Risk Population -<br>Diabetes     | Diabetes Composite (All or Nothing Scoring): Low Density Lipoprotein (<100)          | NQF #729<br>MN Community<br>Measurement | GPRO Web<br>Interface           | R                      | P                      | P                      |
| 24.                                       | At Risk Population -<br>Diabetes     | Diabetes Composite (All or Nothing Scoring): Blood Pressure <140/90                  | NQF #729<br>MN Community<br>Measurement | GPRO Web<br>Interface           | R                      | P                      | P                      |

(continued)



Table 1. Measures for Use in Establishing Quality Performance Standards that ACOs Must Meet for Shared Savings (cont.)

| ACO # | Domain   | Measure Title   | NQF Measure #/<br>Measure<br>Steward                                     | Method of<br>Data<br>Submission | P4P<br>Phase-in<br>PY1 | P4P<br>Phase-in<br>PY2 | P4P<br>Phase-in<br>PY3 |
|-------|--|---|--|---------------------------------|------------------------|------------------------|------------------------|
| 25.   | At Risk Population –<br>Diabetes                     | Diabetes Composite (All or Nothing Scoring): Tobacco Non Use  | NQF #729<br>MN Community<br>Measurement                                  | GPPO Web<br>Interface           | R                      | P                      | P                      |
| 26.   | At Risk Population -<br>Diabetes                     | Diabetes Composite (All or Nothing Scoring): Aspirin Use  | NQF #729<br>MN Community<br>Measurement                                  | GPPO Web<br>Interface           | R                      | P                      | P                      |
| 27.   | At Risk Population -<br>Diabetes                     | Diabetes Mellitus: Hemoglobin A1c Poor Control (>9 percent)   | NQF #59<br>NQQA  | GPPO Web<br>Interface           | R                      | P                      | P                      |
| 28.   | At Risk Population -<br>Hypertension                 | Hypertension (HTN): Controlling High Blood Pressure   | NQF #18<br>NQQA  | GPPO Web<br>Interface           | R                      | P                      | P                      |
| 29.   | At Risk Population –<br>Ischemic Vascular<br>Disease | Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control (<100 mg/dL)  | NQF #75<br>NQQA  | GPPO Web<br>Interface           | R                      | P                      | P                      |
| 30.   | At Risk Population –<br>Ischemic Vascular<br>Disease | Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic   | NQF #58<br>NQQA  | GPPO Web<br>Interface           | R                      | P                      | P                      |
| 31.   | At Risk Population -<br>Heart Failure                | Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)  | NQF #83<br>AMA-PCPI  | GPPO Web<br>Interface           | R                      | R                      | P                      |
| 32.   | At Risk Population –<br>Coronary Artery<br>Disease   | Coronary Artery Disease (CAD) Composite: All or Nothing Scoring: Drug Therapy for Lowering LDL-Cholesterol  | NQF #74<br>CMS<br>(composite) /<br>AMA-PCPI<br>(individual<br>component) | GPPO Web<br>Interface           | R                      | R                      | P                      |
| 33.   | At Risk Population –<br>Coronary Artery<br>Disease   | Coronary Artery Disease (CAD) Composite: All or Nothing Scoring: Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Patients with CAD and Diabetes and/or Left Ventricular Systolic Dysfunction (LVSD) | NQF #66<br>CMS<br>(composite) /<br>AMA-PCPI<br>(individual<br>component) | GPPO Web<br>Interface           | R                      | R                      | P                      |

NOTE: ACO = accountable care organization; NQF = National Quality Forum; P4P = pay for performance; P = performance; R = reporting

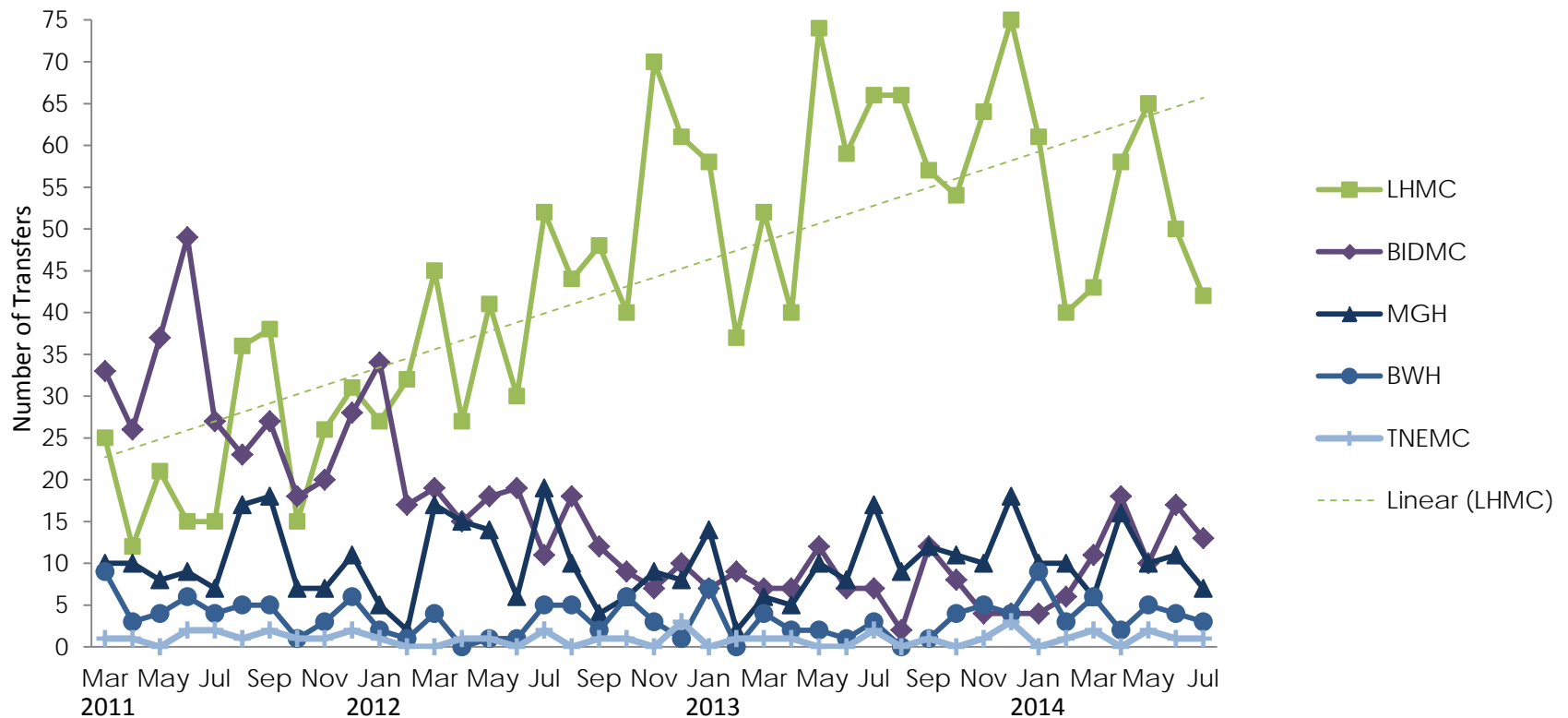
**PERFORMANCE MEASURES BY PAYER**  
**SUMMARY re: HEDIS or PHYSICIAN BASED MEASURES**

| Measure:  | PERFORMANCE YR 2014 |                       |                     |
|---|---------------------|-----------------------|---------------------|
|   | BC_AQC              | HPHC_QAP <sup>1</sup> | THP                 |
| <b>1. Process Measures:</b>   |                     |                       |                     |
| Breast Cancer Screening   | Y                   | Y                     |                     |
| Cervical Cancer Screening   | Y                   | Y                     | Y                   |
| Chlamydia Screening [ages 16-20]  | Y                   | Y                     |                     |
| Chlamydia Screening [ages 20-24]  | Y                   | Y                     |                     |
| Colorectal Cancer Scr   | Y                   |                       |                     |
| <b>Diabetes</b>   |                     |                       |                     |
| Diabetes HbA1c Screening [2x/yr AQC]  | Y                   | Y but once per year   | Y but once per year |
| Diabetes LDL-C Screening  | Y                   | Y                     | Y                   |
| Diabetes Nephropathy Attention  | Y                   | Y                     | Y                   |
| Diabetes Retinal Eye Exam   | Y                   |                       |                     |
| <b>CVD</b>  |                     |                       |                     |
| Cardiac LDL-C Screening   | Y                   | Y                     | Y                   |
| <b>Depression Screening for chronic diseases</b>                                  |                     |                       |                     |
| Antidepressant Medication Mgmt - acute phase -RX for 12 wks                       | Y                   |                       |                     |
| Antidepressant Medication Mgmt - effective continuation - RX for 6 mos            | Y                   | Y                     |                     |
| <b>2. Outcomes Measures:</b>  |                     |                       |                     |
| BP <140/80; Diabetes Pts  | Y                   |                       |                     |
| BP < 140/90; Hypertensive Pts   | Y                   |                       |                     |
| Diabetes HbA1c < 8  |                     | Y                     |                     |
| Diabetes HbA1c > 9 (poor control)   | Y                   |                       |                     |
| Diabetes HbA1c <= 9   |                     |                       | Y                   |
| Diabetes LDL < 100 mg/dl  | Y                   | Y                     | Y                   |
| Cardiac LDL < 100 mg/dl   | Y                   |                       | Y                   |
| <b>Medication: Adults:</b>  |                     |                       |                     |
| Avoidance of antibiotic tx re: acute bronchitis                                   | Y                   | Y                     |                     |
| <b>Pediatric Measures:</b>  |                     |                       |                     |
| Asthma  |                     | Y                     |                     |
| Well Child Visits - <15 mos   | Y                   | Y                     |                     |
| Well Child Visits - 3-6 yrs   | Y                   | Y                     |                     |
| Pediatric Prevention: 3-11 yrs  |                     |                       |                     |
| ADOL WC 12-21   | Y                   | Y                     |                     |
| ADOL WC 12-18   |                     |                       |                     |
| Appropriate treatment for URI [no antibiotic, ages 3mo-18yr]                      | Y                   | Y                     |                     |
| Appropriate testing for Pharyngitis [received antibiotic & strep test; ages 2-18] | Y                   | Y                     |                     |
| <b>Patient Experience</b>   |                     |                       |                     |

Amb Care Patient Exp Measures:

|   |  |  |
|---|--|--|
| Y |  |  |
|---|--|--|

# Tertiary Transfers from Northeast Health System to LHMC and other Boston-based Providers



**Lahey Hospital and Medical Center**  
**Summary of Hospital Encounter Volume - Patient Origin Winchester Primary Service Area**  
**FY 2013 and FY 2014 - YTD June**

**Fiscal Year 2013**

| Encounter Type           | Hospital Encounters |             |             |             |             |             |             |             |             |             |             |             | Total       | Monthly Avg |
|--------------------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                          | Oct                 | Nov         | Dec         | Jan         | Feb         | Mar         | Apr         | May         | Jun         | Jul         | Aug         | Sep         |             |             |
| Inpatient discharge      | 546                 | 535         | 498         | 597         | 478         | 492         | 495         | 568         | 545         | 506         | 553         | 523         | 6,336       | 528         |
| Observation discharge    | 245                 | 222         | 256         | 230         | 218         | 222         | 251         | 223         | 257         | 278         | 221         | 191         | 2,814       | 235         |
| Ambulatory Surgery       | 280                 | 282         | 229         | 269         | 238         | 266         | 273         | 264         | 260         | 258         | 271         | 250         | 3,140       | 262         |
| <b>Inpatient Casemix</b> | <b>1.65</b>         | <b>1.58</b> | <b>1.68</b> | <b>1.63</b> | <b>1.59</b> | <b>1.65</b> | <b>1.63</b> | <b>1.56</b> | <b>1.57</b> | <b>1.64</b> | <b>1.60</b> | <b>1.51</b> | <b>1.61</b> | <b>1.61</b> |

**Fiscal Year 2014**

| Encounter Type        | Hospital Encounters |      |      |      |      |      |      |      |      | Total | Monthly Avg |
|-----------------------|---------------------|------|------|------|------|------|------|------|------|-------|-------------|
|                       | Oct                 | Nov  | Dec  | Jan  | Feb  | Mar  | Apr  | May  | Jun  |       |             |
| Inpatient discharge   | 602                 | 508  | 528  | 565  | 488  | 572  | 571  | 580  | 545  | 4,959 | 551         |
| Observation discharge | 245                 | 242  | 267  | 295  | 249  | 309  | 275  | 284  | 287  | 2,453 | 273         |
| Ambulatory Surgery    | 269                 | 271  | 240  | 294  | 228  | 234  | 264  | 278  | 304  | 2,382 | 265         |
| Inpatient Casemix     | 1.65                | 1.58 | 1.81 | 1.71 | 1.71 | 1.67 | 1.61 | 1.66 | 1.70 | 1.68  | 1.68        |

| Change in   |            |
|-------------|------------|
| Monthly Avg | Annualized |
| 23          | 276        |
| 38          | 457        |
| 3           | 36         |

**Monthly Change - Fiscal 2013 vs. Fiscal 2014**

| Encounter Type     | Hospital Encounters |        |      |      |      |      |        |      |      |
|--------------------|---------------------|--------|------|------|------|------|--------|------|------|
|                    | Oct                 | Nov    | Dec  | Jan  | Feb  | Mar  | Apr    | May  | Jun  |
| Inpatient          | 56                  | (27)   | 30   | (32) | 10   | 80   | 76     | 12   | -    |
| Observation        | -                   | 20     | 11   | 65   | 31   | 87   | 24     | 61   | 30   |
| Ambulatory Surgery | (11)                | (11)   | 11   | 25   | (10) | (32) | (9)    | 14   | 44   |
| Inpatient Casemix  | 0.00                | (0.00) | 0.12 | 0.08 | 0.12 | 0.03 | (0.02) | 0.09 | 0.12 |

**Using Feb - Jun Averages Only**

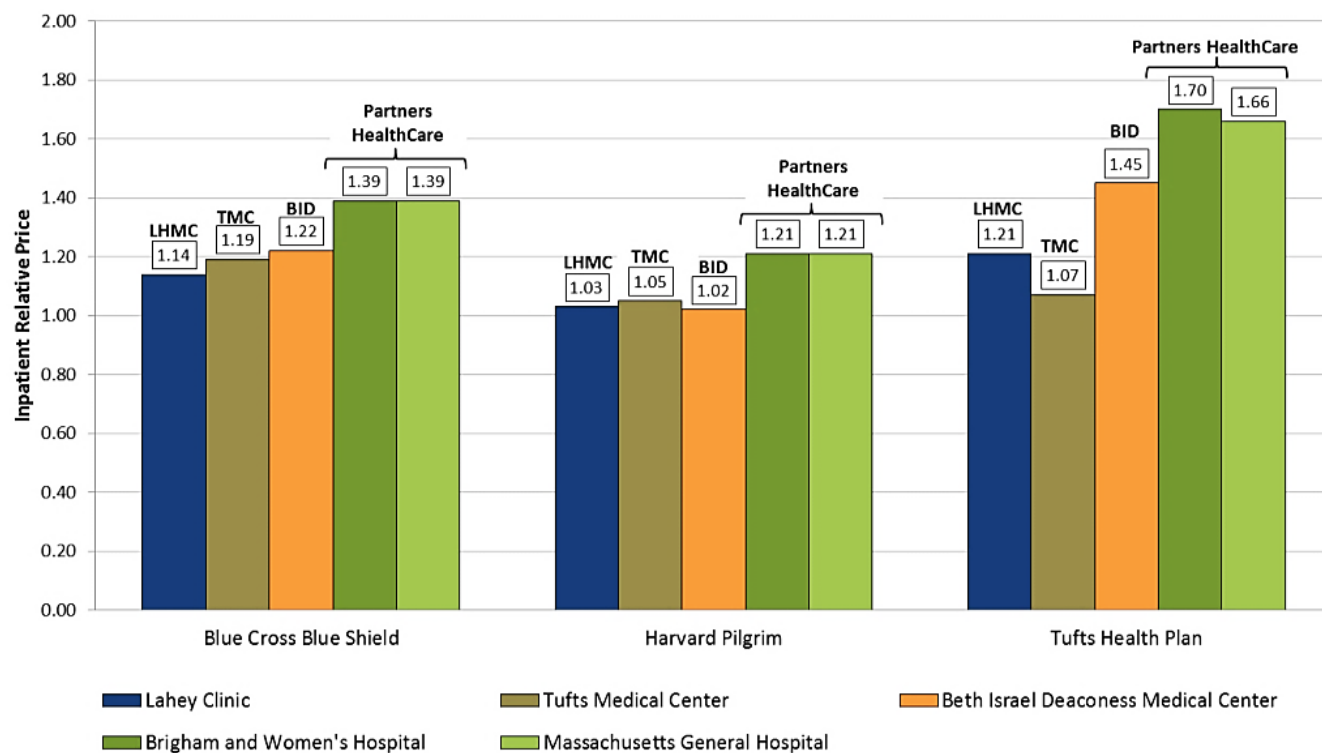
| Change in   |            |
|-------------|------------|
| Monthly Avg | Annualized |
| 36          | 432        |
| 47          | 564        |
| 1           | 12         |

Data Source: Lahey Decision Support System (as fed by Lahey billing system)

**Notes:**

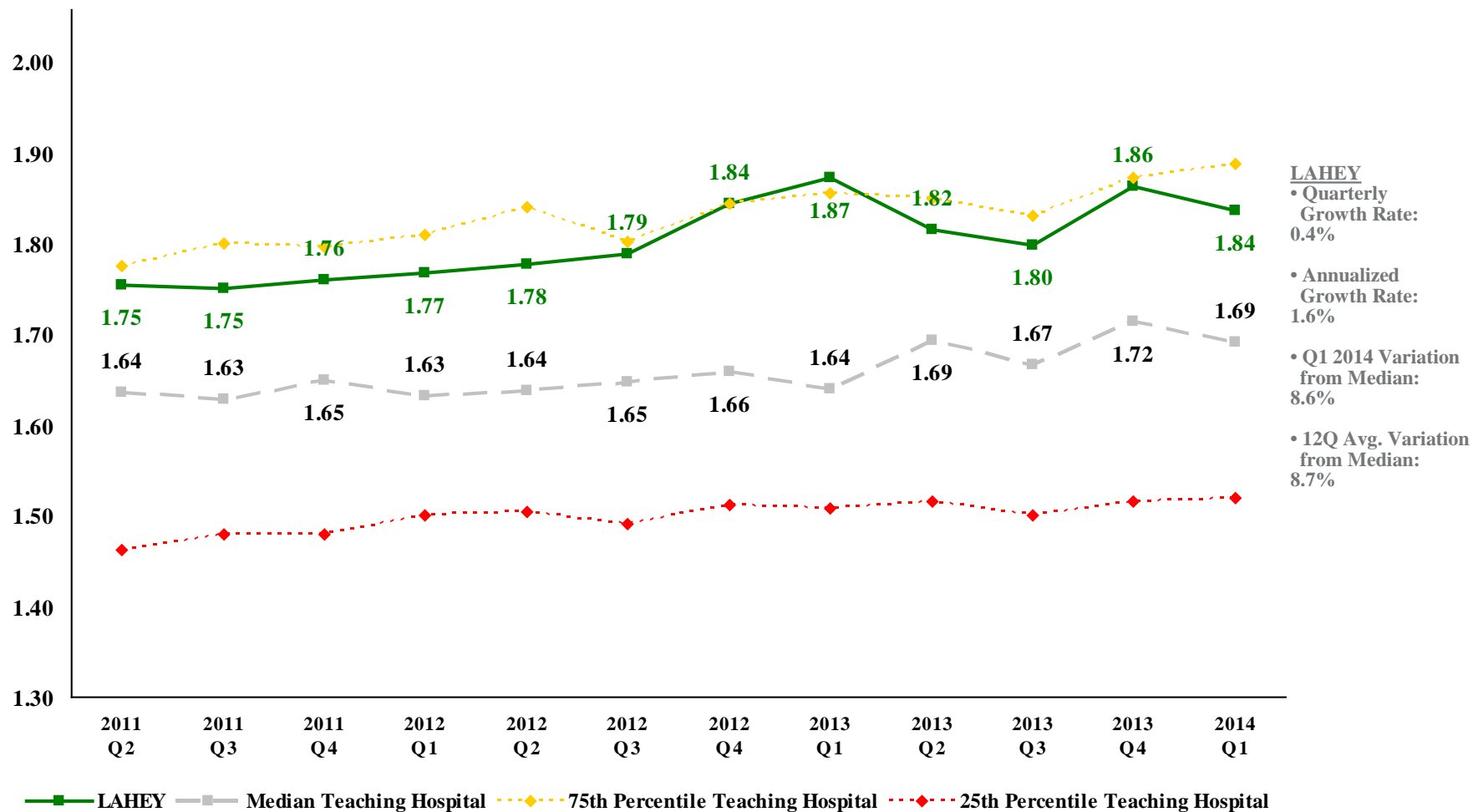
- Includes any patient with a hospital encounter type of inpatient, observation and / or ambulatory surgery at Lahey Burlington or Lahey Peabody with a listed zip code from Billerica, Burlington, Malden, Medford, N. Reading, Reading, Stoneham, Tewksbury, Wakefield, Wilmington, Winchester or Woburn.
- Ambulatory Surgery Cases only include encounters with a hospital operating room charge

# Inpatient Relative Price for Select Tertiary Providers Across Major Payers, 2012



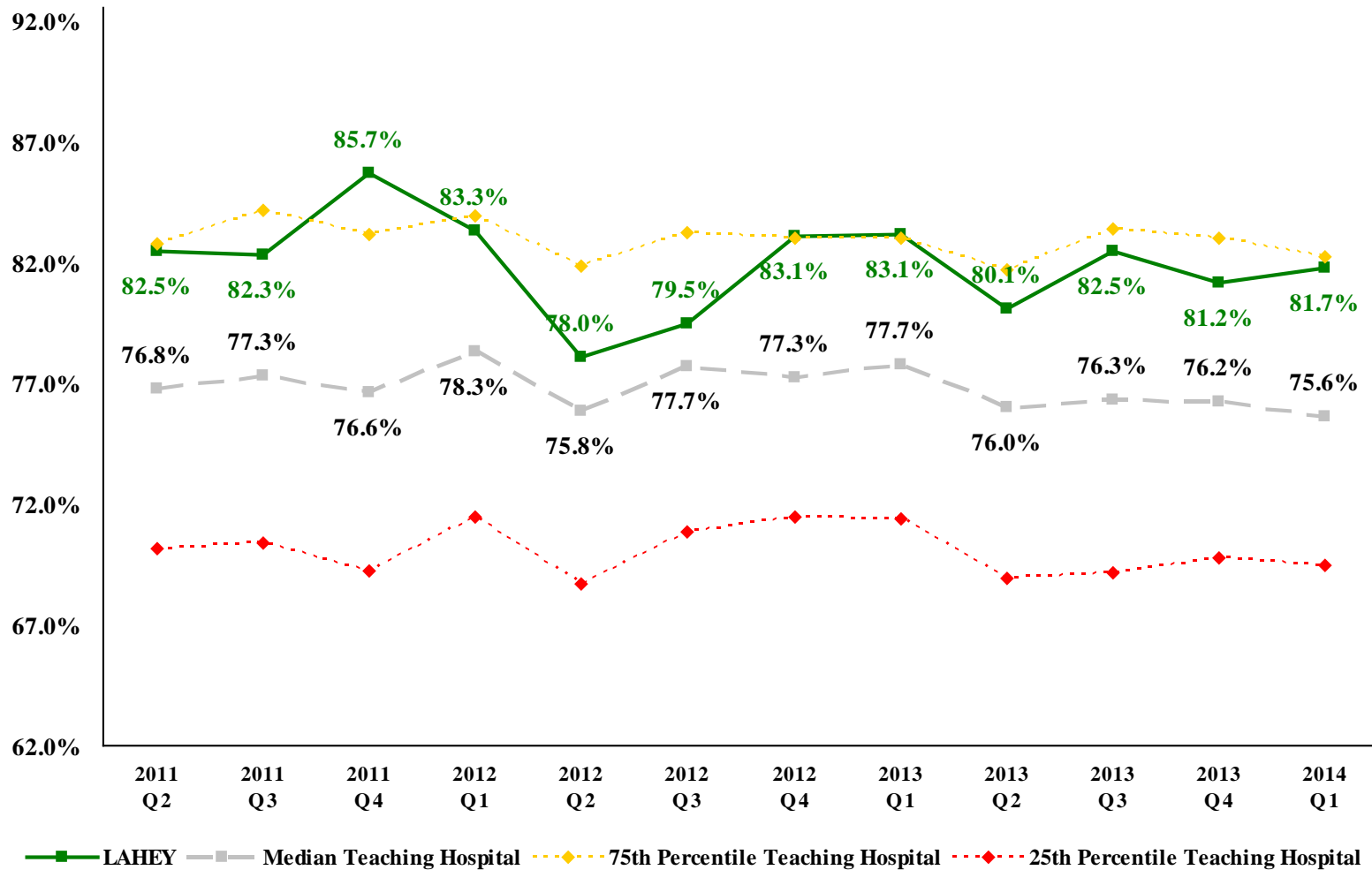
# Overall Hospital Case Mix Index:

Benchmarked against Median Teaching Hospital: Twelve Most Recent Quarters



# Occupancy Rate:

Benchmarked against Median Teaching Hospital: Twelve Most Recent Quarters





Beverly and Addison Gilbert Hospitals  
 Medical/Surgical, Maternity and Observation Admissions  
 FY2011 - FY2014

|              | <b>FY11</b>   | <b>FY12</b>   | <b>FY13</b>   | <b>FY14</b>   | <b>Change</b> |
|--------------|---------------|---------------|---------------|---------------|---------------|
| Oct          | 1,561         | 1,598         | 1,740         | 1,783         | 14%           |
| Nov          | 1,506         | 1,524         | 1,585         | 1,741         | 16%           |
| Dec          | 1,556         | 1,603         | 1,698         | 1,760         | 13%           |
| Jan          | 1,527         | 1,685         | 1,777         | 1,823         | 19%           |
| Feb          | 1,484         | 1,616         | 1,574         | 1,701         | 15%           |
| Mar          | 1,710         | 1,774         | 1,657         | 1,845         | 8%            |
| Apr          | 1,632         | 1,584         | 1,656         | 1,982         | 21%           |
| May          | 1,630         | 1,631         | 1,761         | 1,850         | 13%           |
| Jun          | 1,597         | 1,676         | 1,680         | 1,806         | 13%           |
| Jul          | 1,545         | 1,664         | 1,817         | 1,950         | 26%           |
| Aug          | 1,563         | 1,711         | 1,752         | 1,907         | 22%           |
| Sep          | 1,535         | 1,639         | 1,627         | 1,630         | 6%            |
| <b>Total</b> | <b>18,846</b> | <b>19,705</b> | <b>20,324</b> | <b>21,778</b> | <b>16%</b>    |

Annual % Change

**5%**

**3%**

**7%**

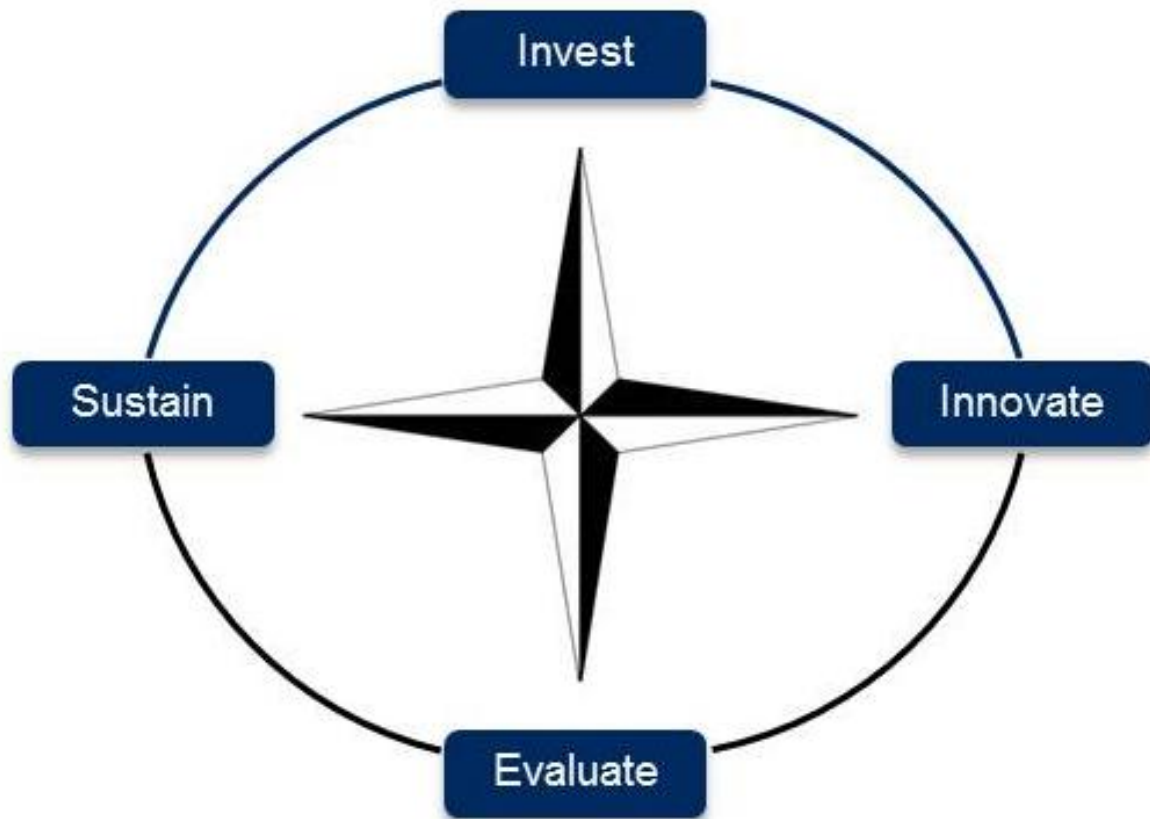
Note: *Projected*

COMMONWEALTH OF MASSACHUSETTS  
HEALTH POLICY COMMISSION

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COMMUNITY HOSPITAL ACCELERATION, REVITALIZATION,  
& TRANSFORMATION INVESTMENTS

*CHARTING A COURSE FOR THE RIGHT CARE AT  
THE RIGHT TIME IN THE RIGHT PLACE*



HPC-CHART-002  
ATTACHMENT B, EXHIBIT 1:  
PROSPECTUS TEMPLATE



**CHART Phase 2 Proposal Prerequisite: Prospectus**

**1. CHART Hospital Name(s)**

Addison-Gilbert Hospital, Beverly Hospital, Winchester Hospital have confirmed joint participation in this project. In addition, we are in discussions to also include Lowell General Hospital, Lawrence General Hospital and Merrimack Valley Hospital in the ED and possibly other project components.

**2. Investment Director(s)**

**Clinical:** Barry Ginsberg, MD Chief of Psychiatry, Beverly Hospital

85 Herrick St, Beverly, MA 01915

Phone: 781-477-6964

Fax: 781-477-6967

Administrative Assistant Deborah Krinsky, [dkrinsky@nhs-healthlink.org](mailto:dkrinsky@nhs-healthlink.org)

Dr. Ginsberg is the Administrative Director and Chief of the Department of Psychiatry at Beverly Hospital and the Medical Director of BayRidge Hospital, a division of Beverly Hospital. He is certified by the American Board of Psychiatry and Neurology in both psychiatry and psychosomatic medicine, and is a distinguished life fellow of the American Psychiatric Association. He completed residency training at the Massachusetts Mental Health Center and Peter Bent Brigham Hospitals, and fellowship training at Tufts in both consultation-liaison psychiatry and psychotherapy. He was an academic consultation-liaison psychiatrist at the University of Massachusetts Medical Center and Mt. Sinai Medical Center and has been a clinical administrator in behavioral health systems since 1993. He initiated and now is the Director of the outpatient Center for Transcranial Magnetic Stimulation at Lahey Outpatient Center, Danvers. He also directs the medical student teaching program at BayRidge Hospital and is an assistant professor of psychiatry at Boston University School of Medicine, from which he received his first voluntary faculty award in 2009.

**Operational:** Kevin Norton, MS, MBA

Chief Executive Officer, Lahey Health Behavioral Services, Beverly Hospital

Lahey Health Behavioral Services, a division of Beverly Hospital

Zero Centennial Drive

Peabody, MA 01960

Tel: 978-968-1701

Administrative Assistant: Cheryle Feugill -- [Cfeugill@nebhealth.org](mailto:Cfeugill@nebhealth.org)

Kevin has worked in the Behavioral Health field for the past 21 years. He began as a clinician working in a residential addictions program and progressed into a leadership role 17 years ago. In his career he has grown the Behavioral Health Services division at Beverly Hospital, from \$5 million annual revenue to over \$90 million revenue, focusing on quality care and the latest evidenced-based interventions. Since the merger with Lahey Health, Kevin has worked with his Diad partner Mary Anna Sullivan, MD to begin the process of breaking down the silos within behavioral health while simultaneously exploring avenues for integration across the healthcare continuum, with the goal of treating the entire person in the right location, at the right time, and in the most effective manner.

**1. Executive Summary**

Three Lahey Health community hospitals—Addison-Gilbert, Beverly and Winchester hospital, in cooperation with Lowell General Hospital and other CHART eligible hospitals, seek approximately \$9 million to implement an \$12 million project to create a novel model of truly integrated care that will carry across the patient lifespan. It is recognized that behavioral health (BH) and substance use conditions are major drivers of health care costs and the health of the population. Patients with comorbid BH and chronic medical conditions in Massachusetts have been found (HPC Cost Trends Report) to incur at least 2 to 2.5 times the cost as those patients without any comorbid BH conditions. Several nationwide demonstration projects have shown remarkable reductions in total medical expense with better, earlier BH and Substance Use Disorders (SUD) care. We are proposing an integrated approach to patients with BH and SUD conditions, across the continuum, to improve care, lower

overall costs, and improve patient engagement. We propose a four-pronged approach: (a) to improve the integrated care in the medical home, by embedding BH specialists in those practices most closely affiliated with our CHART hospitals; (b) To embed 24/7 BH specialists in each emergency department (ED) to screen all patients and make appropriate referrals and to follow-up with BH patients after discharge from the ED; (c) Improve acute and “intermediate” care for patients who currently have no other option than the ED for crisis interventions and wrap-around services; and (d) To develop a centralized triage function with access for all EDs and pilot primary care practices, for a more streamlined referral and handover process for patients who need to transfer to more appropriate settings for the right care at the right time and at the most efficient cost point.

By integrating behavioral health services into hospital and primary care at several points in the community-based care continuum, we believe we will be able to develop a successful integrated model of care that will improve quality, increase patient satisfaction, and contain costs for all patients who fall into this patient population. In addition, this project dovetails well with other state and federal initiatives to tame healthcare cost growth in that we believe that by integrating behavioral health into hospital, primary care, and the community will be more cost effective for payors, as well as beneficial for patients.

- a. **Primary Aim(s)**
- b. ☒ Maximize Appropriate Hospital Utilization
- c. ☒ Enhance Behavioral Health Care
- d. ☒ Improve Hospital-wide or System-wide Processes to Reduce Waste and Improve Quality and Safety

## 2. **Aim Statement**

We aim to improve the quality and safety of care at our participating CHART community hospitals and throughout the communities they serve, across the care continuum, by truly merging behavioral and physical health care into one patient-centered paradigm, while also improving system-wide processes and reducing waste across the health care continuum, which we believe will improve efficiency, reduce waste, and improve patient health care quality and patient safety.

## 3. **Community, Safety or Hospital Efficiency need(s) this project will address**

- 1. Attend to patient behavioral health needs in multiple environments, including urgent, emergent, home, and in the community;
- 2. Improve efficiencies, through shared technologies;
- 3. Disseminate one integrated behavioral health-healthcare model across three CHART hospitals;
- 4. Improve patient safety and preventative healthcare practices through screening programs, such as motivational interviewing techniques, depression and anxiety screening, alcohol and drug screening, etc.;
- 5. Improved access to care, leading to better health and health maintenance;
- 6. Increased care coordination across the care continuum;
- 7. Improved patient-centered care across the health care continuum.

## 4. **Target Population(s), Relevant Hospital Service Line(s), and/or Business Unit(s)**

**Target Population:** We will target all patients with alcohol and/or substance use and behavioral health problems that present at any of our participating hospital emergency rooms and/or intersect with the services provided under this project at any location the project encompasses.

**Estimated Business Units to participate in projects:** The participating joint hospitals, three of which are part of the Lahey Health system, will engage several of Lahey Health’s business units in this project, including, but not limited to, the Business Development, Finance, Behavioral Health, Senior Care, Information Technology, Community Engagement, and its affiliate skilled nursing facilities and drug rehabilitation centers, surrounding the participating hospitals.

## 5. **Proposed Initiative(s)**

This project model will integrate behavioral health into hospital care and throughout the community. Beginning in the Emergency Department, we will provide 24/7 behavioral health screenings and crisis stabilization. We will

also offer ED diversion through crisis teams, crisis stabilization settings, and mobile outreach. We will also support urgent care needs of patients through a centralized triage system. Finally, we will pilot the integration of behavioral health into the primary care setting to determine best practices beyond this project period. More specific details are outlined below.

- a) **Emergency and Urgent Services:** i) All patients presenting to the Emergency Department will be screened for psychiatric and substance use disorders using brief questionnaires; those whose screens are positive will be assessed by a behavioral health clinician in the E.D. The results of that assessment will be integrated into the Emergency Department physician's treatment plan and disposition. ii) We will create an urgent care behavioral health crisis triage stabilization unit that, in conjunction with Lahey Health Behavioral Services' extant crisis stabilization services, will reduce psychiatric inpatient admissions by providing a rapidly accessible, enhanced outpatient alternative (see c. below); iii) We will create an integrated behavioral health placement service, which will have access to the full spectrum of LHBS inpatient and outpatient services. This service will insure that the patients needing the most intensive inpatient care receive that care in the most appropriate setting among the large array of LHBS inpatient services, including general psychiatric and detoxification units as well as specialty units for the psychiatric and medically ill, psychotic disorders, affective disorders and dual diagnosis, senior adult and contracted child services; those patients with less severe conditions are quickly connected with the appropriate outpatient, day program or other wrap-around service in a user-friendly manner.
- b) **In the Community:** The fee-for-service payment system has resulted in varying payer-specific arrays of community-based services, the most robust of which are within managed Medicaid insurance networks. LHBS has been a leader in providing such services, including designated crisis teams, crisis stabilization beds, and various community-based wraparound services for children and families. These services have NOT been available across all payors, resulting in "stuck" cases in EDs and fragmented care. Through this program we will explore ways to bridge behavioral care across the continuum providing additional psychiatric oversight and presence in these services, better integrate them with primary care, and augment our urgent care program, by establishing a telephone-linked care program that regularly "checks in" with patients and makes possible seamless, longitudinal care. By enabling LHBS to provide these services regardless of insurer, we will demonstrate their viability as cost-effective strategies in a commercially insured population.
- c) **In the Primary Care setting:** We recognize that change cannot occur in a vacuum and that behavioral health integration must occur across the healthcare continuum to be truly cost effective. To this end, we will continue to pilot a behavioral health-primary care integration model to develop an evidence base for the benefits of true behavioral health in a primary care setting. In the expanded pilot, we will station Behavioral Health (BH) specialists in select primary care practices which care for patients in the communities served by the three hospitals, to screen and treat patients before their BH conditions worsen, saving valuable time for the PCPs and offering better, integrated, more cost-effective care earlier. Multiple models (e.g., Intermountain, IMPACT) have proven better care at significantly lower total medical expense, in large part through avoided emergency room visits and medical admissions. Embedded BH specialists become valuable and equal members of the medical-home team, assist with motivational interviewing, screen for BH and SUD's, and follow patients with BH/SU diagnoses, among other tasks. The proposed initiatives in this project are all linked through the integration of behavioral health into a patient-centered approach to healthcare. Depending on the needs of the patient, we will employ the appropriate initiative(s) to care for the whole patient (mentally and physically). Note that all our initiatives proposed in this project will contribute toward integrating behavioral health into the care model, (e.g., SBIRT, Motivational Interviewing, training and education on medication management, behavioral change for chronic medical conditions, etc.).

## 6. Key Quantifiable Outcomes and Process Metrics

**Key quantifiable outcomes** will include, but not be limited to: (a) reduction in 30-day all-cause hospital readmission rates; (b) reduction in ED visits, compared to the year prior; (c) depression score reductions, as self-reported by patients; (d) increase in medication adherence among patients; (e) chronic disease self-management

increases over six months, compared to one year prior.

**Some process metrics include:** (a) number of patients served in the ED, participating PCP offices and at home by this program; (b) number of patients and families trained on medication adherence, number of SBIRT interviews; (c) number of motivational interviews, and adherence to time-task chart and budget.

All program activities will be monitored by a professional monitoring and evaluation specialist and data will be regularly collected and analyzed. Our hope is to demonstrate the value of this integration in improving care and reducing costs to all payers, thereby ensuring sustainability beyond the grant period.

## 7. Key Staff

Key staff members on this project include the Investment Directors, a Project Director, Data Analyst(s), Biostatistician, Monitor(s), Grant Administrator/Manager, Community Relations Specialist, Business Development Manager, Psychiatrists, Pharmacists, and Behavioral Health Specialists and coordinators from each participating community hospital.

## 8. Community Partnerships

Participating joint hospitals will engage with the communities they serve, including the school and municipal systems (e.g., police and fire departments). Lahey Health Behavioral Services as the main partner to this application already provides emergency psychiatric services at Lowell General Hospital, Lawrence General Hospital, Merrimack Valley, North Shore Medical Center, and Anna Jacques Hospital. We will continue to explore enhancing these emergency services in these settings under this project. In addition, we will engage with our multiple community partners in this project, including rehabilitation units, senior centers, visiting nurse associations, religious institutions, and others. We will also engage and collaborate with members of the active patient and family advisory councils at each participating hospital as well as the Human Rights Committee at BayRidge Hospital, a subsidiary of Beverly Hospital.

## 9. Subcontractor Hospitals

N/A

## 10. Enabling Technologies

We will ensure that all three hospitals are up and running on the MA HIway, as required under this grant. Other enabling technologies to be used include a new Electronic Health Record module for Behavioral Health patient records, called Netsmart which will be compatible with Lahey Health's new EPIC Electronic Health Record system, being implemented at Addison Gilbert, Beverly, and Winchester Hospitals over the next two years. In addition, system tools to be contributed toward this project include data evaluation, analysis, project monitoring, grants administration and business development strategy consultation for the Lahey Health system hospitals.

## 11. Estimated HPC CHART Funding Request (2 years)

☐ <\$1M    ☐ \$1M    ☐ \$2M    ☐ \$3M    ☐ \$4M    ☐ \$5M    ☐ \$6M    ☒ >\$6M \$9 million, with an approximate \$3 million contribution from each Lahey Health affiliate hospital member.

## 12. Estimated Total Budget (2 years)

☐ <\$1M    ☐ \$1M    ☐ \$2M    ☐ \$3M    ☐ \$4M    ☐ \$5M    ☐ \$6M    ☒ >\$6M Approximately \$12 million

## 13. Budget Plan

The \$9 million in Investment Funds will be used for staffing, training, contracted services and general operating costs to provide services in the Emergency Departments, Primary Care settings and throughout the communities served by participating joint hospital members. Funds will also be used for enabling technologies such as the Mass HIway, a centralized triage system, behavioral health EHR for improved communication across the continuum. More specifically, we anticipate spending approximately \$5 million in direct service staff for our four-pronged approach. In kind contributions include personnel costs of senior leaders throughout the system, including members of the accountable care organization and at each hospital. We also anticipate providing in-kind contributions for performance improvement, performance measurement, data analysis, finance, pharmacy,

Information technology, and business development.

#### **14. Strategic Planning**

This project in itself is one of the key components of the strategic plan of Lahey Health, the parent ACO affiliated with three of the four participating joint hospitals. Behavioral-physical healthcare integration is the core of quality care-- treating patients holistically. Some key strategic initiatives under this project include:

- a. What can we learn from our communities and how can we integrate that learning into more holistic care at each community hospital in a meaningful, cost effective, and high-quality manner?
- b. How will the integration of behavioral health into the community hospital setting and across the care continuum help lower the cost of healthcare?
- c. What BH services do patients want most and how can we provide the highest quality services to them at the right time, when they need it?
- d. How will we improve the quality of care through the integration of BH services?

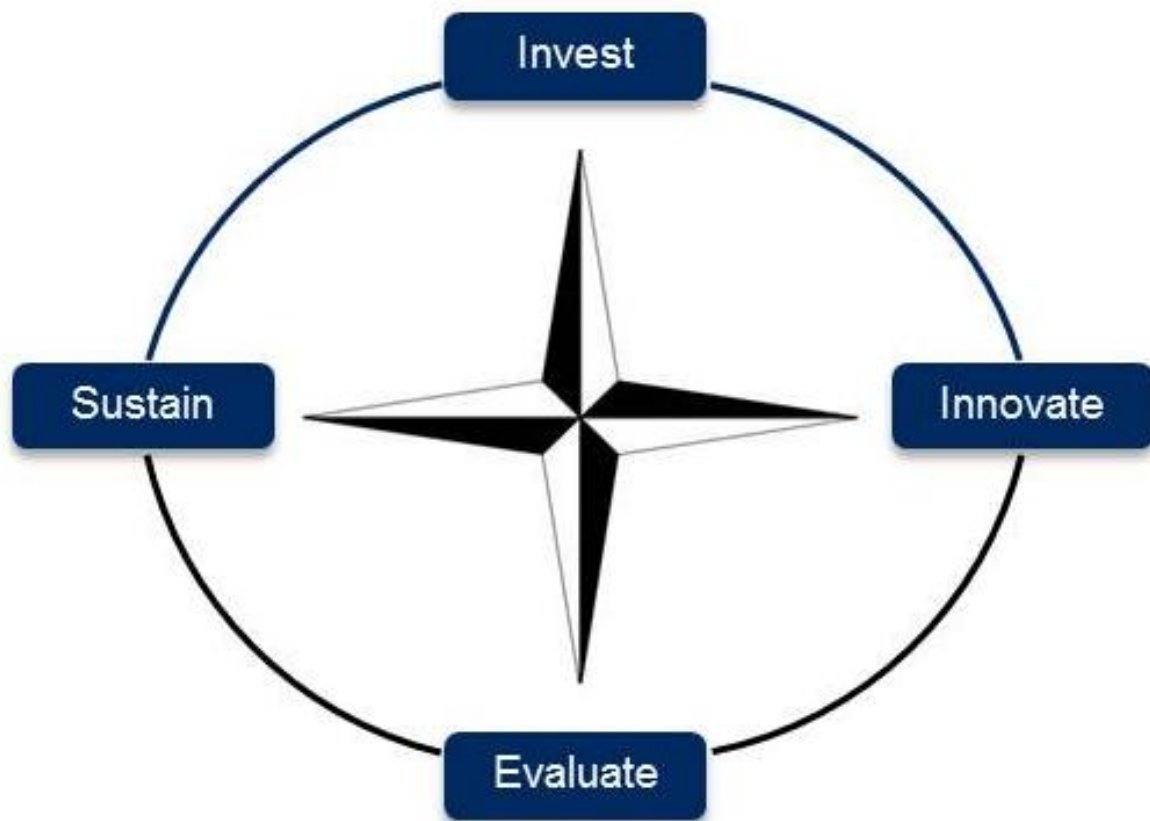


COMMONWEALTH OF MASSACHUSETTS  
HEALTH POLICY COMMISSION

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COMMUNITY HOSPITAL ACCELERATION, REVITALIZATION,  
& TRANSFORMATION INVESTMENTS

*CHARTING A COURSE FOR THE RIGHT CARE AT  
THE RIGHT TIME IN THE RIGHT PLACE*



HPC-CHART-002  
ATTACHMENT B, EXHIBIT 1:  
PROSPECTUS TEMPLATE





## 1. CHART Hospital Name(s)

Winchester Hospital

## 2. Investment Director(s)

Clinical Investment Director:

Richard J. Mazandi Iseke, MD

Vice President, Medical Affairs, Chief Medical Officer, Winchester Hospital

**E-mail:** [riseke@winhosp.org](mailto:riseke@winhosp.org)

**Phone:** 781-756-4776

**Fax:** 781-756-2923

**Assistant:** Stephanie Wall, [swall@winhosp.org](mailto:swall@winhosp.org), 781-756-2128

**Role/Qualifications:** Dr. Iseke has been VP for Medical Affairs and CMO at WH since 2007. He is a physician executive with more than 32 years of clinical and leadership experience. Board certified in internal medicine and emergency medicine, Dr. Iseke is a fellow of the American College of Emergency Physicians and a member of the American College of Physician Executives and the Massachusetts Medical Society.

Operational Investment Director:

Kathy A. Schuler, MS, RN, NE-BC

Vice President, Patient Care Services, Chief Nursing Officer, Winchester Hospital

**E-mail:** [kschuler@winhosp.org](mailto:kschuler@winhosp.org)

**Phone:** 781-756-2127

**Fax:** 781-756-2923

**Assistant:** Bonnie Harding, [bharding@winhosp.org](mailto:bharding@winhosp.org), 781-756-2216

**Role/Qualifications:** Kathy Schuler has been VP of Patient Services and CNO at WH since 2006, following three years as Director of Emergency Services. Ms. Schuler has held patient care and leadership positions on a medical surgical unit, in an intensive care unit, as a clinical nurse specialist, and as a nursing educator and trainer. Ms. Schuler has also served as the President of the Organization of Nurse Leaders of Massachusetts and Rhode Island.

## 3. Executive Summary

30-day readmission rates have long been recognized as a breakdown point in both quality and patient safety, keystones of successful hospital care. An article in The Commonwealth Fund's April 2014 e-newsletter reporting on its study of readmission rates across the United States stated, "Readmission to the hospital shortly after discharge has been recognized as an indicator of poor health system coordination."<sup>i</sup> This proposal will focus on improving health care coordination, both within the care team and across the care continuum, to reduce readmission rates at Winchester Hospital.

In FY13, Winchester Hospital (WH) discharged an estimated 9,870 medical surgical patients age > 21 years (excluding Obstetrics/Maternity and Pediatrics). An estimated 976 (9.9 %) of these patients were readmitted to inpatient care within 30 days of discharge. These numbers represent the high-risk, complex care patients who will benefit from the initiatives described in Section 8.

Winchester Hospital's source of readmissions are as follows:

- Home - 50%
- SNF - 27%
- Home with Services - 22%
- Rehab - 1%

Winchester Hospital seeks to reduce unnecessary and avoidable hospital readmissions for all adult medical surgical patients age > 21 years (excluding Obstetrics/Maternity and Pediatrics). The hospital recognizes that to reduce readmissions requires extending health and social services beyond the walls of the institution. Patients are vulnerable when care is fragmented as they transition from the hospital to post-acute facilities and/or the community.

The most common opportunities for reducing readmissions are:

- Continuing to enhance efforts around identifying and referring patients appropriate for end-of-life services (palliative care and hospice services).
- Improving medication reconciliation and education to ensure adherence.
- Enhancing adherence to health care recommendations and life style choices.
- Improving communication across the continuum, including PCP, SNF, Home Care, Hospice, Community Care Management and Behavioral Health providers.
- Creating a comprehensive care plan that translates across the continuum, including PCP, SNF, Home Care, Hospice, Community Care Management and Behavioral Health providers.
- Identifying, assuring, and partnering with patients so they are discharged to the appropriate next level of care.
- Supporting family caregivers to navigate the health care system.
- Using an assessment tool to identify risk, address care needs and plan patient specific interventions.
- Identifying subtle declines in clinical status of home care patients to mitigate exacerbation and reduce use of emergent care and acute care hospitalization.

To address the opportunities stated above, WH proposes the following care initiatives:

- To build a dedicated multidisciplinary care team that includes nurses, nurse practitioners, physicians, pharmacists, and social workers to ensure our most complex patients are identified and a cohesive, comprehensive, and viable care plan is developed and carried through across the continuum.
- To work with patients and patients' families during hospitalization and sustaining that relationship after discharge whether the patient transitions to the community, to the Winchester Hospital Home Care (WHHC), another home care agency, post-acute/skilled nursing facility, or acute rehabilitation facility. A key component of sustaining the relationship is to ensure complete and accurate information exchange with other providers, including use of both the hospital HIE and Mass HiWay to enhance continuity of care.
- To utilize enabling technology (Telehealth) to allow WHHC to monitor the most vulnerable patients and to identify a change in health status in advance of a need for an ED visit or hospitalization.
- To extend pharmacy oversight beyond hospital discharge to address the challenges of high-risk medications and poly pharmaceuticals including sharing essential pharmaceutical information with PCPs and post-acute facilities and providers.

#### **4. Primary Aim(s)**

- a. ☒ Maximize Appropriate Hospital Utilization
- b. ☐ Enhance Behavioral Health Care
- c. ☒ Improve Hospital-wide or System-wide Processes to Reduce Waste and Improve Quality and Safety

#### **5. Aim Statement**

By February 1, 2017, reduce avoidable hospital adult (>21 years) medical surgical inpatient readmission rate by 15%.

#### **6. Community, Safety or Hospital Efficiency need(s) this project will address**

Identified needs to be addressed by this project include:

- Improved coordination of appropriate patients to end-of-life services (palliative care and hospice services)
- Improved medication reconciliation and education to ensure adherence
- Enhanced adherence to health care and life style choices recommendations
- Improved communication across the continuum, including PCP, SNF, Home Care, Hospice, Community Care Management and Behavioral Health providers
- Improved comprehensive care plans that translate across the continuum, including PCP, SNF, Home Care, Hospice, Community Care Management and Behavioral Health providers
- Improved assessment of patients so they are discharged to the appropriate next level of care.

- Family care giver support to navigate the health care system
- An assessment tool to identify risk, address care needs and plan patient specific intervention
- Enabling technology (Telehealth monitors) to allow early identification of subtle and potentially problematic changes in health status resulting in an ED visit and/or inpatient admission.
- Fragmentation of services
- Integration of patient specific interventions into the electronic health record

## 7. Target Population(s), Relevant Hospital Service Line(s), and/or Business Unit(s)

We will target high-risk medical surgical patients, over age 21. Approximately 66% of the adult medical surgical inpatient population is estimated to be high risk.

## 8. Proposed Initiative(s)

During the proposed two year period of performance, we plan to implement the following three initiatives:

1. **Inpatient Complex Care Team:** Design, create and implement a dedicated multidisciplinary complex care team for the most at risk patients.
2. **Community Care Management:** Building off the success of CHART I, enroll high-risk patients into care management upon admission. Assure an effective and safe discharge plan and where indicated follow the patient to the SNF and home. Care will include hospital visits, home visits, SNF visits, and follow-up appointments with PCP visits. Included is interaction with the patient, family members, inpatient case managers, home care providers, SNF discharge planners, PCPs and others.
3. **Home Health Telehealth:** Utilize enabling technology to allow WH Home Care to monitor the most vulnerable patients to identify a change in health status in advance of a need for an ED visit or hospitalization.

Across these three initiatives, we will be deploying the use of both the hospital HIE and Mass HiWay to enhance continuity of care.

## 9. Key Quantifiable Outcomes and Process Metrics

For the cohort of medical surgical patients over the age of 21 years, the metrics that will be collected and analyzed will include, but are not limited to the following (also excluded will be patients discharged to WH hospice care and patients who die in hospital):

### Outcome Metrics:

- Readmission rate
- Acute care hospitalization rate for home health patients
- Emergent care rate for home health patients

### Process Metrics:

- Number of patients enrolled in each initiative: complex care team management, care management, and home health Telehealth.
- Number of pharmacy consults
- Number of palliative care consults
- Number of hospice consults
- Number of patients evaluated within 24 hours by complex care team
- Number of care management contacts with patients, providers and care givers
- Number of admitted patients screened with high-risk tool
- Number of patients utilizing Telehealth
- Number of interventions based on Telehealth alerts

## 10. Key Staff

Clinical Investment Director

Initiative Leadership Team (Clinical Directors)

Finance Staff  
 Finance Investment Director  
 Health Information Exchange (HIE) Director  
 HIE Staff  
 Information System (IS) Staff  
 Nursing Informatics/ IS Consultant  
 Clinical Staff (RNs, Clinical Nurse Specialists, Nurse Case Managers, Pharmacist, MD/NP, Social Worker)  
 Operational Investment Director  
 Project Assistant  
 Project Manager  
 Quality Care Associate  
 Quality Manager  
 Quality Staff

## 11. Community Partnerships

Winchester Hospital (WH) will engage with behavioral health providers, post-acute care providers, and community service organizations in the 25 communities in its primary and secondary service areas. These community partnerships include, but are not limited to the following:

- Winchester Nursing Center, Winchester
- Aberjona Nursing Center, Winchester
- Woburn Nursing Center, Woburn
- Woodbriar Nursing Center, Wilmington
- Bearhill Nursing Center, Stoneham
- Glenridge Nursing Center, Malden
- Wingate Nursing Center, Reading
- Wilmington Health Care, Wilmington
- New England Rehabilitation Hospital, Woburn, MA
- Mystic Valley Elder Services, Malden, MA
- Minuteman Senior Services, Burlington, MA
- Care Dimensions Hospice and Palliative Care, Danvers, MA
- Tewksbury State Hospital, Tewksbury, MA

## 12. Subcontractor Hospitals

None

## 13. Enabling Technologies

Enabling technologies include:

- Winchester Hospital Health Information Exchange (HIE) to increase communication between the hospital, primary care physicians, specialty physicians, skilled nursing facilities, and rehabilitation hospitals.
- Mass Highway for communication with community partners
- Patient portal for patients and families to access personal health information.
- Telehealth monitoring of Winchester Hospital Home Care patients deemed to be at risk for a change in health status that could lead to a preventable ED visit and/or hospital readmission.

**14. Estimated HPC CHART Funding Request (2 years)** ☐ <\$1M    ☐ \$1M    ☐ \$2M    ☒ \$3M    ☐ \$4M

☐ \$5M    ☐ \$6M    ☐ >\$6M \_\_\_\_\_

**15. Estimated Total Budget (2 years)**

☐ <\$1M    ☐ \$1M    ☐ \$2M    ☐ \$3M    ☐ \$4M    ☐ \$5M    ☐ \$6M    ☒ >\$6M \$6.2

**16. Budget Plan.**

The total budget for the CHART 2 initiative is \$6.2 million. Of the \$6.2 million budget, \$3.2 million (51%) is in kind contribution by Winchester Hospital and \$3 million is our grant request. Eighty two percent (82%) of the budget will be used to fund human resources and training, 7% for IT Infrastructure, 5% for IT consulting, and 6% (in-kind) for capital build out to accommodate the new staff.

The majority of the human resources needed to implement the initiatives are comprised of clinical staff (RNs, Social Workers, NPs, and Pharmacists) at 64% of the salary budget. The human resources needed to oversee and manage the initiatives include executive-level support (e.g., clinical, finance, and operational investment directors) at 15% of the salary budget and management support (initiative directors, project manager and project assistant) at 13% of the salary budget. In addition, support from information systems, quality and finance will be needed to provide the infrastructure needed to implement the initiatives as well as report on the progress. The IT support is 5% of the salary budget and quality/finance support accounts for 3% of the salary budget. An additional expense to support the extensive amount of information systems resources needed is a consultant at 5% of the overall budget. Fifty seven percent (57%) of the staff needed would be new staff and 43% would be existing (in-kind contribution) staff.

In addition to the hospital in-kind contributions, Lahey Health, our system partner, will establish an executive steering committee to provide system-wide advice, leadership, and feedback on our project, as requested by each member hospital. Members will include senior level executives from Lahey Health's departments of Quality Improvement and Patient Safety, Finance, Primary Care, Behavioral Health, and the ACO. The committee will convene quarterly.

**17. Strategic Planning**

Winchester Hospital as a member of Lahey Health is committed to providing high quality, low cost care in the appropriate setting.

Winchester Hospital aims to utilize the CHART 2 investment monies to maximize appropriate hospital use by transforming the delivery of health care services from an historical focus on treating patients in an acute care setting to an integrated care delivery model, maximizing care across the continuum and in the community.

As we strive for change and improvement, we anticipate that the existing hospital structures and services will also evolve and change. A few key questions we will ask that pertain to strategic planning during this ongoing change process include:

- Do our new patient-centered services match the patient population needs of the community?
- What will be the appropriate mix of inpatient and outpatient services provided by the hospital?
- How can we represent the patient's perspective in our care management plan?
- How can we sustain the model of low readmission rates after the project end period?
- What efforts must we make to truly engage key stakeholders (i.e., providers, staff, patients, community based organization, etc) to successfully transition to a new care and payment model that will contain costs, improve health and raise patient satisfaction levels in a sustainable manner?
- What process and program evaluation metrics need to be applied to this new model of care for successful sustainability?

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<sup>i</sup> <http://www.commonwealthfund.org/publications/in-the-literature/2014/apr/community-factors-and-hospital-readmission-rates>

## **Lahey Health Initiatives to Integrate Physical and Behavioral Health Care Services**

Lahey Health and its member entities are currently underway on several initiatives with multiple provider and community partners to better integrate physician and behavioral health care services, including:

**(A1)** In 2013, we launched a primary care-behavioral health integration program across four of our Lahey Health primary care sites in Arlington, Burlington, Ipswich, and Peabody. At these sites, we have embedded behavioral health specialists who conduct PHQ-9 and CAGE-Aid screening for depression and substance use. All new patients and all patients getting their annual physical examinations now receive these screenings. In the past year, 600+ patients with challenging medical and psychiatric co-morbidities have been screened.

**(A2)** We are anticipating funding of a \$250,000 grant which would fund an educational and train-the-trainer-styled program in which staff at one of our largest behavioral health sites will become more involved in coaching psychiatric outpatients in self-managing their (patients') chronic physical conditions. Staff will receive 8 weeks of training, including how to teach their behavioral health patients a number of skills, including effective self-management; how to form stronger 'partnerships' with their medical providers; how to use brief interventions to assist behavioral health outpatients to better manage common physical symptoms of insomnia, pain, and fatigue; and how to better coordinate their treatment efforts with those of patients' primary care and specialty medical providers. This grant will allow for an initial pilot program in which we train 50-60 of our behavioral health providers. Long-term, we will extend this initial pilot across most or all of our behavioral health sites.

**(A3)** The health promotion advocate or s/a liaison in Addison Gilbert Hospital's Emergency Department. Gloucester has consistently shown a higher than state rate opioid use and overdose rate, so the health promotion program is targeted at substance abuse patients who come to the ER for care. The liaison works to get these patients into post-ER or longer-term behavioral health treatment or referrals.

**(A4)** Community Services Program: Helps mental health and s/a patients to get transportation, care coordination between healthcare providers, housing applications, social services. Works with chronically co-morbid populations in Essex County.

**(A5)** The Lahey Community Relations Department is actively constructing a speakers bureau in which s/a and m/h professionals will provide expertise and programming to primary care practices and/or municipal health departments and community groups.

**(A6)** The psychiatric emergency mobile crisis teams (4), which provides 24/7, face-to-face care to adults and children, serve all towns and cities in the North Shore and the Merrimack Valley (west to Lowell). The mobile crisis teams collaborate with many referral sources, including pediatric practices, local

hospitals, police departments and schools to change the culture around using the ER for child and adult psychiatric crisis. The collaborations include the establishment of formal affiliation business agreements with healthcare organizations within and outside of Lahey Health. These organizations include: Haverhill Pentucket Medical PC practices, especially pediatricians, Lowell General Hospital, Holy Family, Lawrence General, Merrimack Valley, Salem, and Anna Jaques Hospitals. Internally, we collaborate cross-refer with Lahey Medical Center, Peabody, Addison Gilbert, and Beverly Hospitals



## **Lahey Health Initiatives to Reduce Unnecessary ER Visits and Inpatient Psychiatric Care**

**(B1)** The 24/7 mobile crisis teams (described above) work with adults, families and children who are in psychiatric crisis. The teams work with patients in their communities, in the schools, or in the Emergency Services clinics (4). Many of these clients are families or individuals with multiple and complex mental and physical health issues, and some live in areas of high-population immigrant communities in which the presenting psychiatric or behavioral condition is sometimes somatic (of underlying physical health problems) or is self-reported in the culturally more acceptable symptoms of physical, not mental health.

Statistics: From June 2013 – May 2014, 70.8% of all children assessed or visited by the mobile crisis team in greater Lawrence were seen in community settings (not the E.R.). This exceeds the state average of 58% and the state target of 60%.

On the North Shore, 30% of adults assessed and/or triaged for psychiatric emergencies were now seen in community settings, not the ER. 62% of children assessed by the team were seen in community settings.

**(B2) The Jail Diversion program**, in which a Lahey Health Behavioral Services clinician is embedded in the police departments in Danvers, Topsfield, Middleton and Salem to provide appropriate care for those police calls that involve psychiatric-crisis individuals. The clinician also provides police education and helps to connect the person to appropriate mental health care or substance use treatment.

**Examples of usage and results:** From May to July 2014, at the **Danvers Police Station**, the embedded clinician saw 39 cases; 62% were diverted from the ER to more suitable care for police-involved subjects with mental health or substance use issues. Estimated ER cost savings: \$84,000.

From May to July 2014 at the **Salem Police Station**, the Lahey Health clinician was involved in 53 cases, 42% of which were diverted from ER care to more suitable mental health settings. Estimated ER cost savings: \$77,000.

**(B3)** Community Service Agency works with publicly insured families who have one or more child with serious behavioral or mental health issues. The goal of the program is to help families to access multiple levels of care and to keep children in community and home-based settings while giving the families the skills to access services and advocate for their child.

**Statistics/numbers of families seen:** **Haverhill** 1,470 families in five years.

**Cape Ann/North Shore:** 1,400 families (approx.)

**(B4)** 138 detoxification beds, providing 24/7 admissions and substance-abuse specific care at a lower-cost of care than ER or inpatient beds. The newest detoxification unit, opened in May 2013 (32 beds) was opened to specifically address a verified and growing need for treatment in the Merrimack Valley.

**(B5)** 18 Crisis stabilization beds providing 5-day care and stabilization for those seen by mobile crisis teams. These patients would otherwise be in an inpatient psychiatric hospital. There are six patients per unit, who receive intensive, 24/7 care management.

**(B6) Decreasing psych inpatient care:** Two partial hospitalization programs sited within our inpatient psychiatric hospitals in Lynn and Beverly. Both of the partial hospitalization programs offer a viable alternative to inpatient hospitalization and offer same modalities but on an outpatient bases. We also transfer inpatient individuals into these programs as a transition from hospital to the community.

**(B7)** Our inpatient psychiatric team have created a post-discharge continuing care plan that tracks the percentage of discharged patients who are successfully transferred to the next level of care.

## **Lahey Health Successes and Challenges in the Integration of Behavioral Health Services**

### **Successes in integration/removal of barriers:**

- Emergency Services has worked with addiction treatment services to allocate one detoxification treatment bed specially reserved for emergency psychiatric patients, particularly those exhibiting suicidality. By fast-tracking these emergency, dual-diagnosed patients into a guaranteed, reserved detoxification bed, it increases the likelihood and immediacy of the patient accessing care.
- For certain patients in crisis who need remediation, the mobile crisis teams can provide urgent access to psychopharmacological evaluation and support. These patients can get a psychiatric consult and be prescribed needed medications in a relatively rapid time frame (approximately one week).
- Emergency physicians and administrators are on call across all four mobile crisis teams. This provides consistency of care and instant access to psychiatric or administrative consults.
- Institution of system-wide electronic health record system for Lahey Health acute and primary care and a companion system for community behavioral health. The two systems will be integrate-able and scale-able to enable information sharing, diagnosis, medication tracking of dual-diagnosis and patients with physical and behavioral health issues.

### **Challenges:**

- Technology/sharing of medical records between providers;
- Allocation of time to review/discuss shared complex cases between primary care and behavioral health providers. Even when co-located, the services can become silo-ed.
- Educating primary care providers on behavioral health principles/practices, as physicians or nurse practitioners often have a range of knowledge and comfort with addressing behavioral health in their practices;
- Space allocation in a co-located service;
- Addressing new operational requirements, from scheduling to billing;
- Managing and sustaining behavioral health services over time – what type of clinician will see the patient initially and for follow-up, who carries the patient for management of behavioral health services (BH versus primary care) and for how long.
- Regulatory requirements, including CFR42, Part 2, in which, without patient authorization, sharing information regarding substance abuse treatment cannot occur
- Physical geography and distances, in that sites or clinics are often at a distance from each other
- Physical space or treatment environments. Due to poor or static reimbursement rates for behavioral health services, some of our sites are functional, compliant, but not equal to primary care or specialty practices in terms of aesthetics or geographic accessibility.

## Lahey Health

### Includes

#### I. Northeast Health System

a roll up of;

Northeast Hospital Corporation

Northeast Behavioral Health Corporation

Northeast Senior Health Corporation

Northeast Medical Practice, Inc.

#### II. Lahey Hospital & Medical Center

a roll up of;

Lahey Clinic Hospital, Inc.

Lahey Clinic, Inc.

|                                | P4P Contracts        |                |                         |              | Risk Contracts       |      |                                      |      |                                 |      | FFS Arrangements |                | Other Revenue Arrangements |               |      |
|--------------------------------|----------------------|----------------|-------------------------|--------------|----------------------|------|--------------------------------------|------|---------------------------------|------|------------------|----------------|----------------------------|---------------|------|
|                                | Claims-Based Revenue |                | Incentive-Based Revenue |              | Claims-Based Revenue |      | Budget Surplus/<br>(Deficit) Revenue |      | Quality<br>Incentive<br>Revenue |      |                  |                |                            |               |      |
|                                | HMO                  | PPO            | HMO                     | PPO          | HMO                  | PPO  | HMO                                  | PPO  | HMO                             | PPO  | HMO              | PPO            | HMO                        | PPO           | Both |
| BCBSMA                         | \$ 135,094,047       | \$ 136,081,599 | \$ 8,587,809            | \$ 7,853,824 | \$ 27,608,358        | \$ - | \$ 1,331,068                         | \$ - | \$ 1,784,491                    | \$ - | \$ 6,002,558     | \$ -           | \$ 847,713                 | \$ -          | \$ - |
| Tufts                          | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 6,148,262         | \$ - | \$ -                                 | \$ - | \$ 21,130                       | \$ - | \$ 56,178,422    | \$ 20,386,467  | \$ 198,805                 | \$ -          | \$ - |
| HPHC                           | \$ 69,219,224        | \$ 29,001,114  | \$ 499,140              | \$ 201,691   | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 1,288,356     | \$ 21,015      | \$ -                       | \$ -          | \$ - |
| Fallon                         | \$ 9,729,744         | \$ 1,843,401   | \$ 58,185               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 226,976       | \$ -           | \$ -                       | \$ -          | \$ - |
| CIGNA                          | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 4,632,827     | \$ 14,389,608  | \$ -                       | \$ -          | \$ - |
| United                         | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 17,243,956    | \$ 12,245,924  | \$ -                       | \$ -          | \$ - |
| Aetna                          | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 2,868,686     | \$ 17,502,088  | \$ -                       | \$ -          | \$ - |
| Other Commercial               | \$ 7,353,422         | \$ -           | \$ 10,211               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 469,649       | \$ 54,589,649  | \$ -                       | \$ -          | \$ - |
| Total Commercial               | \$ 221,396,437       | \$ 166,926,115 | \$ 9,155,345            | \$ 8,055,515 | \$ 33,756,620        | \$ - | \$ 1,331,068                         | \$ - | \$ 1,805,620                    | \$ - | \$ 88,911,432    | \$ 119,134,750 | \$ 1,046,519               | \$ -          | \$ - |
|                                |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Network Health                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 11,783,858    | \$ -           | \$ -                       | \$ -          | \$ - |
| NHP                            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 22,147,683    | \$ -           | \$ -                       | \$ -          | \$ - |
| BMC Healthnet                  | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 4,524,906     | \$ -           | \$ -                       | \$ -          | \$ - |
| Fallon                         | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 3,333,615     | \$ -           | \$ -                       | \$ -          | \$ - |
| Other Medicaid                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 27,864,263    | \$ 1,069,541   | \$ -                       | \$ -          | \$ - |
| Total Managed Medicaid         | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 69,654,325    | \$ 1,069,541   | \$ -                       | \$ -          | \$ - |
|                                |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Mass Health                    | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 8,485,108     | \$ 35,680,926  | \$ -                       | \$ -          | \$ - |
|                                |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Tufts Medicare Preferred       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 40,844,237    | \$ -           | \$ 825,000                 | \$ -          | \$ - |
| Blue Cross Senior Options      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 7,038,018     | \$ 122,530     | \$ -                       | \$ -          | \$ - |
| HPHC                           | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 52,268,946  | \$ -                       | \$ -          | \$ - |
| Other (Tricare, Champus, etc.) | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 254,731       | \$ 10,397,390  | \$ -                       | \$ 137,500    | \$ - |
| Other Comm Medicare            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 10,155,627    | \$ 685,218     | \$ -                       | \$ -          | \$ - |
| Commercial Medicare Subtotal   | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 58,292,613    | \$ 63,474,084  | \$ 825,000                 | \$ 137,500    | \$ - |
|                                |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Medicare                       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 342,520,877 | \$ -                       | \$ 9,484,294  | \$ - |
|                                |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Other                          | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 27,547        | \$ 57,777,447  | \$ -                       | \$ -          | \$ - |
| Self Pay                       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 35,136        | \$ 7,189,919   | \$ -                       | \$ 3,980,579  | \$ - |
| Other                          | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 62,684        | \$ 64,967,366  | \$ -                       | \$ 3,980,579  | \$ - |
|                                |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| GRAND TOTAL                    | \$ 221,396,437       | \$ 166,926,115 | \$ 9,155,345            | \$ 8,055,515 | \$ 33,756,620        | \$ - | \$ 1,331,068                         | \$ - | \$ 1,805,620                    | \$ - | \$ 225,406,162   | \$ 626,847,545 | \$ 1,871,519               | \$ 13,602,373 | \$ - |

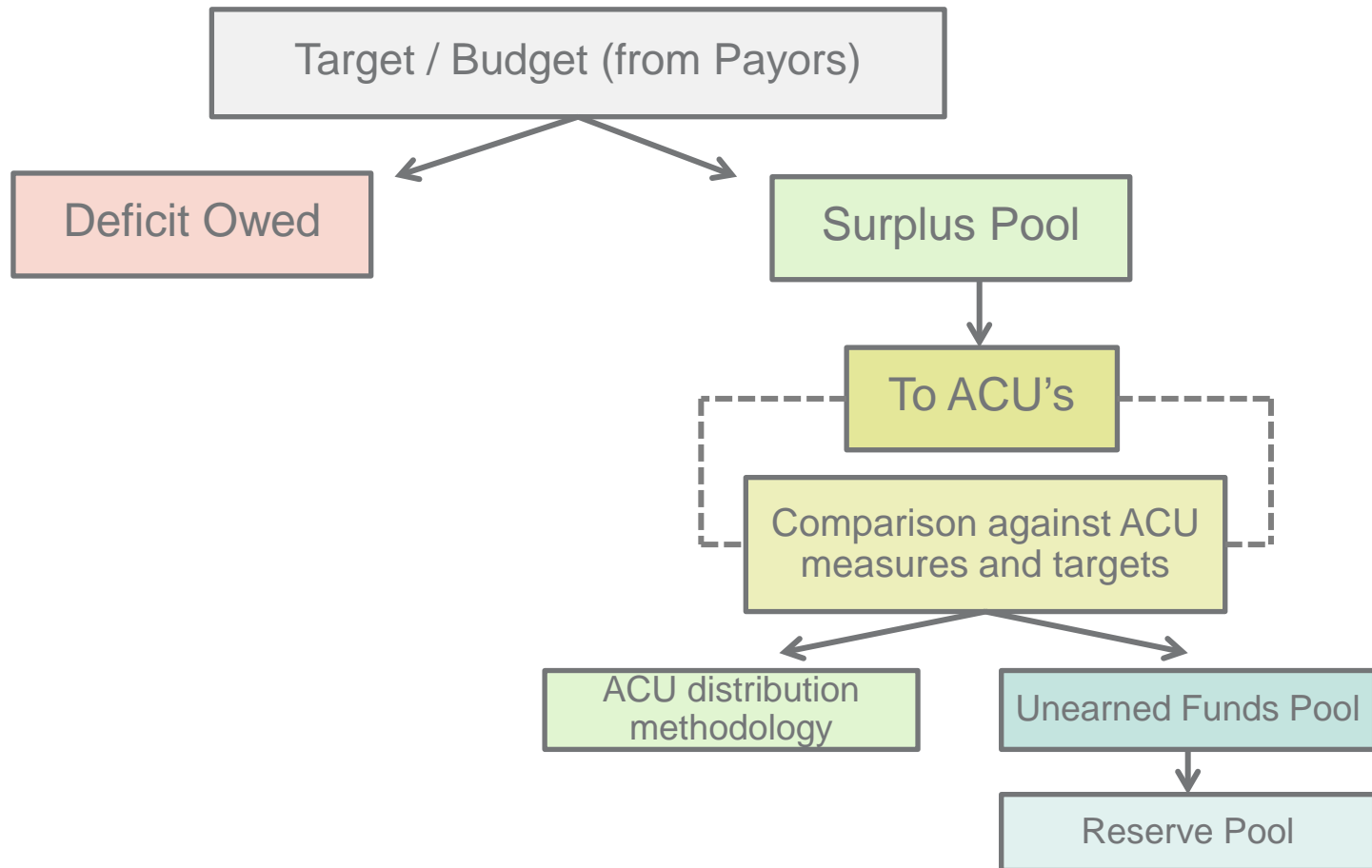
|                                     | P4P Contracts        |                |                         |              | Risk Contracts       |      |                                      |      |                                 |      | FFS Arrangements |                | Other Revenue Arrangements |               |      |
|-------------------------------------|----------------------|----------------|-------------------------|--------------|----------------------|------|--------------------------------------|------|---------------------------------|------|------------------|----------------|----------------------------|---------------|------|
|                                     | Claims-Based Revenue |                | Incentive-Based Revenue |              | Claims-Based Revenue |      | Budget Surplus/<br>(Deficit) Revenue |      | Quality<br>Incentive<br>Revenue |      |                  |                |                            |               |      |
|                                     | HMO                  | PPO            | HMO                     | PPO          | HMO                  | PPO  | HMO                                  | PPO  | HMO                             | PPO  | HMO              | PPO            | HMO                        | PPO           | Both |
| BCBSMA                              | \$ 123,768,830       | \$ 139,805,797 | \$ 8,481,705            | \$ 8,469,927 | \$ 28,342,495        | \$ - | \$ 912,025                           | \$ - | \$ 2,391,573                    | \$ - | \$ 4,953,311     | \$ -           | \$ 738,920                 | \$ -          | \$ - |
| Tufts                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 28,480,483        | \$ - | \$ 508,252                           | \$ - | \$ 138,336                      | \$ - | \$ 35,164,469    | \$ 20,613,793  | \$ 268,902                 | \$ -          | \$ - |
| HPHC                                | \$ 66,423,970        | \$ 25,410,805  | \$ 688,297              | \$ 190,029   | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 1,219,278     | \$ 57          | \$ -                       | \$ -          | \$ - |
| Fallon                              | \$ 7,614,926         | \$ 1,388,116   | \$ 37,752               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 233,987       | \$ -           | \$ -                       | \$ -          | \$ - |
| CIGNA                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 5,296,365     | \$ 18,884,620  | \$ -                       | \$ -          | \$ - |
| United                              | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 26,530,580    | \$ 14,844,861  | \$ -                       | \$ -          | \$ - |
| Aetna                               | \$ 2,336,004         | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 347,121       | \$ 19,579,887  | \$ -                       | \$ -          | \$ - |
| Other Commercial                    | \$ 6,838,616         | \$ -           | \$ 15,048               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 478,318       | \$ 57,964,638  | \$ -                       | \$ -          | \$ - |
| <b>Total Commercial</b>             | \$ 206,982,347       | \$ 166,604,718 | \$ 9,222,802            | \$ 8,659,955 | \$ 56,822,978        | \$ - | \$ 1,420,277                         | \$ - | \$ 2,529,908                    | \$ - | \$ 74,223,429    | \$ 131,887,855 | \$ 1,007,822               | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Network Health                      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 13,293,809    | \$ -           | \$ -                       | \$ -          | \$ - |
| NHP                                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 29,479,756    | \$ -           | \$ -                       | \$ -          | \$ - |
| BMC Healthnet                       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 4,434,232     | \$ -           | \$ -                       | \$ -          | \$ - |
| Fallon                              | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 1,242,870     | \$ -           | \$ -                       | \$ -          | \$ - |
| Other Medicaid                      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 32,033,113    | \$ 1,160,344   | \$ -                       | \$ -          | \$ - |
| <b>Total Managed Medicaid</b>       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 80,483,781    | \$ 1,160,344   | \$ -                       | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>Mass Health</b>                  | \$ 7,678,860         | \$ 4,946,769   | \$ 102,238              | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 29,940,741  | \$ -                       | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Tufts Medicare Preferred            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 66,619,301    | \$ -           | \$ -                       | \$ -          | \$ - |
| Blue Cross Senior Options           | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 8,225,327     | \$ 360,871     | \$ -                       | \$ -          | \$ - |
| HPHC                                | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 755,800     | \$ -                       | \$ -          | \$ - |
| Other (Tricare, Champus, etc.)      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 271,183       | \$ 11,577,320  | \$ -                       | \$ 262,007    | \$ - |
| Other Comm Medicare                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 13,445,705    | \$ 1,733,316   | \$ -                       | \$ -          | \$ - |
| <b>Commercial Medicare Subtotal</b> | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 88,561,516    | \$ 14,427,307  | \$ -                       | \$ 262,007    | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>Medicare</b>                     | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 391,256,099 | \$ -                       | \$ 7,327,913  | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Other                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 13,768        | \$ 57,832,347  | \$ -                       | \$ -          | \$ - |
| Self Pay                            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 50,765        | \$ 8,115,342   | \$ -                       | \$ 3,273,061  | \$ - |
| <b>Other</b>                        | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 64,534        | \$ 65,947,689  | \$ -                       | \$ 3,273,061  | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>GRAND TOTAL</b>                  | \$ 214,661,206       | \$ 171,551,487 | \$ 9,325,039            | \$ 8,659,955 | \$ 56,822,978        | \$ - | \$ 1,420,277                         | \$ - | \$ 2,529,908                    | \$ - | \$ 243,333,259   | \$ 634,620,036 | \$ 1,007,822               | \$ 10,862,981 | \$ - |

|                                     | P4P Contracts        |                |                         |              | Risk Contracts       |      |                                      |      |                                 |      | FFS Arrangements |                | Other Revenue Arrangements |               |      |
|-------------------------------------|----------------------|----------------|-------------------------|--------------|----------------------|------|--------------------------------------|------|---------------------------------|------|------------------|----------------|----------------------------|---------------|------|
|                                     | Claims-Based Revenue |                | Incentive-Based Revenue |              | Claims-Based Revenue |      | Budget Surplus/<br>(Deficit) Revenue |      | Quality<br>Incentive<br>Revenue |      |                  |                |                            |               |      |
|                                     | HMO                  | PPO            | HMO                     | PPO          | HMO                  | PPO  | HMO                                  | PPO  | HMO                             | PPO  | HMO              | PPO            | HMO                        | PPO           | Both |
| BCBSMA                              | \$ 48,287,380        | \$ 141,955,390 | \$ 2,399,998            | \$ 8,525,710 | \$ 84,121,108        | \$ - | \$ (1,450,219)                       | \$ - | \$ 6,323,072                    | \$ - | \$ 4,139,909     | \$ -           | \$ 552,920                 | \$ -          | \$ - |
| Tufts                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 25,814,259        | \$ - | \$ 439,793                           | \$ - | \$ 103,923                      | \$ - | \$ 19,830,759    | \$ 26,285,754  | \$ 192,863                 | \$ -          | \$ - |
| HPHC                                | \$ 92,239,987        | \$ 26,060,693  | \$ 497,916              | \$ 147,339   | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 1,326,977     | \$ 42          | \$ -                       | \$ -          | \$ - |
| Fallon                              | \$ 9,075,505         | \$ 2,011,682   | \$ 37,301               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 249,513       | \$ -           | \$ -                       | \$ -          | \$ - |
| CIGNA                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 4,675,762     | \$ 24,610,276  | \$ -                       | \$ -          | \$ - |
| United                              | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 25,681,038    | \$ 18,172,791  | \$ -                       | \$ -          | \$ - |
| Aetna                               | \$ 2,346,529         | \$ -           | \$ 300,000              | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 226,302       | \$ 21,608,542  | \$ -                       | \$ -          | \$ - |
| Other Commercial                    | \$ 6,264,682         | \$ -           | \$ 13,441               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 528,226       | \$ 55,959,800  | \$ -                       | \$ -          | \$ - |
| <b>Total Commercial</b>             | \$ 158,214,082       | \$ 170,027,765 | \$ 3,248,656            | \$ 8,673,049 | \$ 109,935,367       | \$ - | \$ (1,010,426)                       | \$ - | \$ 6,426,995                    | \$ - | \$ 56,658,486    | \$ 146,637,205 | \$ 745,783                 | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Network Health                      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 17,248,753    | \$ -           | \$ -                       | \$ -          | \$ - |
| NHP                                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 32,948,139    | \$ -           | \$ -                       | \$ -          | \$ - |
| BMC Healthnet                       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 3,576,154     | \$ -           | \$ -                       | \$ -          | \$ - |
| Fallon                              | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 1,130,863     | \$ -           | \$ -                       | \$ -          | \$ - |
| Other Medicaid                      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 36,222,736    | \$ 1,615,082   | \$ -                       | \$ -          | \$ - |
| <b>Total Managed Medicaid</b>       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 91,126,645    | \$ 1,615,082   | \$ -                       | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>Mass Health</b>                  | \$ 8,072,118         | \$ 6,154,116   | \$ -                    | \$ 389,595   | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 389           | \$ 31,581,150  | \$ -                       | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Tufts Medicare Preferred            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 42,489,991        | \$ - | \$ (1,592,496)                       | \$ - | \$ 630,240                      | \$ - | \$ 33,135,936    | \$ -           | \$ 265,360                 | \$ -          | \$ - |
| Blue Cross Senior Options           | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 8,088,100     | \$ 751,714     | \$ -                       | \$ -          | \$ - |
| HPHC                                | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 111,264     | \$ -                       | \$ -          | \$ - |
| Other (Tricare, Champus, etc.)      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 291,496       | \$ 12,502,481  | \$ -                       | \$ 200,000    | \$ - |
| Other Comm Medicare                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 15,746,732    | \$ 1,454,025   | \$ -                       | \$ -          | \$ - |
| <b>Commercial Medicare Subtotal</b> | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 42,489,991        | \$ - | \$ (1,592,496)                       | \$ - | \$ 630,240                      | \$ - | \$ 57,262,263    | \$ 14,819,484  | \$ 265,360                 | \$ 200,000    | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>Medicare</b>                     | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 423,328,632 | \$ -                       | \$ 11,280,059 | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Other                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 7,019         | \$ 52,226,714  | \$ -                       | \$ -          | \$ - |
| Self Pay                            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 74,813        | \$ 8,755,627   | \$ -                       | \$ 5,264,213  | \$ - |
| <b>Other</b>                        | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 81,832        | \$ 60,982,341  | \$ -                       | \$ 5,264,213  | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>GRAND TOTAL</b>                  | \$ 166,286,201       | \$ 176,181,881 | \$ 3,248,656            | \$ 9,062,644 | \$ 152,425,358       | \$ - | \$ (2,602,922)                       | \$ - | \$ 7,057,235                    | \$ - | \$ 205,129,615   | \$ 678,963,895 | \$ 1,011,143               | \$ 16,744,272 | \$ - |

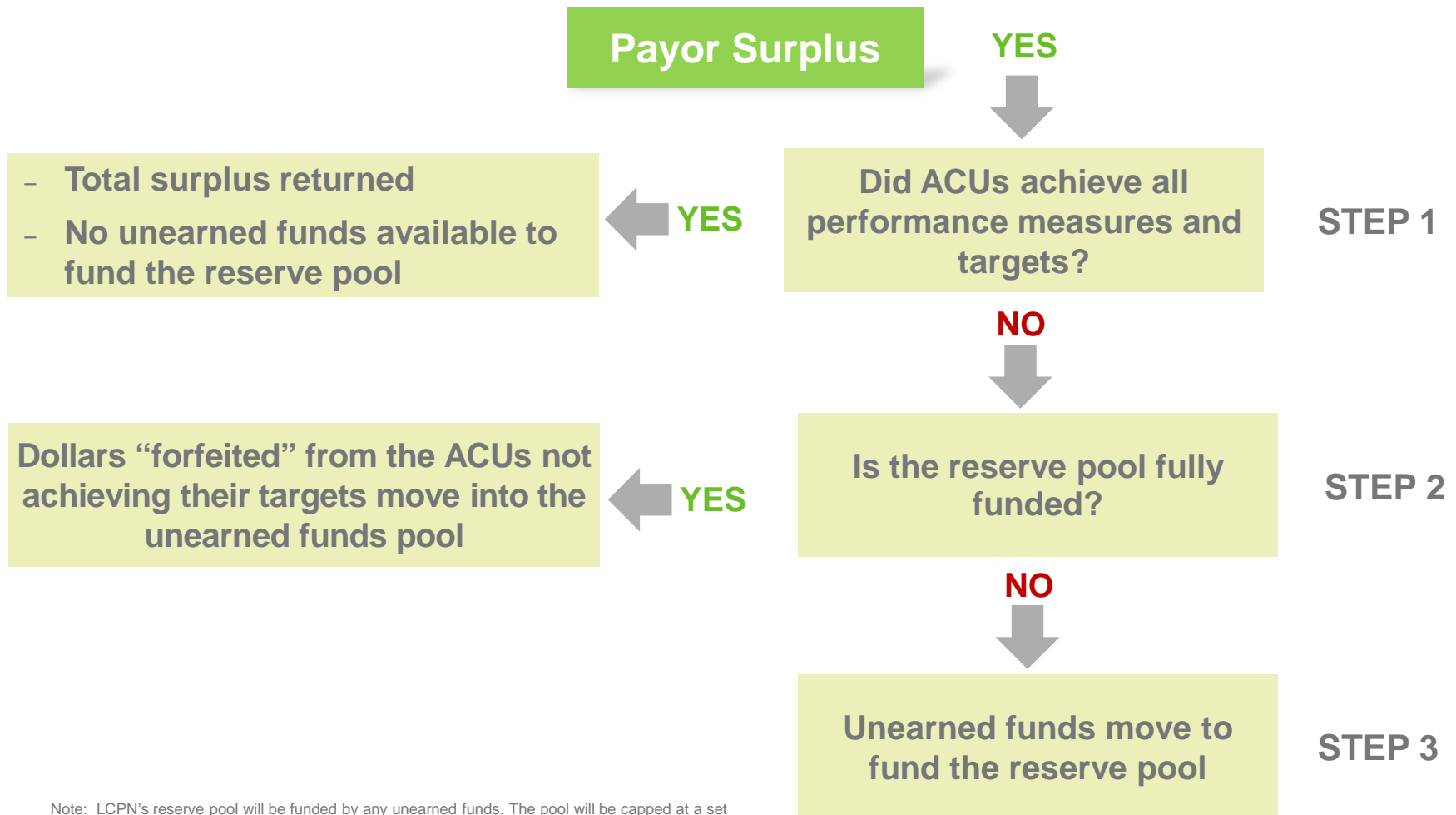
|                                     | P4P Contracts        |                |                         |              | Risk Contracts       |      |                                      |      |                                 |      | FFS Arrangements |                | Other Revenue Arrangements |               |      |
|-------------------------------------|----------------------|----------------|-------------------------|--------------|----------------------|------|--------------------------------------|------|---------------------------------|------|------------------|----------------|----------------------------|---------------|------|
|                                     | Claims-Based Revenue |                | Incentive-Based Revenue |              | Claims-Based Revenue |      | Budget Surplus/<br>(Deficit) Revenue |      | Quality<br>Incentive<br>Revenue |      |                  |                |                            |               |      |
|                                     | HMO                  | PPO            | HMO                     | PPO          | HMO                  | PPO  | HMO                                  | PPO  | HMO                             | PPO  | HMO              | PPO            | HMO                        | PPO           | Both |
| BCBSMA                              | \$ 41,003,405        | \$ 141,416,481 | \$ 2,140,546            | \$ 8,798,849 | \$ 72,014,989        | \$ - | \$ 91,856                            | \$ - | \$ 5,482,026                    | \$ - | \$ 3,915,204     | \$ -           | \$ 417,132                 | \$ -          | \$ - |
| Tufts                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 24,279,912        | \$ - | \$ 45,897                            | \$ - | \$ 22,949                       | \$ - | \$ 19,723,075    | \$ 30,598,997  | \$ 317,188                 | \$ -          | \$ - |
| HPHC                                | \$ 89,607,012        | \$ 34,870,999  | \$ 494,123              | \$ 279,669   | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 2,199,542     | \$ 2,196       | \$ -                       | \$ -          | \$ - |
| Fallon                              | \$ 9,507,234         | \$ 2,410,610   | \$ 38,874               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 263,024       | \$ -           | \$ -                       | \$ -          | \$ - |
| CIGNA                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 4,660,202     | \$ 24,542,245  | \$ -                       | \$ -          | \$ - |
| United                              | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 16,244,022    | \$ 28,057,185  | \$ -                       | \$ -          | \$ - |
| Aetna                               | \$ 1,642,769         | \$ -           | \$ 90,000               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 200,162       | \$ 20,774,429  | \$ -                       | \$ -          | \$ - |
| Other Commercial                    | \$ 5,899,647         | \$ -           | \$ 13,746               | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 603,904       | \$ 49,545,931  | \$ -                       | \$ -          | \$ - |
| <b>Total Commercial</b>             | \$ 147,660,066       | \$ 178,698,090 | \$ 2,777,289            | \$ 9,078,518 | \$ 96,294,902        | \$ - | \$ 137,753                           | \$ - | \$ 5,504,975                    | \$ - | \$ 47,809,136    | \$ 153,520,983 | \$ 734,320                 | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Network Health                      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 27,877,238    | \$ -           | \$ -                       | \$ -          | \$ - |
| NHP                                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 38,310,802    | \$ -           | \$ -                       | \$ -          | \$ - |
| BMC Healthnet                       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 5,863,427     | \$ -           | \$ -                       | \$ -          | \$ - |
| Fallon                              | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 1,392,629     | \$ -           | \$ -                       | \$ -          | \$ - |
| Other Medicaid                      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 34,500,674    | \$ 1,967,516   | \$ -                       | \$ -          | \$ - |
| <b>Total Managed Medicaid</b>       | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 107,944,770   | \$ 1,967,516   | \$ -                       | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>Mass Health</b>                  | \$ 7,836,828         | \$ 6,484,071   | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 26,605,495  | \$ -                       | \$ -          | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Tufts Medicare Preferred            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 43,579,413        | \$ - | \$ (1,339,517)                       | \$ - | \$ -                            | \$ - | \$ 30,146,927    | \$ -           | \$ -                       | \$ -          | \$ - |
| Blue Cross Senior Options           | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 9,537,650     | \$ -           | \$ -                       | \$ -          | \$ - |
| HPHC                                | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ -           | \$ -                       | \$ -          | \$ - |
| Other (Tricare, Champus, etc.)      | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 13,202,128  | \$ -                       | \$ 230,999    | \$ - |
| Other Comm Medicare                 | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 21,093,667    | \$ 1,870,705   | \$ -                       | \$ 5,101      | \$ - |
| <b>Commercial Medicare Subtotal</b> | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 43,579,413        | \$ - | \$ (1,339,517)                       | \$ - | \$ -                            | \$ - | \$ 60,778,244    | \$ 15,072,833  | \$ -                       | \$ 236,100    | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>Medicare</b>                     | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ 83,038,348        | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ -             | \$ 353,028,231 | \$ -                       | \$ 11,914,365 | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| Other                               | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 18,296        | \$ 55,625,452  | \$ -                       | \$ -          | \$ - |
| Self Pay                            | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 44,730        | \$ 8,946,541   | \$ -                       | \$ 2,914,220  | \$ - |
| <b>Other</b>                        | \$ -                 | \$ -           | \$ -                    | \$ -         | \$ -                 | \$ - | \$ -                                 | \$ - | \$ -                            | \$ - | \$ 63,025        | \$ 64,571,993  | \$ -                       | \$ 2,914,220  | \$ - |
|                                     |                      |                |                         |              |                      |      |                                      |      |                                 |      |                  |                |                            |               |      |
| <b>GRAND TOTAL</b>                  | \$ 155,496,894       | \$ 185,182,161 | \$ 2,777,289            | \$ 9,078,518 | \$ 222,912,663       | \$ - | \$ (1,201,764)                       | \$ - | \$ 5,504,975                    | \$ - | \$ 216,595,176   | \$ 614,767,051 | \$ 734,320                 | \$ 15,064,685 | \$ - |



# APM Risk Management Funds Flow Overview



# Surplus Settlement Decision Tree



Note: LCPN's reserve pool will be funded by any unearned funds. The pool will be capped at a set dollar amount determined by the amount of downside risk LCPN holds within our contracts versus the withhold being collected.

# Deficit Settlement Decision Tree

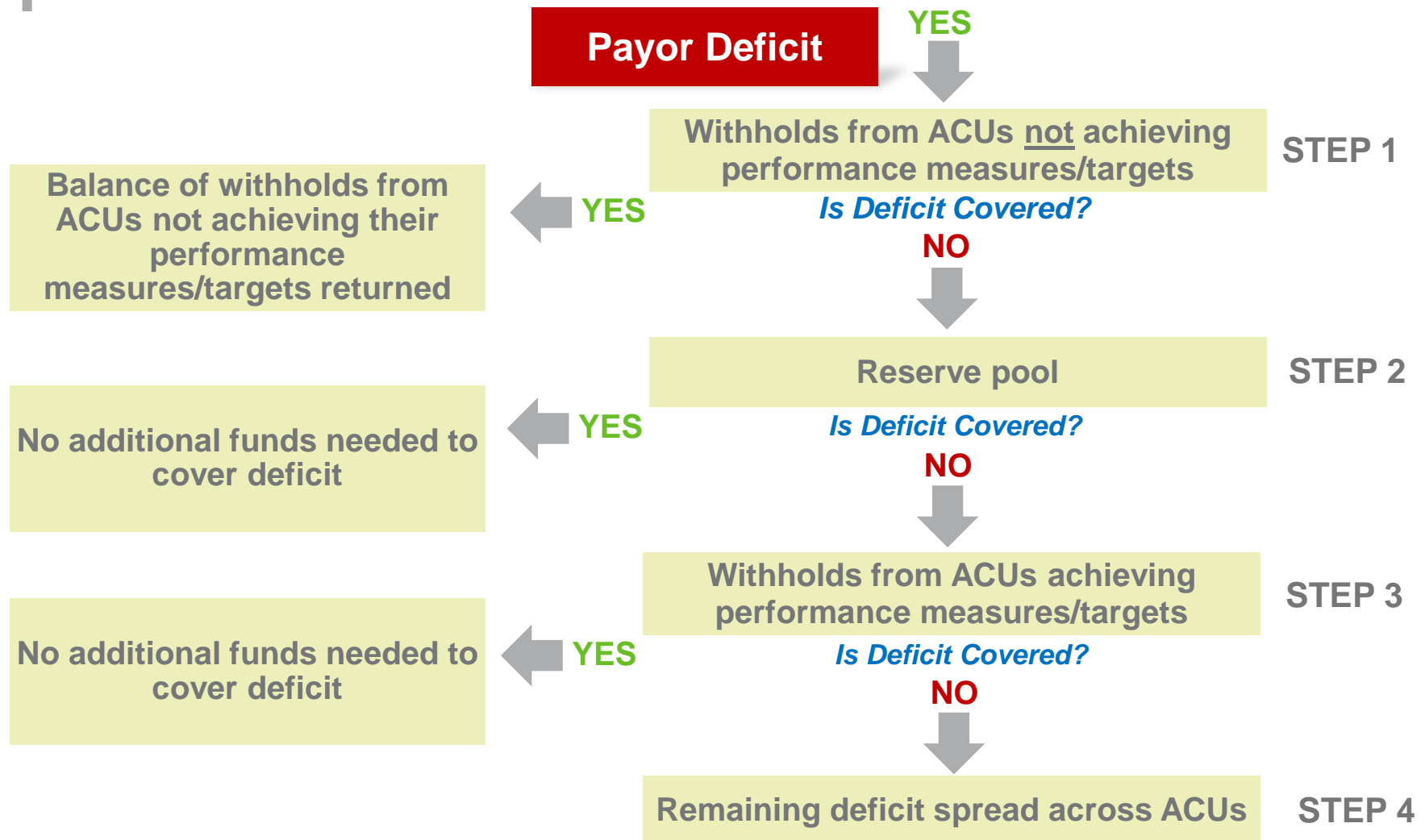


Exhibit C - Attachment C2a  
Margin by Major Payor Category

| \$ in 000's | Commercial                   |                         | Government                   |                         | All Other                    |                         | Total                        |                         |
|-------------|------------------------------|-------------------------|------------------------------|-------------------------|------------------------------|-------------------------|------------------------------|-------------------------|
|             | Percent of<br>Total Business | Operating<br>Margin (%) | Percent of<br>Total Business | Operating<br>Margin (%) | Percent of<br>Total Business | Operating<br>Margin (%) | Percent of<br>Total Business | Operating<br>Margin (%) |
| FY2010      | 53.5%                        | 16.1%                   | 43.2%                        | -14.8%                  | 3.3%                         | 23.9%                   | 100.0%                       | 2.8%                    |
| FY2011      | 52.7%                        | 18.5%                   | 43.8%                        | -21.4%                  | 3.5%                         | 15.0%                   | 100.0%                       | 1.2%                    |
| FY2012      | 51.0%                        | 22.3%                   | 45.7%                        | -16.0%                  | 3.3%                         | 22.6%                   | 100.0%                       | 5.5%                    |
| FY2013      | 49.6%                        | 22.1%                   | 47.3%                        | -15.5%                  | 3.1%                         | 17.7%                   | 100.0%                       | 4.8%                    |

Note: Includes Lahey Clinic Foundation and Affiliates.

Lahey Hospital & Medical Center

Exhibit C-Attachment C2a

Margin By Major Payor Category

Updated Version

|        | Commercial                |                      | Government                |                      | All Other                 |                      | Total                     |                      |
|--------|---------------------------|----------------------|---------------------------|----------------------|---------------------------|----------------------|---------------------------|----------------------|
|        | Percent of Total Business | Operating Margin (%) | Percent of Total Business | Operating Margin (%) | Percent of Total Business | Operating Margin (%) | Percent of Total Business | Operating Margin (%) |
| FY2010 | 53.6%                     | 19.5%                | 43.1%                     | -20.3%               | 3.3%                      | 16.1%                | 100.0%                    | 2.3%                 |
| FY2011 | 52.6%                     | 22.3%                | 43.8%                     | -16.0%               | 3.5%                      | 22.6%                | 100.0%                    | 5.5%                 |
| FY2012 | 51.0%                     | 22.1%                | 45.7%                     | -15.5%               | 3.3%                      | 17.7%                | 100.0%                    | 4.8%                 |
| FY2013 | 49.5%                     | 23.1%                | 47.4%                     | -15.8%               | 3.1%                      | 12.4%                | 100.0%                    | 4.3%                 |