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Department of Health and Mental Hygiene

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Health Services Cost Review Commission

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**541st MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION
June 14, 2017**

EXECUTIVE SESSION

11:00am

(The Commission will begin in public session at 11:00 a.m. for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00 p.m.)

1. **Update on Contract and Modeling of the All-payer Model vis-a-vis the All-Payer Model Contract – Administration of Model Moving into Phase II - Authority General Provisions Article, §3-103 and §3-104**
2. **Discussion on Planning for Model Progression – Authority General Provisions Article, §3-103 and §3-104**
3. **Personnel Matters – Authority General Provisions Article, §3-305 (b) (1)**

PUBLIC SESSION

1:00 p.m.

1. **Review of the Minutes from the Public Meeting and Executive Session on May 10, 2017**
2. **Executive Director's Report**
3. **New Model Monitoring**
4. **Docket Status – Cases Closed**
2383A – Johns Hopkins Health System
5. **Docket Status – Cases Open**

2371R – MedStar Franklin Square Medical Center	2372A - Doctors Community Hospital
2384R – McCready Health	2385A – University of Maryland Medical Center
2386A – University of Maryland Medical Center	2387A – University of Maryland Medical Center
2388A – Medstar Health	2389A – MedStar Health
2390N – McCready Health	2391A – Johns Hopkins Health System
2392A – Johns Hopkins Health System	2393A – Johns Hopkins Health System
6. **Presentation by Lifebridge Health**
7. **Final Recommendation for Update Factor for FY 2018**
8. **Final Recommendation for PAU Savings for RY 2018**
9. **Final Recommendation for Maximum Revenue Guardrail for Quality Programs for RY 2019**

- 10. Final Recommendation for Nursing Support Program II for FY 2018**
- 11. Draft Recommendation for Nursing Support Program I for FY 2018**
- 12. Draft Recommendation on Uncompensated Care Policy for FY 2018**
- 13. Report on Ongoing Support of CRISP in FY 2018 for HIE Operations and Reporting Service Activities**
- 14. Hearing and Meeting Schedule**

**Closed Session Minutes
Of the
Health Services Cost Review Commission**

May 10, 2017

Upon motion made in public session, Chairman Sabatini called for adjournment into closed session to discuss the following items:

1. Discussion on Planning for Model Progression – Authority General Provisions Article, §3-103 and §3-104
2. Update on Contract and Modeling of the All-payer Model vis-a-vis the All-Payer Model Contract – Administration of Model Moving into Phase II - Authority General Provisions Article, §3-103 and §3-104

The Closed Session was called to order at 10:39 a.m. and held under authority of §3-103, and §3-104 of the General Provisions Article.

In attendance in addition to Chairman Sabatini were Commissioners Antos, Bayless, Colmers, Keane, and Wong. Also, Ms. Fran Phillips was in attendance in a non-voting ex-officio capacity as a Commissioner with the Maryland Health Care Commission.

In attendance representing Staff were Donna Kinzer, Katie Wunderlich, Chris Peterson, Jerry Schmith, Amanda Vaughn, Claudine Williams, Jess Lee, Madeline Jackson, and Dennis Phelps.

Also attending were Howard Haft, M.D., Deputy Secretary, Public Health Services of the Department of Health and Mental Hygiene, Eric Lindeman Commission Consultant, and Stan Lustman and Leslie Schulman, Commission Counsel.

Item One

Ms. Kinzer and Dr. Haft updated the Commission and the Commission discussed planning for the All-Payer Model Progression.

In addition, Dr. Haft summarized and the Commission discussed the progression of the Maryland Primary Care Comprehensive Primary Care Model.

Item Two

Ms. Kinzer and Eric Lindeman, Commission Consultant, updated the Commission on Medicare data and analysis vis-a-vis the All-Payer Model Agreement.

The Closed Session was adjourned at 12:50 p.m.

MINUTES OF THE
540th MEETING OF THE
HEALTH SERVICES COST REVIEW COMMISSION
May 10, 2017

Chairman Nelson Sabatini called the public meeting to order at 10:39 a.m. Commissioners Joseph Antos, Ph.D., Victoria Bayless, John Colmers, Jack C. Keane, Herbert Wong, Ph.D., and Fran Phillips, nonvoting ex-officio member, were also in attendance. Upon motion made by Commissioner Colmers and seconded by Commissioner Wong, the meeting was moved to Executive Session. Chairman Sabatini reconvened the public meeting at 1:00 p.m.

REPORT OF THE MAY 10, 2017 EXECUTIVE SESSION

Mr. Dennis Phelps, Associate Director, Audit & Compliance, summarized the minutes of the May 10, 2017 Executive Session.

ITEM I
REVIEW OF THE MINUTES FROM THE APRIL 12 AND 25, 2017
EXECUTIVE SESSIONS AND APRIL 12, 2017 PUBLIC MEETING

The Commission voted unanimously to approve the minutes of the April 12 and April 25, 2017 Executive Sessions and the April 12, 2017 Public Meeting.

ITEM II
EXECUTIVE DIRECTOR'S REPORT

Ms. Donna Kinzer, Executive Director, stated that Staff and the Department of Health and Mental Hygiene (DHMH) are continuing to discuss the All-Payer Model Progression Plan and the Maryland Comprehensive Primary Care Model with the Center for Medicare and Medicaid Innovation (CMMI) and federal administration. Ms Kinzer noted that discussions are proceeding according to plan. She also noted that Staff is continuing discussions with stakeholders for input on the progression plan.

Ms. Kinzer reported that the Care Redesign amendment has been signed by Governor Hogan. Chris Peterson, Director Clinical and Financial Information, will be leading the efforts to work with the Chesapeake Regional Information System for Our Patients (CRISP) and stakeholders to access the tools that can be used to support the care redesign efforts.

Ms. Kinzer reported that Staff has completed the calculations for most Rate Year 2018 settlements and adjustments, including Market Shift, Maryland Hospital Acquired Conditions (MHAC), Readmission Reduction Incentive Program (RRIP), Potentially Avoidable Utilization (PAU), and Uncompensated Care. Ms. Kinzer noted that it has been a difficult year as Staff had to work through three different groupers and the movement from ICD 9 to ICD 10. Ms. Kinzer expressed her thanks to Ms. Denise Johnson, Ms. Claudine Williams, Mr. Nduka Udom, and Dr. Alyson Schuster for their efforts on these settlements and adjustments.

Ms. Kinzer updated the Commission on the activities of several workgroups:

- Total Cost of Care Workgroup--This workgroup is continuing to focus on implementation requirements for the Care Redesign amendment, as well as the development of a value based payment that links hospital payments with total cost of care.
- Population Health Measures-- DHMH Office of Population Health has been working with HSCRC staff on a plan with performance goals for the State. It is expected that goals from this plan will play a role in Phase Two of the All Payer Model.
- Payment Models Workgroup—Staff will present a preliminary update factor recommendation today (see Item XIII below).
- Performance Measurement Workgroup—This work group continues to update policies and review draft calculations.
- Consumer Standing Advisory Council – This Council represents the joint efforts of DHMH and HSCRC. CRISP presented to the Council on May 3, 2017 on its latest efforts to connect providers and engage consumers.

Ms. Kinzer stated that Jess Lee, Centers for Medicare and Medicaid Services (CMS) Liaison, was leaving the Commission to enter medical school. Ms. Kinzer expressed her appreciation for all of Jess' important work on the progression plan as well as her work with CMMI and on the New All- Payer Model negotiations.

Ms. Kinzer welcomed three new staff members:

- Allan Pack, who will be taking on the role of Director of Population Based Health Methodologies
- Adrienne Kappauf, who will be taking on the role of Workgroup Coordinator
- Madeline Jackson, who will be taking on the role of CMS Liaison.

THE JOHNS HOPKINS RATE ISSUES

Mr. Jerry Schmith, Director Revenue Regulation and Compliance, presented Staff's concerns regarding the accuracy of the data submissions of the Johns Hopkins Hospital (JHH) and the reliability and compliance of the hospital's charging practices with the HSCRC rate orders and regulations (see "Recommendation for Resolution of Rate Related Issues with The Johns Hopkins Hospital" on the HSCRC website).

Mr. Schmith stated that the HSCRC staff has become increasingly concerned, since early in fiscal year FY 2016, about multiple problems regarding the accuracy of the data submissions of JHH and the reliability and compliance of its charging practices with HSCRC rate orders and regulations. The problems have included repeated variations in charges, rate order compliance issues, unexplained changes in units, and problematic data submissions. Despite numerous discussions, JHH and Staff have not been able to satisfactorily resolve the data and charge issues.

In addition, JHH has communicated concerns that the cost and service delivery challenges it faces, including some that are driven by its role as a nationally and internationally renowned academic medical center (AMC), may not be sufficiently or appropriately recognized under the All Payer Model. In response to these requests, the Staff has made multiple adjustments to JHH's Global Budget Revenue (GBR) agreement including modifications for out-of-state patients, transplants, experimental cancer cases, and drugs. Most recently, Staff allowed JHH to bring the revenue associated with out-of- state cases back under JHH's GBR.

JHH has informed the HSCRC that it is facing significant difficulties in staff retention and recruitment and in cost control, especially in the area of high cost drugs; that it has incurred extraordinary costs associated with implementation of the EPIC system; that its projections of increased out-of-state volume have not been realized; and that these factors and others have imposed significant financial strains on JHH for which it is seeking temporary rate relief from the HSCRC. JHH has also asked the HSCRC staff to consider modifications to rate setting methodologies which would appropriately respond to JHH's expressed concerns.

The HSCRC has a statutory mandate to keep informed as to whether a hospital has sufficient resources to meet its reasonable financial requirements and to find solutions to any identified resource or solvency problems in the form of greater efficiency and/or modified rate levels. In this recommendation, the Staff proposes a pathway to resolution of the various issues and concerns that have been described above.

The Staff recommends that the HSCRC take the following actions:

- That JHH be permitted to charge \$75 million, in addition to its otherwise approved "Total Approved Regulated Revenue" (i.e., its regulated GBR and regulated non-GBR revenue), during the remainder of rate year RY 2017 (i.e., by June 30, 2017). This temporary increase will be reversed July 1, 2017.
- That JHH be required to remove the additional \$75 million through prospective rate reductions on the following schedule: \$35 million by December 31, 2017; \$25 million by December 31, 2018; and \$15 million by December 31, 2019. These rate reductions will be made through rate reductions relative to JHH's Total Approved Regulated Revenue for these periods.
- That JHH submit to the HSCRC its preliminary internal budgets, and any other budgets submitted to its Board of Trustees, to enable the HSCRC to ascertain whether the budgets provide for the required payback and include any other adjustments, including operating efficiency improvements.
- That the prospective rate reductions be subject to acceleration by the HSCRC at any time for cause, including non-compliance with the purposes, steps, and objectives of the Review Agreement. Additionally, if the State is required to take corrective action under its Agreement with CMS, that the prospective rate reductions may be accelerated by the HSCRC.

Chairman Sabatini and Commissioner Antos thanked JHH for continuing support of the Commission. Commissioner Antos noted that this is a serious matter, and that there is a need to closely monitor JHH accounting practices and budgets until the temporary adjustments have

been reversed. Commissioner Keane praised the great cooperation from JHH through the negotiation process. Dr. Redonda Miller, President, The Johns Hopkins Hospital, thanked Staff and Commissioners for their support.

The Commissioners approved the recommendation. Commissioner Bone's vote in favor was cast by the Chairman as a proxy for Dr. Bone. Commissioner Colmers recused himself from the vote and discussion. Commissioner Bayless abstained from the vote.

EMERGENCY DEPARTMENT PERFORMANCE IN MARYLAND

Ms. Katie Wunderlich, Director Engagement and Alignment, presented an overview of recent trends in emergency department (ED) performance (see- "Emergency Department Performance in Maryland" on the HSCRC website).

Ms Wunderlich note that Staff is currently monitoring ED performance through three measures:

- Percentage of time on Yellow Alerts- ED Diversion- Measures the percent of time the ED is on yellow alert, when hospital alert Emergency Medical Service providers that ED cannot accept any more patients.
- ED-2 Admit Decision until Admission- Measures time between decision to admit and actual admission.
- OP-20: Door to Diagnostic Evaluation- This measure is most accessible to consumers and was recently published in the news.

Ms Wunderlich noted that Staff is evaluating the feasibility of including select ED wait times measures in the RY2020 QBR program. Staff is also working with the Maryland Institute for Emergency Medical Services Systems (MIEMMS) to capture additional data on ED Diversion to better inform market shift adjustments.

Commissioner Sabatini inquired as to why yellow alerts were increasing.

Ms. Kinzer observed that there were many contributing factors including an increasing shortage of nurses, more patients with mental health conditions, and overall increase in ED volume. In addition, there is the effect of Baltimore City residents using the ED as their primary care provider because of lack of urgent care centers in the city. Ms. Kinzer noted that staff has asked MIEMMS to provide additional information for analysis in our attempt to determine the causes for the increase in yellow alerts.

ITEM III **NEW MODEL MONITORING**

Ms. Caitlin Grim, Rate Analyst, reported \$63.4 million of Medicare total spending per beneficiary savings for the 12 months ending December 2016. Ms. Grim noted that hospital spending growth per Maryland Medicare beneficiary was favorable for CY December 2016 but

was projected to be above the nation for CY February 2017. Medicare Total Cost of Care per capita was favorable for CY December 2016 but was projected to be unfavorable CY February 2017. Medicare non-hospital spending per capita was mostly unfavorable for CY December 2016 and continue to be unfavorable for CY February 2017.

Ms. Amanda Vaughan, Associate Director Clinical and Financial Information, stated that Monitoring Maryland Performance (MMP) for the new All-Payer Model for the month of March focuses on the fiscal year (July 1 through June 30) as well as calendar year results.

Ms. Vaughan reported that for the nine month period ended March 31, 2017, All-Payer total gross revenue increased by 1.30% over the same period in FY 2016. All-Payer total gross revenue for Maryland residents increased by 1.40%. All-Payer gross revenue for non-Maryland residents increased by 0.23%.

Ms. Vaughan reported that for the three months of the calendar year ended March 31, 2017, All-Payer total gross revenue increased by 6.00% over the same period in CY 2016. All-Payer total gross revenue for Maryland residents increased by 5.56%. All-Payer gross revenue for non-Maryland residents increased by 10.92%.

Ms. Vaughan reported that for the nine month period ended March 31, 2017, Medicare Fee-For-Service gross revenue increased by 1.37% over the same period in FY 2016. Medicare Fee-For-Service gross revenue for Maryland residents increased by 1.10 %. Maryland Fee-For-Service gross revenue for non-residents increased by 4.58%.

Ms. Vaughan reported that for the three months of the calendar year ended March 31, 2017, Medicare Fee-For-Service gross revenue increased by 5.12% over the same period in CY 2016. Medicare Fee-For-Service gross revenue for Maryland residents increased by 4.11%. Maryland Fee-For-Service gross revenue for non-residents increased by 17.95%.

Ms. Vaughan reported that for the nine months of the fiscal year ended March 31, 2017 over the same period in CY 2016:

- All Payer in State capita growth was 1.04 %.
- Medicare Fee for Service in State was (0.21%).

Ms. Vaughan reported that for the three months of the calendar year ended March 31, 2017 over the same period in CY 2016:

- All Payer in State capita growth was 5.18%.
- Medicare Fee for Service in State was 3.12%.

Ms. Vaughan reported that for the three months of the calendar year ended March 31, 2017 over the same period in CY 2013:

- Net per capita growth was 6.13 %.
- Per capita growth before UCC and MHIP adjustments was 9.21%.

- Net per capita Medicare growth was 1.15%.
- Per capita growth Medicare before UCC and MHIP was 4.14 %.

According to Ms. Vaughan, for the nine months of the fiscal year ended March 28, 2017, unaudited average operating profit for acute hospitals was 2.29%. The median hospital profit was 3.34%, with a distribution of 0.29% in the 25th percentile and 5.64% in the 75th percentile. Rate Regulated profits were 4.45%.

Ms. Denise Johnson, Chief, Special Projects, presented utilization trend reports reflecting the Equivalent Case-Mix Adjusted Discharges (ECMAD) growth for the three months of the calendar year ended December 31, 2016.

Ms. Johnson reported that for the twelve months of the calendar year ended December 31, 2016, All Payer ECMAD growth increased by 0.64% over the same period in CY 2015. ECMAD growth for Maryland residents increased by 0.59%. This is made up of Maryland inpatient ECMAD increasing by 0.83% and outpatient ECMAD increasing 0.20%. ECMAD growth for non-residents increased by 1.26%.

Ms. Johnson reported that for the twelve months of the calendar year ended December 31, 2016, Medicare ECMAD growth increased by 0.74% over the same period in CY 2015. This is made up of Maryland Medicare inpatient ECMAD decreasing by 0.65% and Maryland Medicare outpatient ECMAD increasing 0.94%.

ITEM IV
DOCKET STATUS- CLOSED CASES

2379A - Johns Hopkins Health System	2380A – University of Maryland Medical Center
2381A – Johns Hopkins Health System	2382A – Johns Hopkins Health System

ITEM V
DOCKET STATUS- OPEN CASES

2383A- Johns Hopkins Health System

On April 26, 2017, Johns Hopkins Health System (“System”) filed an application with the HSCRC on behalf of Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center (“the Hospitals”). The System requests approval to continue to participate in a revised global rate arrangement for solid organ and bone marrow transplant services with Blue Cross Blue shield Blue Distinction Centers for Transplants for a period of one year beginning June 1, 2017.

Staff recommends that the Commission approve the Hospitals’ request to continue to participate in the global rate arrangement for solid organ and bone marrow transplant services for a period of one year beginning June 1, 2017, and that approval be contingent upon the execution of the standard Memorandum of Understanding.

The Commission voted unanimously to approve staff’s recommendation. Commissioner Colmers

recused himself from the discussion and vote.

30 Day Extensions
2384R- McCready Health

The Commission voted unanimously to approve staff's request to extend the time for review in proceeding 2384R McCready Health for 30 days.

ITEM VI
PRESENTATION BY GREATER BALTIMORE MEDICAL CENTER

Dr. John Chessare, President and Chief Executive Officer of Greater Baltimore Medical Center (GBMC), presented a population health update to the Commission (see "GBMC Healthcare System Population Health Update to the Health Services Cost Review Commission" on the HSCRC website).

Dr. Chessare noted that GBMC has invested more than \$70.5 million in population health with a focus on primary care. GBMC currently has 12 Patient Centered Medical Homes. The Hospital also participates in an Accountable Care Organization (ACO).

In March 2017, GBMC had its highest HCAHP score of 77.50 which puts it in the 93rd percentile for Maryland and 77th percentile nationally. The overall satisfaction score was in the 85th percentile. GBMC scored in the 92nd percentile for convenience of office hours.

ITEM VII
READMISSION REDUCTION ANALYSIS

Dr. Alyson Schuster, PhD., Associate Director Performance Management, presented a quality report update on the Maryland Hospital Acquired Conditions program based upon potentially preventable complications (through December 2016) and readmission data on discharges (through December 2016).

Readmissions

- The All-Payer risk adjusted readmission rate was 11.54% for December 2016 YTD. This is a decrease of 10.75% from the December 2013 risk adjusted readmission rate.
- The Medicare Fee for Service risk adjusted readmission rate was 12.41% for December 2016 YTD. This is a decrease of 9.94% from the December 2013 YTD risk adjusted readmission rate.
- Based on the New Model, hospitals must reduce Maryland's readmission rate to or below the national Medicare readmission rate by 2018. The Readmission Reduction incentive program has set goals for hospitals to reduce their adjusted readmission rate by 9.5% during CY 2016 compared to CY 2013. Currently, 28 out of 46 hospitals have reduced their risk adjusted readmission rate by more than 9.5%. An additional 8 hospitals are on track for achieving the attainment goal.

FINAL RECOMMENDATION TO UPDATE THE READMISSION REDUCTION INCENTIVE PROGRAM FOR RY 2019

Dr. Schuster presented Staff's final recommendation on the Readmission Incentive Program for FY 2019 (see "Final Recommendation for the Readmissions Reduction Incentive Program for Rate Year 2019"- on the HSCRC website).

The United States healthcare system currently experiences an unacceptably high rate of preventable hospital readmissions. These excessive readmissions generate considerable unnecessary costs and substandard care quality for patients. A readmission is defined as an admission to a hospital within a specified time period after a discharge from the same or another hospital. Historically, Maryland's readmission rates have been high compared with the national levels for Medicare. Under authority of the Affordable Care Act, CMS established its Medicare Hospital Readmissions Reduction Program (HRRP) in federal fiscal year (FFY) 2013.

Because of the long-standing Medicare waiver for Maryland's all-payer hospital rate-setting system, special considerations were given to Maryland, including exemption from the federal HRRP. Instead, the HSCRC implements various Maryland-specific quality-based payment programs which provide incentives for hospitals to improve their quality performance over time.

Maryland entered into a new All-Payer Model Agreement with CMS effective January 1, 2014. One of the requirements under this new agreement is for Maryland's hospital readmission rate to be equal to or below the national Medicare readmission rate by calendar year (CY) 2018. Maryland must also make scheduled, annual progress toward this goal. In order to meet this requirement, the HSCRC established the Readmissions Reduction Incentive Program (RRIP) in April 2014.

The purpose of this final recommendation is to make recommendations for updating the RRIP for the state rate year (RY) 2019 methodology.

The final recommendation updates the readmission reduction targets for RY 2019 in order to align with the All-Payer Model's readmission reduction target for Calendar Year (CY) 2018, and also includes the following policy elements:

- Updates the base period for the RY 2019 RRIP to fall under the International Classification of Disease, 10th Edition (ICD-10) time period;
- Evaluates Calendar Year 2016 year-to-date (YTD) performance versus the All Payer Agreement requirements, and recommends Medicare improvement targets to ensure continued progress; and
- Develops all-payer targets for attainment and improvement with established preset rewards/penalties scales for RY 2019 RRIP hospital revenue adjustments.

HSCRC staff recommends the following updates to the RRIP program for RY 2019:

- The RRIP policy should continue to be set for all-payers.
- Hospital performance should continue to be measured as the better of attainment or improvement.
- Due to ICD-10, RRIP should have a one-year improvement target (CY 2017 over CY 2016), which will be added to the actual improvement from CY 2016 over CY 2013, to create a modified cumulative improvement target.
- The attainment benchmark should be set at 10.83 percent.
- The reduction benchmark for CY 2017 readmissions should be -3.75 percent from CY 2016 readmission rates.
- Hospitals should be eligible for a maximum reward of 1 percent, or a maximum penalty of 2 percent, based on the better of their attainment or improvement scores.
- Staff will continue to work with CMS to review readmission logic and data discrepancies, and an update will be provided to the Commission if any substantive issues are found that warrant revisiting RY 2019 targets.

Ms. Traci LaValle, Vice President, Rate Setting, Maryland Hospital Association, believes the target could be set closer to 3.25%, since Maryland hospitals have advanced in care coordination over the last few years. According to Ms. LaValle, Medicare and All Payer readmissions rates are converging. In addition, Ms. LaValle asserted that Maryland hospitals have nearly met the 2017 target and are already almost at next year's target.

Commissioners voted 5-1 to approve the recommendation. Commissioner Keane voted against the recommendation.

ITEM VIII
FINAL RECOMMENDATION FOR CONTINUED SUPPORT FOR THE MARYLAND
PATIENT SAFETY CENTER

Ms. Wunderlich presented staff's final recommendations for continued support of the Maryland Patient Safety Center (MPSC or Center) (See "Final Recommendations on Continued Financial Support for the Maryland Patient Safety Center for FY 2018" on the HSCRC website).

In 2004, the HSCRC adopted recommendations that made it a partner in the initiation of the MPSC by providing seed funding through hospital rates. The initial recommendations provided funding to cover 50% of the reasonable budgeted costs of the Center. The Commission receives a briefing and documentation annually on the progress of the MSPC in meeting its goals as well as an estimate of expected expenditures and revenues for the upcoming fiscal year.

Based on information presented to the Commission, and after evaluating the reasonableness of

the budget items presented, staff provides the following final recommendations on the MPSC funding support policy:

- The HSCRC should maintain current Commission policy (of an annual 10 percent reduction) by providing funding support for the MPSC in FY 2018 through an increase in hospital rates in the amount of \$787,320, a 10 percent reduction from FY 2017.
- In order to receive future funding from the hospital rate setting system, the MPSC should report quarterly on data that it has collected from hospitals and other facilities that participate in its quality and safety initiatives and demonstrate, to the extent possible, the ways in which MPSC initiatives are producing measurable gains in quality and safety at participating facilities. Prior to quarterly reporting, the MPSC should work in consultation with HSCRC to identify the appropriate reporting measures that are consistent with the requirements of the All-Payer Model.
- Going forward, the HSCRC should decrease the amount of support by 10 percent per year, or a greater amount contingent upon:
 - ❖ How well the MPSC initiatives align with a broader statewide plan and activities for patient safety; and
 - ❖ Whether new MPSC revenues offset HSCRC funding support.
- The MPSC should continue to pursue strategies to achieve long-term sustainability through other sources of revenue, including identifying other provider groups that benefit from MPSC programs.

Dr. Jim Rost, Chairman of the Patient Safety Center Board, Robert Imhoff, President and CEO and Dr. David Mayer, Board Member, presented an overview of the Maryland Patient Safety Center and its positive impact on patient safety at Maryland hospitals.

Chairman Sabatini requested the MPSC demonstrate that there is a direct correlation between their efforts and increased patient safety outcomes at Maryland hospitals. The Chairman indicated he requested this at last month's Public Meeting, but the presentation and information provided by the MPSC did not show a direct correlation.

Commissioner Keane indicated that HSCRC funding of the MPSC was intended to be seed money, yet the HSCRC is still providing funding over ten years later. Accordingly, Mr. Keane recommended that the Staff recommendation be modified to reduce funding to zero, but over a three year period and have the MPSC increase funding through other methods.

Commissioner Colmers commented that improvements in safety benefit everyone. He also indicated there might be some expectation for funding from payers. That funding should not come exclusively from hospitals, since safety benefits patients at large. Mr. Colmers then noted that in the FY17 and FY18 MPSC budgeted revenues, there was a reduction in cash contributions and contributions from hospitals, which does not seem to demonstrate interest from the hospitals and other members.

Mr. Imhoff indicated the MPSC is in favor of reducing dependence on HSCRC and increasing funding from outside sources, but that it will take time to raise the requisite funding.

Commissioner Keane made a motion to reduce funding for MPSC by 33% annually to zero out the funding in 3 years.

Commissioner Bayless expressed concern that there was not better alignment between MPSC outcomes and quality metrics that HSCRC monitors on a monthly basis.

Commissioner Wong stated that patient safety and quality metrics are difficult to measure and to attribute to particular source. He shared Commissioner Bayless' concern and noted that this same point had been made by Commissioners in the past. In addition, Commissioner Wong proposed a friendly amendment to Commissioner Keane's motion. Commissioner Wong suggested that funding be reduced by 20% annually to end all funding in 5 years.

Commissioner Keane declined to accept Commissioner Wong's amendment.

Commissioner Colmers made a motion to amend Staff's recommendation to reduce funding by 25% annually and to end funding in 4 years. The motion was seconded.

The Commissioners voted unanimously to approve Staff's recommendation with the modification that funding be reduced by 25% in FY 2018, and that funding decisions be revisited annually.

ITEM IX

FINAL RECOMMENDATION ON MEDICAID CURRENT FINANCING FOR CY 2017

Mr. Dennis Phelps, Associate Director, Audit Compliance presented Staff's final recommendation on Medicaid Current Financing for CY 2017 (see "Staff recommendation Medicaid Current Financing Methodology" on the HSCRC website).

The Medical Assistance Program (MAP) requested at the April 2016 Commission meeting to continue a modified current financing formula for CY 2016, i.e., increasing its CY 2015 current financing deposits being held by hospitals by the HSCRC final update factor for FY 2016.

The Commission approved MAP's request with the caveat that it develop a revised current financing methodology or be required to use the standard current financing methodology applicable to commercial payers for its CY 2017 deposit calculation.

On May 2, 2017, MAP submitted a request for the Commission to approve its use of the standard current financing methodology with the modification that excludes claims when Medicaid eligibility is retroactive. This methodology would provide an additional \$16.4 million in current financing deposits for CY 2017. MAP, however, pointed out in its request that it had not yet received approval from the Department of Budget and Management for the additional funds.

After review, staff recommends approval of MAP's revised methodology for its CY 2017 and future current financing calculations.

Mr. Mike Robbins, Senior Vice President, Rate Setting Maryland Hospital Association, stated that the hospitals support the change in methodology and the change in current financing for next year.

Commissioners unanimously approved Staff's recommendation.

ITEM X
DRAFT RECOMMENDATION FOR POTENTIALLY AVOIDABLE UTILIZATION
SAVINGS FOR RY 2018

Ms. Laura Mandel, HSCRC Policy Analyst, presented staff's draft recommendations for the Potentially Avoidable Utilization Savings Policy for RY 2018 (See "Draft Recommendation for the Potentially Avoidable Utilization Savings Policy for Rate Year 2018" on the HSCRC website).

HSCRC operates a potentially avoidable utilization (PAU) savings policy as part of its portfolio of value-based payment policies. This policy was formerly referred to as the readmission shared savings policy. The PAU savings policy is important for maintaining hospitals' focus on improving care and health for patients by reducing PAU and its associated costs. The PAU savings policy is also important for maintaining Maryland's exemption from the CMS quality-based payment programs, as this exemption allows the State to operate its own programs on an all-payer basis.

In this draft recommendation, staff is proposing to continue the PAU methodology used in rate year 2017, to increase the level of savings derived from the policy, and to specify the calculations and application of the policy in conjunction with the state fiscal year FY 2018 update.

Staff recommends the following for the PAU savings policy for RY 2018:

1. Set the value of the PAU savings amount to 1.45 percent of total permanent revenue in the State, which is a 0.20 percent net reduction in RY 2018.
2. Cap the PAU savings reduction at the statewide average reduction for hospitals with higher socio-economic burden.
3. Evaluate further expansion of PAU definitions for RY 2019 to incorporate additional categories of unplanned admissions.

Mr. Robert Murray, CareFirst Consultant, indicated there is an issue with the narrow definition of avoidable utilization. Mr. Murray suggested performing research to determine how to expand the definition. He also indicated that it is arguable that hospitals have more control over Part B services that contribute to utilization than they do for Prevention Quality Indicators (PQI).

Ms. Kinzer commended Staff for all the effort in completing the draft policy. Ms. Kinzer also acknowledged the potential to expand the definition of PAU. She noted, however, that expansion would need to be deliberated after thorough research was performed.

This is a draft recommendation; therefore, no Commission action is required.

ITEM XI
DRAFT RECOMMENDATION FOR MAXIMUM REVENUE GUARDRAIL FOR
QUALITY PROGRAMS FOR RY 2019

Dr. Schuster presented staff's draft recommendations for maximum revenue guardrail for quality programs for RY 2019 (See "Draft Recommendation for The Maximum Revenue Guardrail for Maryland Hospital Quality Programs for Rate Year 2019" on the HSCRC website).

The HSCRC performance-based payment methodologies are important policy tools that provide strong incentives for hospitals to improve their quality performance over time. These performance-based payment programs hold amounts of hospital revenue at-risk directly related to specified performance benchmarks. Because of the long-standing Medicare waiver for Maryland's all-payer hospital rate-setting system, special considerations were given to Maryland, including exemption from the federal Medicare quality-based programs. Instead, the HSCRC implements various Maryland-specific quality-based payment programs, which are discussed in further detail in other sections.

Maryland entered into a new All-Payer Model Agreement with the CMS effective January 1, 2014. One of the requirements under this new agreement is that the proportion of hospital revenue that is held at-risk under Maryland's quality-based payment programs must be greater than or equal to the proportion that is held at-risk under national Medicare quality programs. The Model Agreement also requires Maryland to achieve specific reduction targets in potentially preventable conditions and readmissions, in addition to the revenue at-risk requirement. In an effort to meet these reduction targets, Maryland restructured its quality programs in such a way that financial incentives are established prior to the performance period in order to motivate quality improvement and the sharing of best practices while holding hospitals accountable for their performance.

The purpose of this draft recommendation is recommend the maximum amount one hospital can be penalized for RY 2019, otherwise known as the maximum revenue guardrail. For RY 2019, the recommendations for the maximum penalties and rewards for each quality program are set forth in the individual policies rather than in an aggregate at-risk policy. At the time of this draft policy, final RY 2019 PAU savings adjustments have not been approved. Thus, this policy may be adjusted if there are any changes to those individual policies.

In order to develop the maximum revenue at-risk guardrail for RY 2019 quality programs, HSCRC staff considered CMS relevant policies, conducted analyses, and solicited input from the Performance Measurement Workgroup. During its February meeting, the Performance Measurement Workgroup reviewed data comparing the amount of revenue at-risk in Maryland with the national Medicare programs. The RY 2019 aggregate at-risk amounts were approved as part of the actual quality program policies, and this report only presents a recommendation for

the maximum revenue guardrail.

As the HSCRC increases the maximum revenue adjustments statewide, the potential for a particular hospital to receive significant revenue reductions has raised concerns that such penalties may generate unmanageable financial risk. As hospitals improve quality in the State, the variation between individual hospitals is expected to decline, increasing the chances of a single hospital receiving the maximum penalty for all quality programs. Similar to the risk corridors in other VBP programs, a maximum penalty guardrail may be necessary to mitigate the detrimental financial impact of unforeseen large adjustments in Maryland programs. Given the increases in risk levels in other programs, a hospital-specific guardrail will provide better protection than a statewide limit. In RY 2017 and RY 2018, the hospital maximum penalty guardrail was set at 3.50 percent of total hospital revenue. Staff used the Medicare aggregate amount at-risk total as the benchmark to calculate the hospital maximum penalty guardrail (e.g. 6 percent * 58 percent of inpatient revenue). This maximum revenue guardrail applies to QBR, MHAC, RRIP, and net PAU savings. For RY 2018, the estimated maximum penalty for one hospital was 1.06 percent of total hospital revenue (which corresponds to 1.41 percent of inpatient revenue).

Staff recommendation is that the maximum penalty guardrail should continue to be set at 3.50 percent of total hospital revenue for FY 2019.

This is a draft recommendation; therefore, no Commission action is required.

ITEM XII **DRAFT RECOMMENDATION FOR NURSING SUPPORT PROGRAM II**

Ms. Claudine Williams, Associate Director Policy Analysis, presented staff's draft recommendations for the Nurse Support Program II (NSP II) FY 2018 Competitive Institutional Grants (See "Nurse Support Program II FY 2018 Competitive Institutional Grants" on the HSCRC website).

This draft recommendation presents Staff recommendation for the Nurse Support Program II (NSP II) Competitive Institutional Grant Review Panel for fiscal year (FY) 2018. The FY 2018 recommendations align with both NSP II and national-level nursing goals and objectives. The recommendations are submitted by the staff of the Maryland Higher Education Commission (MHEC) and the HSCRC.

The HSCRC has funded programs to address the cyclical nursing workforce shortages since 1985. In July 2001, the HSCRC implemented the hospital-based NSP I program to address the nursing shortage impacting Maryland hospitals. The HSCRC implemented the NSP II program in May 2005 to respond to the faculty shortage and other limitations in nursing educational capacity underlying the nursing shortage. The Commission approved an increase of 0.1 percent of regulated gross hospital revenue to expand the pool of nurses in the State by increasing the capacity of nursing programs through institutional and nursing faculty interventions. The MHEC,

coordinating board for all Maryland institutions of higher education, was selected by the HSCRC to administer the NSP II programs.

Maryland has made significant progress in alleviating the State's nursing shortage. However, Maryland remains the only state in the geographic region and 1 of only 16 states in the nation projected to have a nursing shortage in 2025. In 2015, at the conclusion of the program evaluation of the NSP II for FYs 2006 to 2015, the HSCRC renewed funding at 0.1 percent of hospital regulated gross patient revenue for FYs 2016 through 2020. In 2016, the NSP II statute was revised by the Maryland General Assembly to meet Maryland's current hospital and health systems' changing health care delivery models to be inclusive of all registered nurses through Chapter 159 of the Acts of 2016 (SB108). The next program evaluation is due in FY 2020.

The staff draft recommendations on the NSP II funding for FY 2018 are as follows:

- The HSCRC and the MHEC staff members recommend that the NSP II Competitive Grant Review Panel Recommendation funding be approved at \$17,590,678.
- Support nursing undergraduate degree completions at Towson University with collaborative hospital partnerships with Howard County Hospital, Johns Hopkins Hospital, Sinai Hospital Center, St. Joseph's Medical Center and University of Maryland Medical Center;
- A planning grant at Baltimore City Community College for Associate to Bachelor of Science in Nursing degrees at Coppin State University;
- Implementation of a new Nurse Practitioner degree program in Western Maryland at Frostburg State University;
- A post-doctorate Adult and Gerontological Primary Care Nurse Practitioner Certificate at the University of Maryland;
- A continuation of the Allegany College of Maryland's Nurse Managed Wellness, and
- Developing web-based Leadership and Communication toolkits on the Eastern Shore of Maryland at Salisbury University with hospital partners Atlantic General Hospital, Peninsula Regional Medical Center, and University of Maryland Shore Regional Health.
- HSCRC and MHEC staff members recommend the 28 proposals presented in Table 1 for FY 2018 Competitive Institutional Grant funding.

This is a draft recommendation; therefore, no Commission action is required.

ITEM XIII **DRAFT RECOMMENDATION FOR UPDATE FACTOR FOR FY 2018**

Mr. Jerry Schmith, Director Center for Revenue and Regulation Compliance, and Ms. Kinzer presented the staff's draft recommendation concerning the update factors for FY 2018 (See "Draft Recommendations on the Update Factors for FY 2018" on the HSCRC website).

On July 1st of each year, the HSCRC updates hospitals' rates and approved revenues to account

for inflation policy adjustments and other adjustments related to performance and settlements from prior years.

Based on the currently available data and the staff's analyses to date, the HSCRC staff is providing the following preliminary recommendations for the FY 2018 update factors. This preliminary staff recommendation is subject to change pending the release of updated figures from the CMS Office of Actuary and evaluation of modeled update results.

For Global Revenues:

- Provide an overall increase of 3.39 percent for revenue (net of offsets) and 3.02 percent per capita for hospitals under Global Budgets. In addition, staff is proposing to split the approved revenue into two targets, a mid-year target and a year-end target. Staff will apply 49.7 percent of the Total Approved Revenue to determine the mid-year target and the remainder of revenue will be applied to the year-end target. Staff is aware that there are a few hospitals that do not follow this pattern of seasonality and will adjust the split accordingly.
- Allocate 0.28 percent of the inflation allowance based on each hospital's proportion of drug cost to total cost. In addition to an adjustment for drug prices, staff is also proposing a 0.20 percent adjustment for drug volume/utilization, 0.10 percent prospectively allocated to hospitals using the FY 2016 outpatient oncology drug utilization and standard costs filed by hospitals, and the other 0.10 percent based on actual growth for FY 2017 over FY 2016. These adjustments will help fund the rising cost of new outpatient, physician-administered drugs.
- Consider whether to differentiate hospital updates based on progress relative to high needs patients and other aligned efforts with physicians and other providers.
- Evaluate the impact of the difference statistic to determine compliance with both the All Payer Waiver Test and the Medicare Waiver Test.

Non-Global Revenues including psychiatric hospitals and Mt. Washington Pediatric Hospital:

- Provide an overall update of 2.18 percent by using a productivity adjustment of 0.50 percent from the inflation factor of 2.68 percent.
- Continue to focus on implementation of quality measures and value based programs for psychiatric facilities.

Commissioner Keane noted that in prior years the update recommendation included a discussion of Difference Statistics i.e., the difference between the annual growth in hospital charges for services to Maryland residents by resident and the annual growth in all hospital payments per Maryland Medicare Fee-for-Service beneficiary. Commissioner Keane asked what the calculation was this year and its impact on the allowable update. Commissioner Keane also asked what Staff thought was the anticipated impact of hospital undercharges in the second half of CY2016 which must be charged in the first half of CY 2017 as well as the 0.56% update carryover, doubled, which also has to be charged by hospitals in the first half of CY 2017 on the affordable update.

Mr. Schmith indicated that Staff has yet to receive the Medicare beneficiary increase from the Office of the Actuary.

Ms. Kinzer stated that Staff believes that the Difference Statistic for last year was approximately 2%. However, Jack Cook, PhD. and Bob Murray did the calculation of the three years under the New Model and came up with approximately 1.4% as very conservative estimate of last year's Difference Statistics.

As to the undercharges, Ms. Kinzer stated that Staff had submitted a draft request to CMMI, with documentation, requesting that undercharges for CY 2016 not being recovered in CY 2017 not be used as a reason to fail the test and invoke corrective action. Ms Kinzer noted that in discussions about this issue, CMM seems to be sympathetic.

Mike Robbins stated that in regards to GBR hospitals, with respect to the 0.4% allowance for unforeseen adjustments, there may be a need for some hospitals to seek some of that funding from the HSCRC. Regarding specialty hospitals, Mr. Robbins stated Medicare IPPS uses a 0.4% productivity factor and noted the HSCRC is using 0.5% productivity. Accordingly, he advocated for the use of a 0.4% productivity adjustment for specialty hospitals which would increase the update factor for those hospitals from 2.18% to 2.28%.

Mr. Jon Blum, Executive Vice President CareFirst, and Mr. Robert Murray, CareFirst Consultant expressed CareFirst's opposition to the Staff's recommendation. Mr. Blum stated that based on CareFirst's analysis, the State would fail three waiver tests going forward if the draft update factor is approved. Mr. Blum also noted there is no evidence hospital finances have degraded across the State as hospital margins continue to be strong.

ITEM XIV **FISCAL YEAR 2016 COMMUNITY BENEFITS REPORT**

Ms. Laura Spicer, Director of Health Reform, The Hilltop Institute, provided background and summarized the FY 2016 Maryland Hospital Community Benefits Report (CBR) (see "HSCRC FY 2016 Community Benefits Report Findings" on the HSCRC's website).

Each year, the HSCRC collects community benefit information from individual hospitals to compile into a publicly available statewide CBR. Current year and previous CBRs submitted by hospitals are available on the HSCRC website. According to Ms. Spicer, the FY CBR indicated that hospitals: 1) reported a total of \$1.5 billion in community benefits for FY 2016 (FY 2015 amount was also approximately \$1.5 billion); 2) provided an average of 9.30% of total operating expenses in community benefits (compared to 10.80% in FY 2015); and 3) provided net community care of \$827.3 million or 5.72% of hospitals' net operating expenses (down from \$840.3 million and 5.72% of hospitals' net operating expenses in FY 2015).

ITEM XV

HEARING AND MEETING SCHEDULE

June 14, 2017	Times to be determined, 4160 Patterson Avenue HSCRC Conference Room
July 12, 2017	Times to be determined, 4160 Patterson Avenue HSCRC Conference Room

There being no further business, the meeting was adjourned at 4:03 p.m.



National Cost Pressures in Hospitals

6/14/2017



Overview

- ▶ Healthcare affordability continues as the centerpiece of national conversations
- ▶ Increasing federal and state participation in funding is creating budgetary challenges
 - ▶ The ACA created funding cuts for providers
 - ▶ Providers are experiencing financial challenges
- ▶ Maryland providers are subject to the same cost pressures
 - ▶ The All-Payer Model provides additional avenues for success



Challenges Nationally for Hospitals



Hospitals are experiencing margin pressure

- ▶ Growth in lower yielding Medicare and Medicaid revenues putting pressures on margins
- ▶ Price pressure from commercial payers increasing
- ▶ Increasing supply and drug costs, outstripping revenue growth
- ▶ CBO projects contraction of Medicare margins due to Medicare's ACA-related reductions
 - ▶ Affordable Care Act rate reductions (-.75%)
 - ▶ DSH reductions
- ▶ Assumption of risk—provider owned health plans
- ▶ Increased Medicaid coverage with lower yields and strained state budgets continuing pressure on Medicaid yields

Hospitals around the country are feeling the effects

UPMC's operating income down 35% in first 9 months of fiscal year

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | May 05, 2017 | [Print](#) | [Email](#)

UPMC saw revenues increase in the first nine months of fiscal year 2017, but the Pittsburgh-based health system ended the period with lower operating income than in the first nine months of fiscal year 2016.

UPMC recorded operating income of \$178 million on revenues of \$10.6 billion in the first nine months of fiscal year 2017, compared to operating income of \$272 million on revenues of \$9.5 billion in the same period last year.

"Prior-year operating income benefitted from \$46 million of interest and favorable adjustment of reserves | operating physician

University of Iowa Health Care halves 2017 operating income estimates due to Medicaid denials

Texas Children's records \$36.2M operating loss on insurance arm

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | May 30, 2017

Houston-based Texas Children's Hospital saw its financial picture improve in the first six months of fiscal year 2017, despite recording an operating loss of \$36.2 million on its health plan, according to bondholder [documents](#).

Texas Children's reported operating income of \$28.5 million on revenues of \$1.7 billion in the first six months of fiscal year 2017. In the same period of fiscal year 2016, the hospital recorded an operating loss of \$14.9 million on revenues of \$1.5 billion. The hospital said its financial boost was primarily attributed to higher net patient service revenue.

Texas Children's health plan struggled in the six-month period that ended March 31. The hospital



Southeast Alabama Medical Center cuts 80 jobs as revenue trends downward

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | May 25, 2017 | [Print](#) | [Email](#)

Southeast Alabama Medical Center in Dothan has eliminated 80 jobs as part of a cost-cutting program, according to the *Dothan Eagle*.

The 80 jobs represent about 2.8 percent of the 2,800 jobs at the hospital. The hospital did not say which positions were affected by the cuts.

SAMC's revenue has been on a decline in recent years, and the hospital ended 2016 with an operating loss of \$2 million. To stem its losses, the hospital in February set a goal to cut \$30 million in expenses and created task force groups to explore where cost reductions could be made, according to the *Dothan Eagle*.

Although the hospital isn't facing a financial crisis, Mark Stewart, director of community relations at SAMC, told the *Dothan Eagle* the cost-cutting efforts will help prepare the facility for changes to the industry.

Partners HealthCare cutting \$600m in costs



Mayo Clinic's operating income drops 9.8% :

7 things to know

Navicent Health's operating income drops

75% in FY 2016

Written by Morgan Haefner | February 27, 2017 |

Rochester, Minn.-based Mayo Clinic saw its operating income [fall](#) from \$526 million in 2015 to \$475 million in 2016, reflecting increased costs associated with growing its workforce and providing uncompensated care to patients in Medicaid programs.

Banner Health's operating income drops

36% in Q1

MD Anderson points to Epic implementation for 77% drop in adjusted income

Written by Akanksha Jayanthi ([Twitter](#) | [Google+](#)) | August 26, 2016 | [Print](#) | [Email](#)

Houston-based MD Anderson Cancer Center reported a 76.9 percent drop in adjusted income for

Baystate Health's operating income drops

52% in FY 2016

BRIEF

Cleveland Clinic suffers 71% operating income drop

MARKET NEWS | Tue May 2, 2017 | 8:39am EDT

Hospital operator HCA Holdings' quarterly profit drops 5 pct



HCA Holdings Inc, the largest U.S. for-profit hospital operator, posted a 5 percent drop in quarterly profit due to higher costs even as patient admissions increased.

Survey: Health systems, physicians reported substantial operating losses in 2015

Nearly half of region's hospitals report operating losses

May 2, 2017 12:00 AM

By Steve Twedt / Pittsburgh Post-Gazette

Kentucky system gets downgrade on eve of \$296.5 million bond offering

By Dave Barkholz | May 8, 2017

Baptist Healthcare System in Louisville, Ky., has been hit with a debt downgrade by Moody's as it prepares for a

Advocate plans \$200 million in cuts

By Kristen Schorsch May 04, 2017

Advocate Health Care, the largest hospital network in Illinois, pressures mount.

Rocky reimbursement sparks Providence St. Joseph's Q1 loss

CHI's operating loss swells to \$153.9M in Q2

Health plan plunges Mass Gen parent into \$108 million operating loss for 2016

Dartmouth-Hitchcock records \$39M operating loss as expenses grow

Allegheny Health Network records \$39M operating loss

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | February 02, 2017 | [Print](#) | [Email](#)

Written by Kelly Gooch | December 05, 2016 | [Print](#) | [Email](#)

Despite revenue jump, LifePoint's net income falls 31% in 2016

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | February 17, 2017 | [Print](#) | [Email](#)

LifePoint Health saw revenues [increase](#) in 2016, but the Brentwood, Tenn.-based hospital operator's bottom line took a hit from several nonrecurring expenses.

Texas Children's operating income falls 62% as health plan costs grow

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | December 14, 2016 | [Print](#) | [Email](#)

Texas Children's Hospital saw revenue increase 5.3 percent year over year to nearly \$3 billion in fiscal year 2016, but the Houston-based hospital saw its operating surplus decline, according to [recently released bondholder documents](#).

SSM Health's operating income tumbles after St. Louis hospital acquisition

RAND study: MACRA could cause \$250B

drop in hospital Medicare revenue by 2030

CHS to sell 25 hospitals as net loss swells to \$1.7B in 2016

Advocate Health Care looks to cut costs after Q1 revenue falls below budget target

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | May 25, 2017 | [Print](#) | [Email](#)

CHI takes \$483 million operating loss into Dignity merger talks

CHS records \$199M net loss, says divestiture spree is over

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | May 02, 2017 | [Print](#) | [Email](#)

Franklin, Tenn.-based Community Health Systems [posted](#) a net loss of \$199 million in the first quarter after recording net income of \$11 million in the same period of the year prior.

CHS said revenues dipped to \$4.49 billion in the first quarter of this year, down from \$4.99 billion in the same period of 2016. The decrease in revenues was attributable to a net of 100,000

MD Anderson records \$102.4M operating loss in first 2 months of FY 2017

NYC Health + Hospitals sees operating loss nearly double to \$673M

Written by Ayla Ellison ([Twitter](#) | [Google+](#)) | June 01, 2017 | [Print](#) | [Email](#)

Dignity Health reports \$85M operating loss in Q3

Written by Morgan Haefner | May 17, 2017 | [Print](#) | [Email](#)

San Francisco-based Dignity Health reported a net operating loss of \$85 million in the third quarter of 2017.



NYC Health & Hospitals eliminates 476 positions

MEIRO

By Alex Kacik | June 2, 2017

New York hospitals brace for bloodbath of pink slips

By Carl Campanile

May 30, 2017 | 5:19pm | Updated

Centegra unexpectedly loses money after opening its latest hospital

By Kristen Schorsch | June 5, 2017

Centegra Health System made a risky bet last August that most systems in

Data Points -- Financial pressures mounting for hospitals

By Modern Healthcare | May 13, 2017

Financial challenges in recent years have led to an increasingly competitive market among the nation's hospitals. [Download](#)

Rural hospitals report deficits last year

BY JON O'CONNELL, STAFF WRITER / PUBLISHED: APRIL 26, 2017

Nashville General Hospital Leaders Say Cuts May Be Ahead

BY: Jason Lamb

POSTED: 8:05 PM, May 20, 2017

MAY 26 | MORE ON MERGERS & ACQUISITIONS

Swelling health plan losses batter Northwell's earnings

By Dave Barkholz | May 31, 2017

Dover's Union Hospital to join Cleveland Clinic System after year of cost-cutting, layoffs

Two entities have signed a letter of intent; details of agreement to be finalized over the next 90 days, hospital says.

INDUSTRY NEWS > HEALTH CARE

Layoffs at South Shore Hospital meant to contain costs

KentuckyOne to sell its Louisville hospitals to stop losses

Dallas hospital abruptly closes as independent hospitals flounder in value-based models

By Alex Kacik | June 5, 2017

Maryland has Supported the All-Payer Model Goals

- ▶ Eliminated the MHIP assessment on hospitals
- ▶ Expanded Medicaid with avoided uncompensated care of more than 2%
- ▶ MD statute reduces the Medicaid deficit assessment by \$145M over 5 years (FY2019-FY2023)
 - ▶ Impact on Medicare savings is ~\$60M
- ▶ HSCRC regulatory structure has evolved

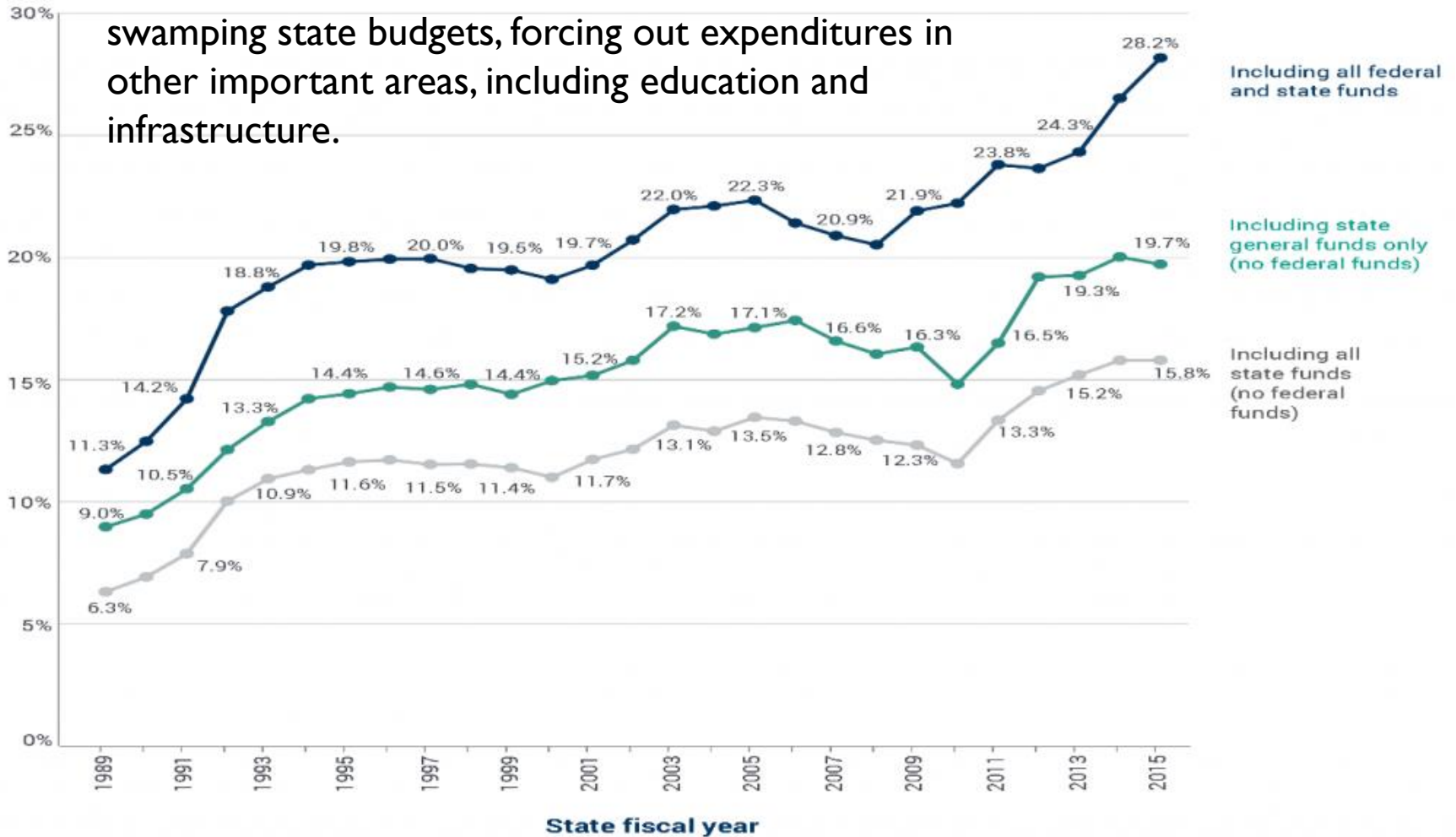
The All-Payer Model Provides Additional Tools to Maryland Hospitals

- ▶ Maryland hospitals are subject to the same pressures as hospitals nationally
- ▶ The All-Payer Model has additional tools for hospitals to work with to meet performance requirements through reduced avoidable utilization
- ▶ Some of the the tools Maryland has/has proposed under the progression plan are:
 - ▶ All-Payer hospital global revenues
 - ▶ Funding for care management initiatives
 - ▶ Care redesign tools, starting July 1
 - ▶ Maryland Comprehensive Primary Care program, proposed for 2018
 - ▶ Population health resources from the State (increased focus through the Progression Plan)

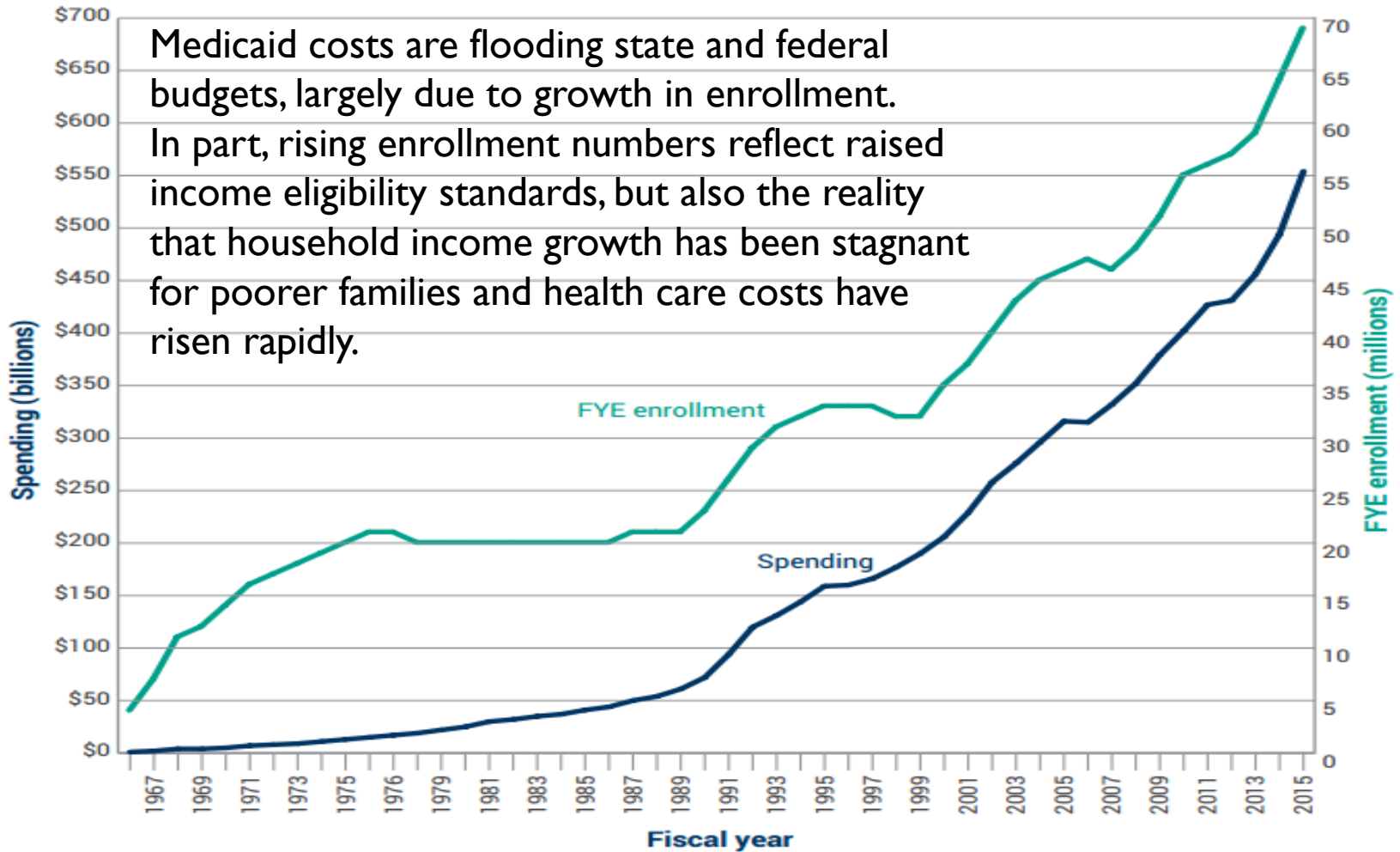
Supplemental Coverage Costs and Medicaid Statistics

State Medicaid Spending Pressures

MACPAC has documented how Medicaid is swamping state budgets, forcing out expenditures in other important areas, including education and infrastructure.



Medicaid Enrollment/Spending Growth



Continuing Affordability Crisis

- ▶ Coverage is not affordable for many individuals, families and businesses
 - ▶ Average single premium (2015 MEPS)
 - ▶ US \$5,963
 - ▶ Maryland \$6,229
 - ▶ Average family premium (2015 MEPS)
 - ▶ US \$17,322
 - ▶ Maryland \$17,961

Update on Medicare Performance Adjustment (MPA)



Medicare Performance Adjustment (MPA)

▶ **What is it?**

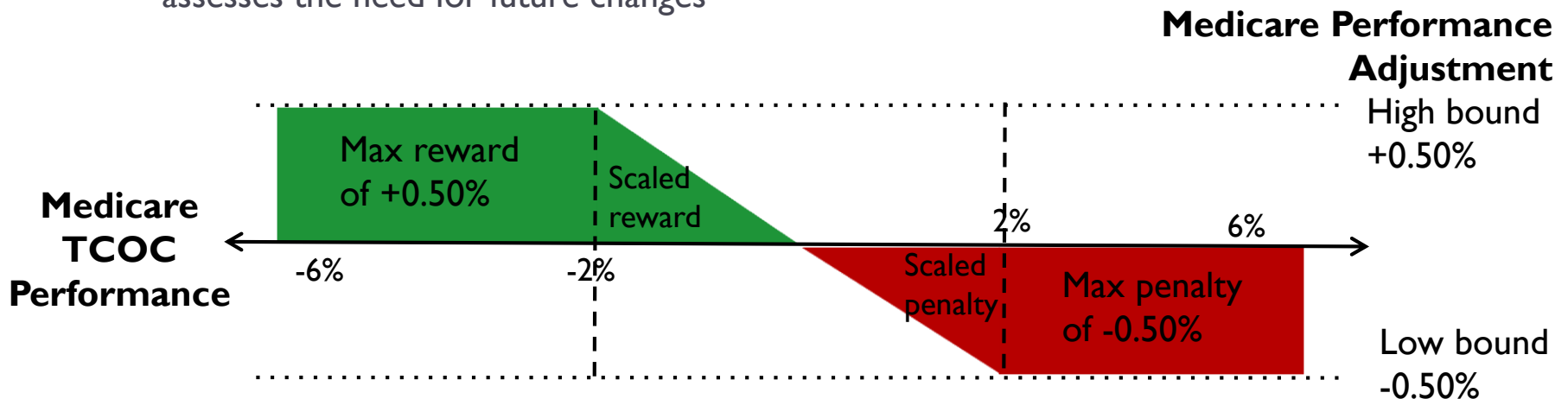
- ▶ A scaled adjustment for each hospital based on its performance relative to a Medicare Total Cost of Care (TCOC) benchmark

▶ **Objectives**

- ▶ Allow Maryland to step progressively toward developing the systems and mechanisms to control TCOC, by increasing hospital-specific responsibility for Medicare TCOC (Part A & B) over time (Progression Plan Key Element 1b)
- ▶ Provide a vehicle that links non-hospital costs to the All-Payer Model, allowing participating clinicians to be eligible for bonuses under MACRA
- ▶ **Design consideration: Possibly implement MPA as an adjustment to Medicare payments rather than as a revenue adjustment**

MPA: Current Design Concept

- ▶ Based on a hospital's performance on the Medicare TCOC measure, the hospital will receive a scaled bonus or penalty
 - ▶ Function similarly to adjustments under the HSCRC's quality programs
 - ▶ Be a part of the revenue at-risk for quality programs (redistribution among programs)
 - ▶ NOTE: Not an insurance model
- ▶ Scaling approach includes a narrow band to share statewide performance and minimize volatility risk
- ▶ MPA will be applied to Medicare hospital spending, starting at 0.5% Medicare revenue at-risk (which translates to approx. 0.2% of hospital all-payer spending)
 - ▶ First payment adjustment in July 2019
 - ▶ Increase to 1.0% Medicare revenue at-risk, perhaps more moving forward, as HSCRC assesses the need for future changes



Tentative MPA Timeline

Date	Topic/Action
Ongoing	TCOC Work Group meetings, transitioning to technical revisions of potential MPA policy with stakeholders
October 2017	Staff drafts RY 2020 MPA Policy
November 2017	Draft RY 2020 MPA Policy presented to Commission
December 2017	Commission votes on Final RY 2020 MPA Policy
Jan 1, 2018	Performance Period for RY 2020 MPA begins

Rate Year 2018			Rate Year 2019				Rate Year 2020				Rate Year 2021		
Calendar Year 2018			Calendar Year 2019				Calendar Year 2020				CY2021		
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun

Hospital Calculations	MPA RY2020 Performance Period			MPA RY2021 Performance Period				MPA RY2022 Performance Period				
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Hospital Adjustment						MPA RY2020				MPA RY2021	
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MPA: Design Considerations

- ▶ How should the MPA interact with existing revenue at-risk for quality?

Maximum Quality Penalties or Rewards for Maryland and The Nation

MD All-Payer	Max Penalty %	Max Reward %	National Medicare	Max Penalty %	Max Reward %
RY 2019			FFY 2019		
MHAC	2.0%	1.0%	HAC	1.0%	N/A
RRIP	2.0%	1.0%	HRRP	3.0%	N/A
QBR	2.0%	2.0%	VBP	2.0%	2.0%

- ▶ How should the MPA reflect statewide Medicare TCOC performance? Possible options:
 - ▶ In future years, split MPA into two parts: (a) hospital-specific TCOC performance and (b) statewide TCOC performance; or
 - ▶ Adjust trend factor for benchmarking by statewide TCOC performance
- ▶ How to target hospitals' MPA adjustment to Medicare?
 - ▶ Possible option: Adjust Medicare payments to hospitals (not charges), similar to sequestration adjustment on federal Medicare payments



Monitoring Maryland Performance Medicare Fee-for-Service (FFS)

Data through March 2017– Claims paid through April
Source: CMMI Monthly Data Set



HSCRC

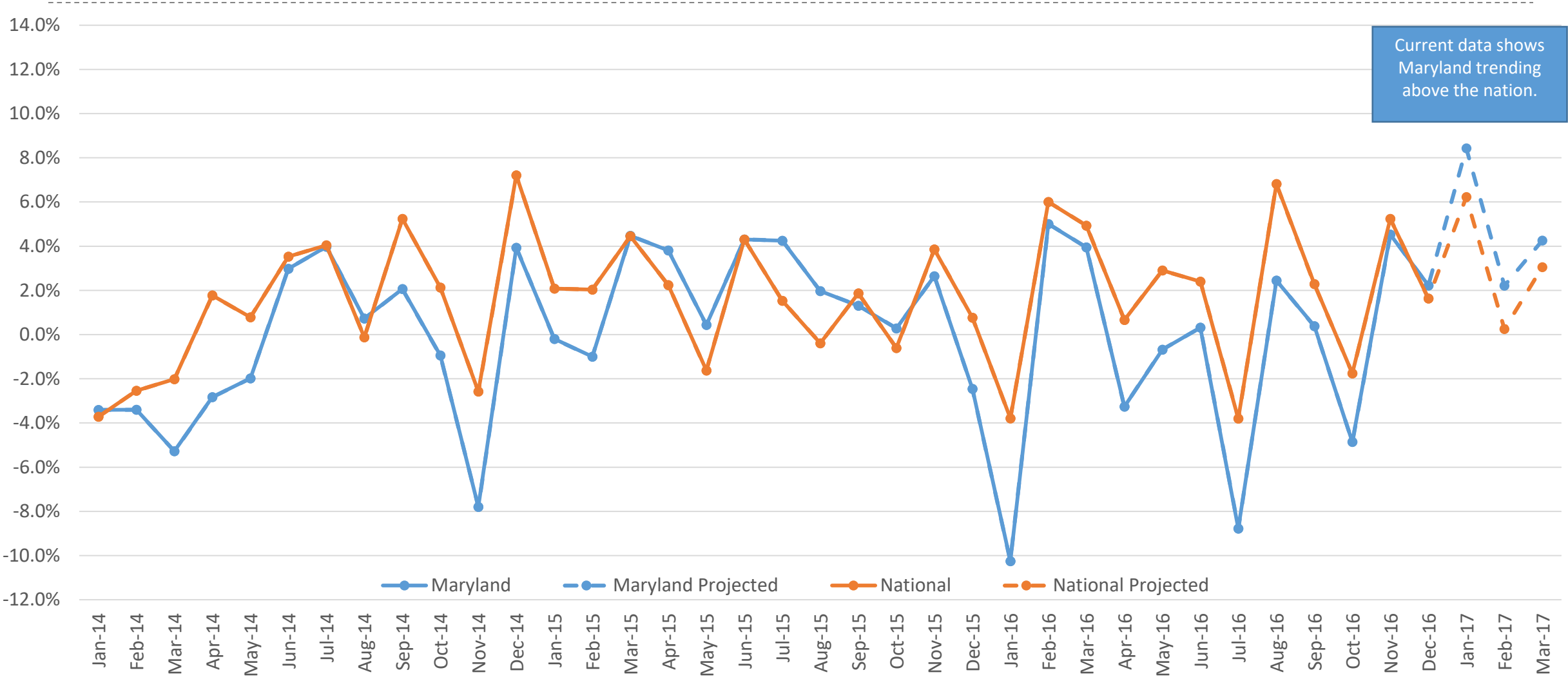
Health Services Cost
Review Commission

Disclaimer:

Data contained in this presentation represent analyses prepared by HSCRC staff based on data summaries provided by the Federal Government. The intent is to provide early indications of the spending trends in Maryland for Medicare FFS patients, relative to national trends. HSCRC staff has added some projections to the summaries. This data has not yet been audited or verified. Claims lag times may change, making the comparisons inaccurate. ICD-10 implementation and EMR conversion could have an impact on claims lags. These analyses should be used with caution and do not represent official guidance on performance or spending trends. These analyses may not be quoted until public release.

Medicare Hospital Spending per Capita

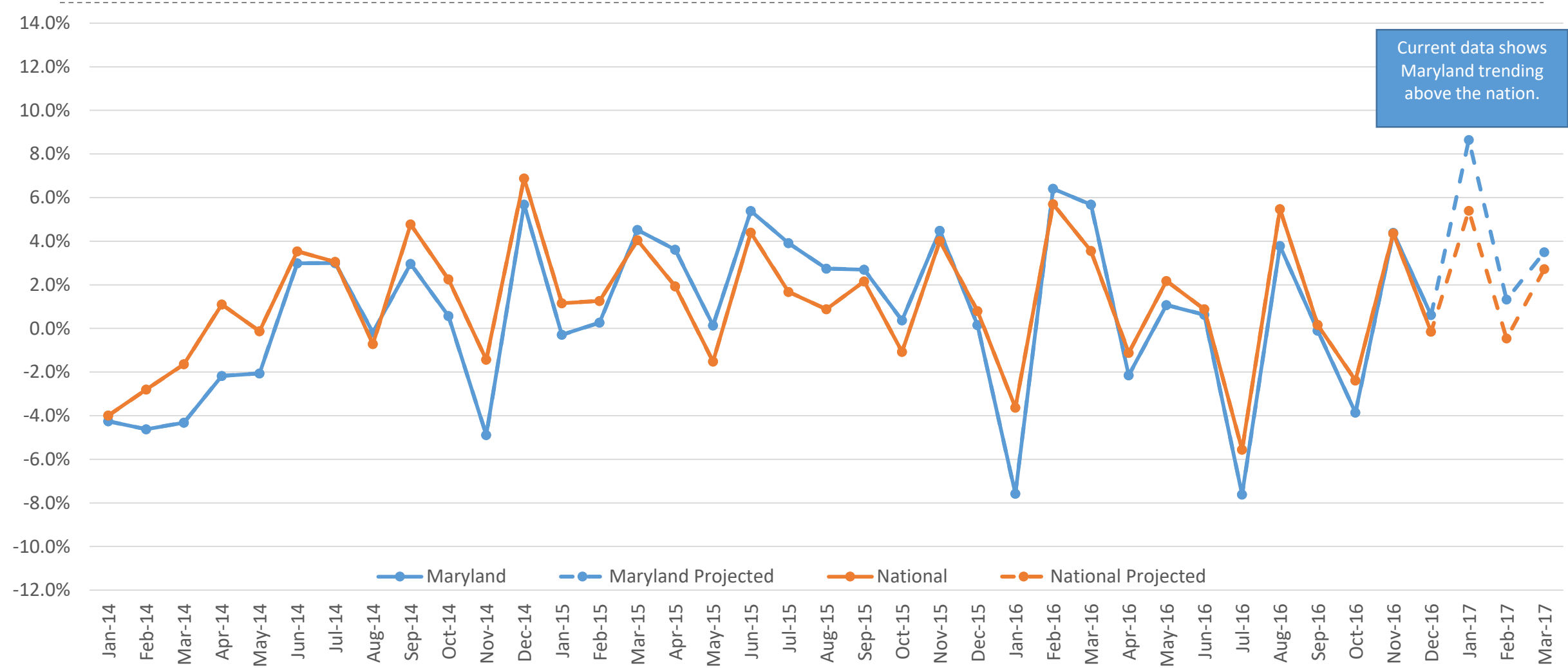
Actual Growth Trend (CY month vs. prior CY month)



Current data shows Maryland trending above the nation.

Medicare Total Cost of Care per Capita

Actual Growth Trend (CY month vs. prior CY month)



Current data shows Maryland trending above the nation.



Medicare Non-Hospital Spending per Capita

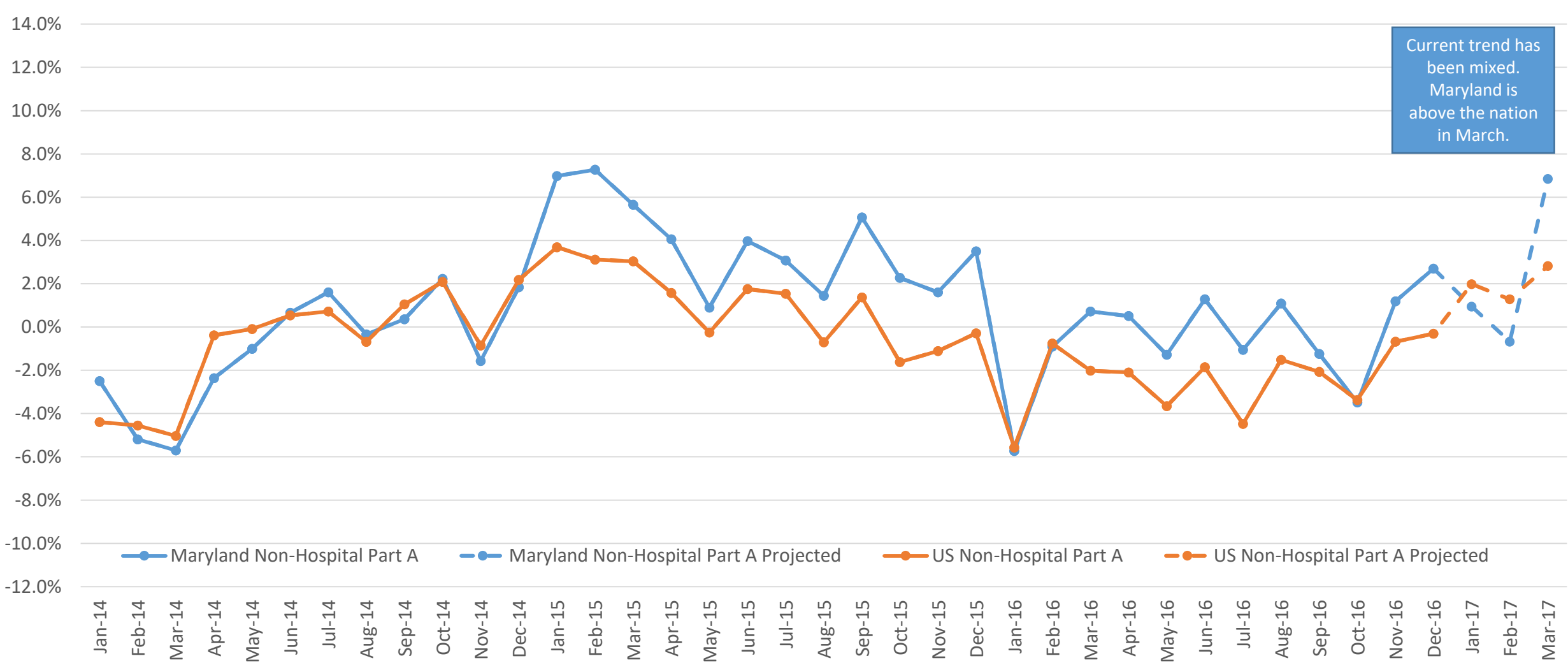
Actual Growth Trend (CY month vs. prior CY month)



Current data shows Maryland trending above the nation.

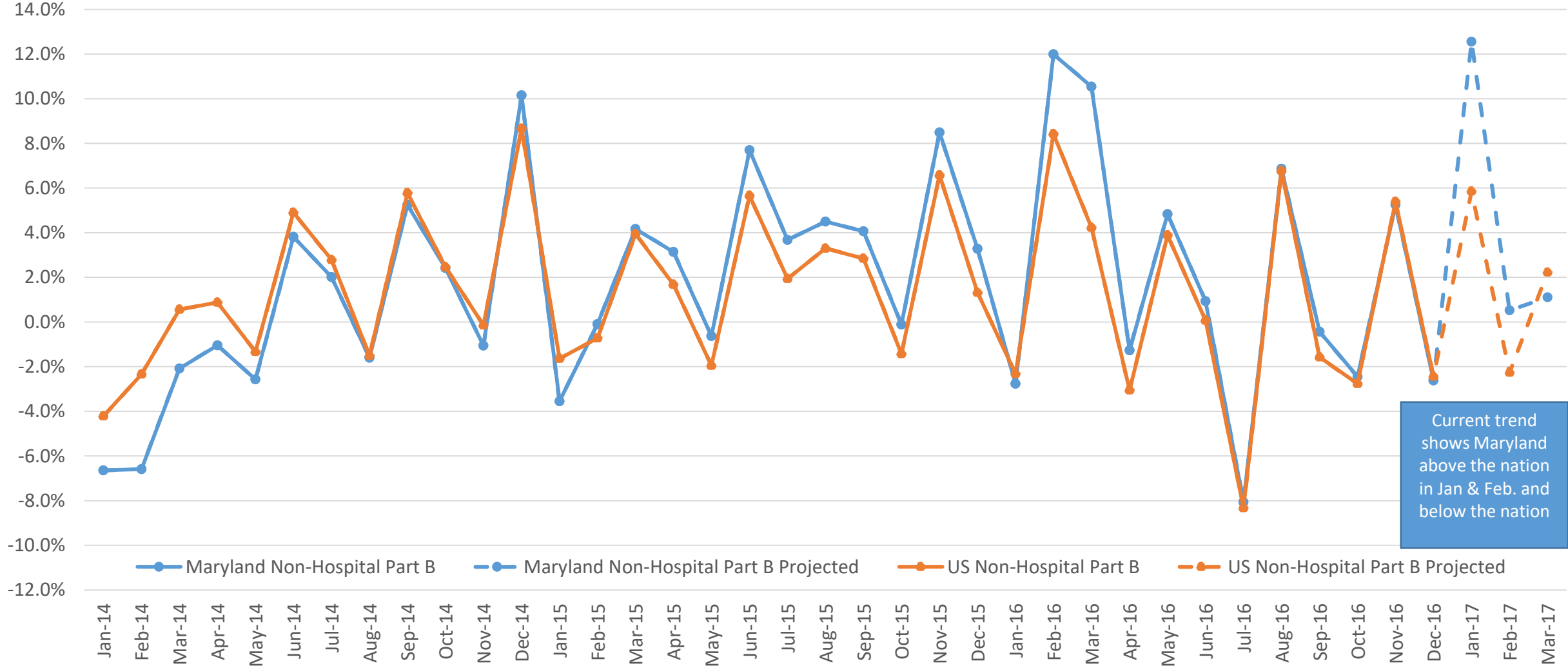
Medicare Non-Hospital Part A Spending per Capita

Actual Growth Trend (CY month vs. prior CY month)



Medicare Non-Hospital Part B Spending per Capita

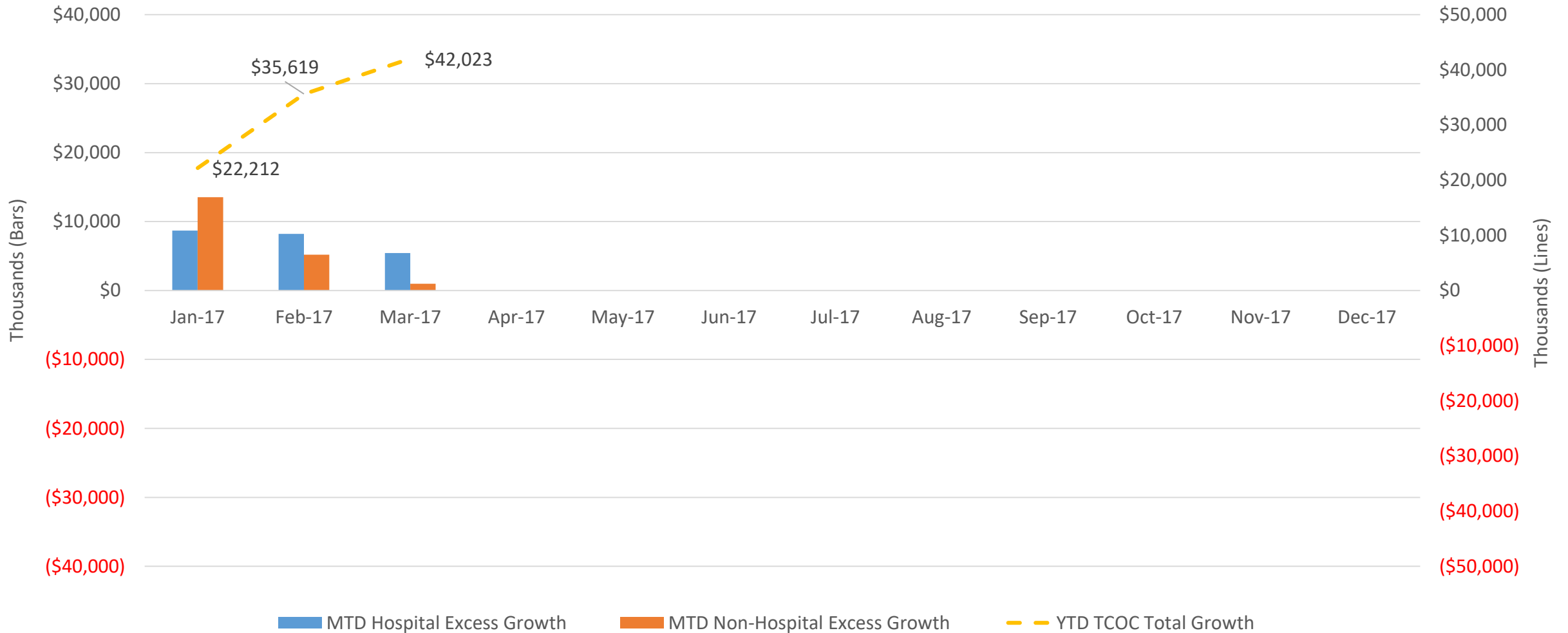
Actual Growth Trend (CY month vs. prior CY month)



Current trend shows Maryland above the nation in Jan & Feb. and below the nation

Medicare Hospital & Non-Hospital Growth

(with completion) CYTD through March 2017





Monitoring Maryland Performance Financial Data

Year to Date through April 2017
(includes 9 month experience revisions)

Source: Hospital Monthly Volume and Revenue and Financial Statement Data
Run: June 2017



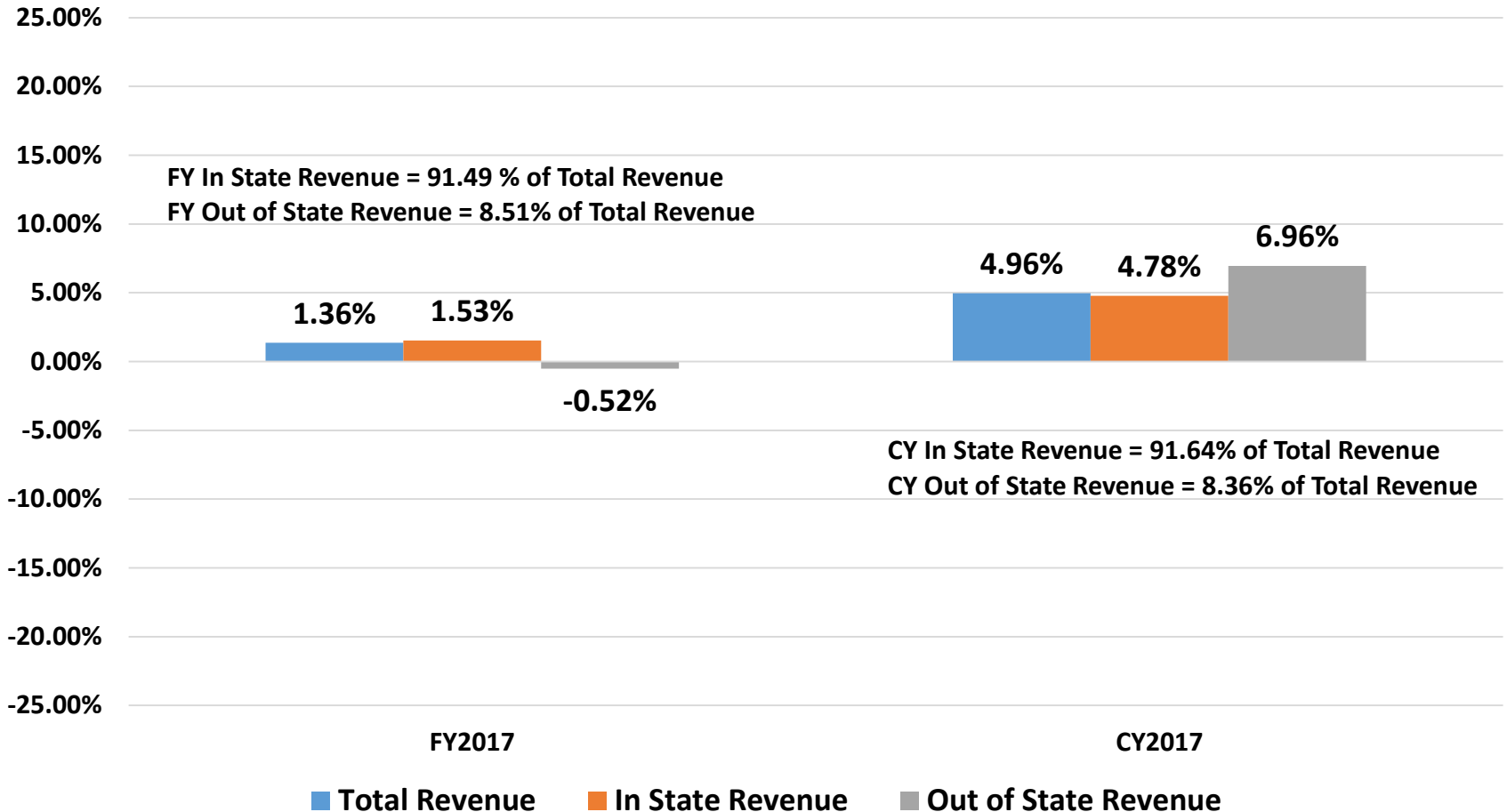
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HSCRC

Health Services Cost
Review Commission

Gross All Payer Revenue Growth

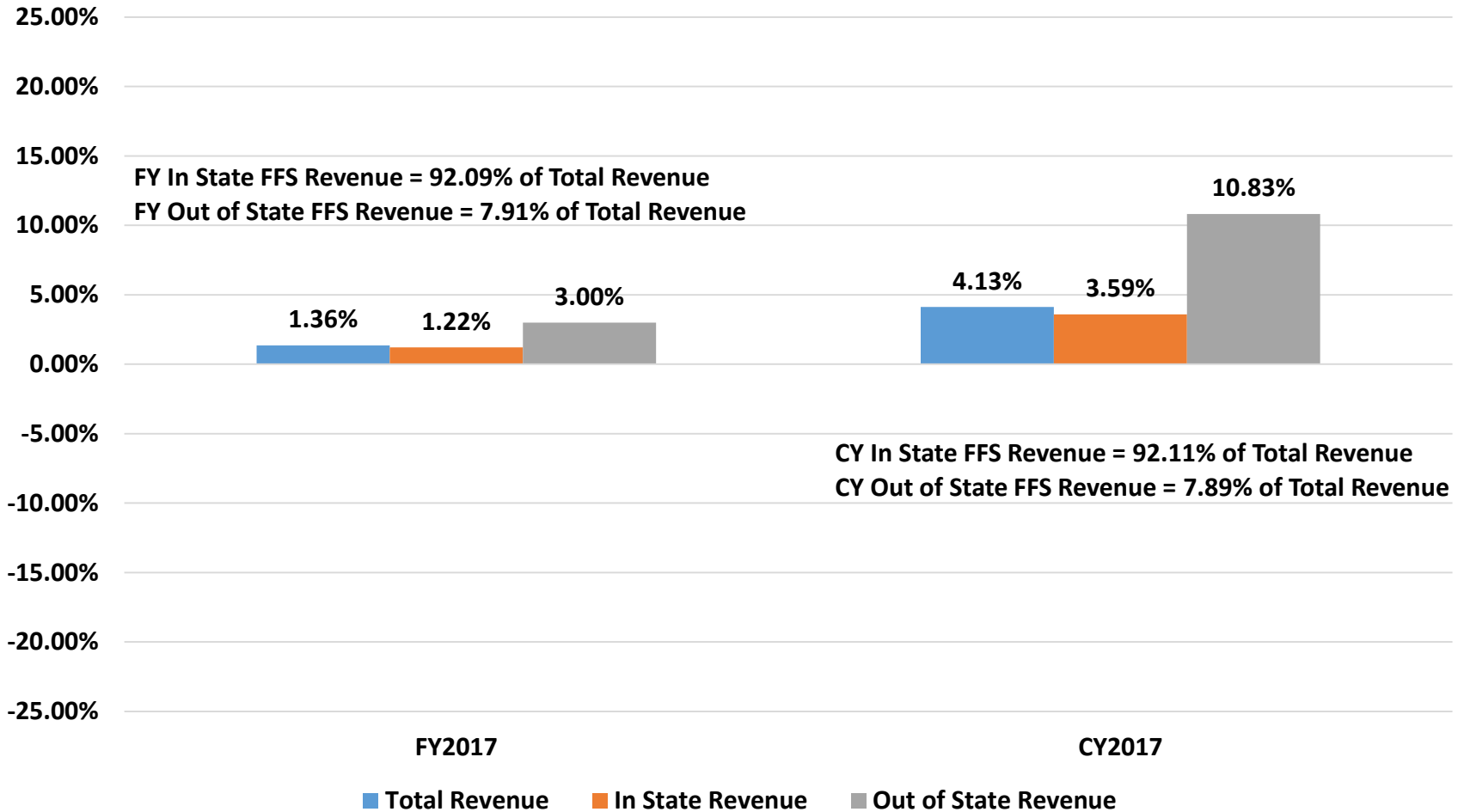
FY 2017 (Jul 2016-April 2017 over Jul 2015-April 2016) and CY 2017 (Jan-April 2017 over Jan-April 2016)



The State's Fiscal Year begins July 1

Gross Medicare Fee for Service Revenue Growth

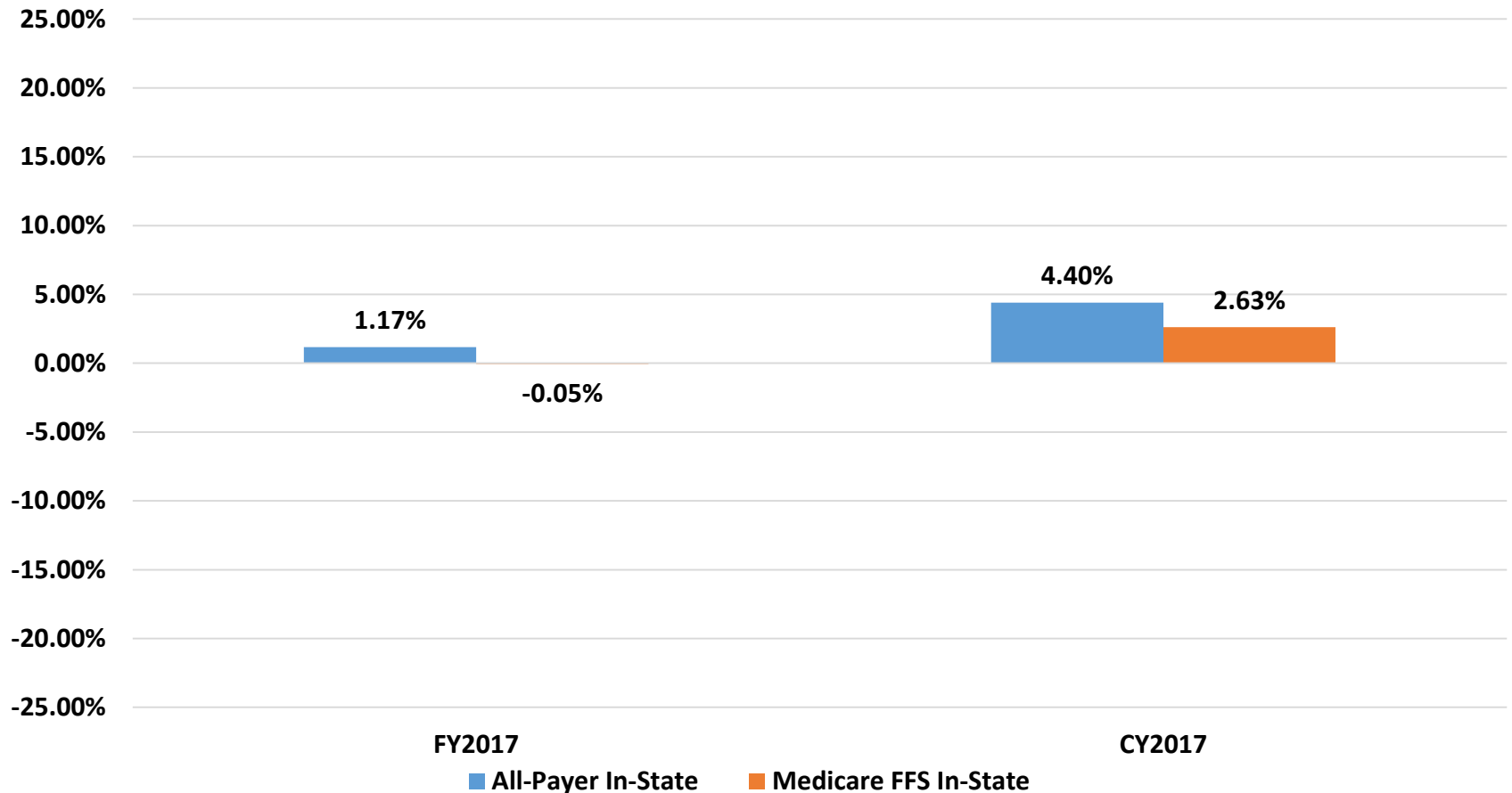
FY 2017 (Jul 2016 - April 2017 over Jul-April 2015) and CY 2016 (Jan-April 2017 over Jan-April 2016)



The State's Fiscal Year begins July 1

Hospital Revenue Per Capita Growth Rates

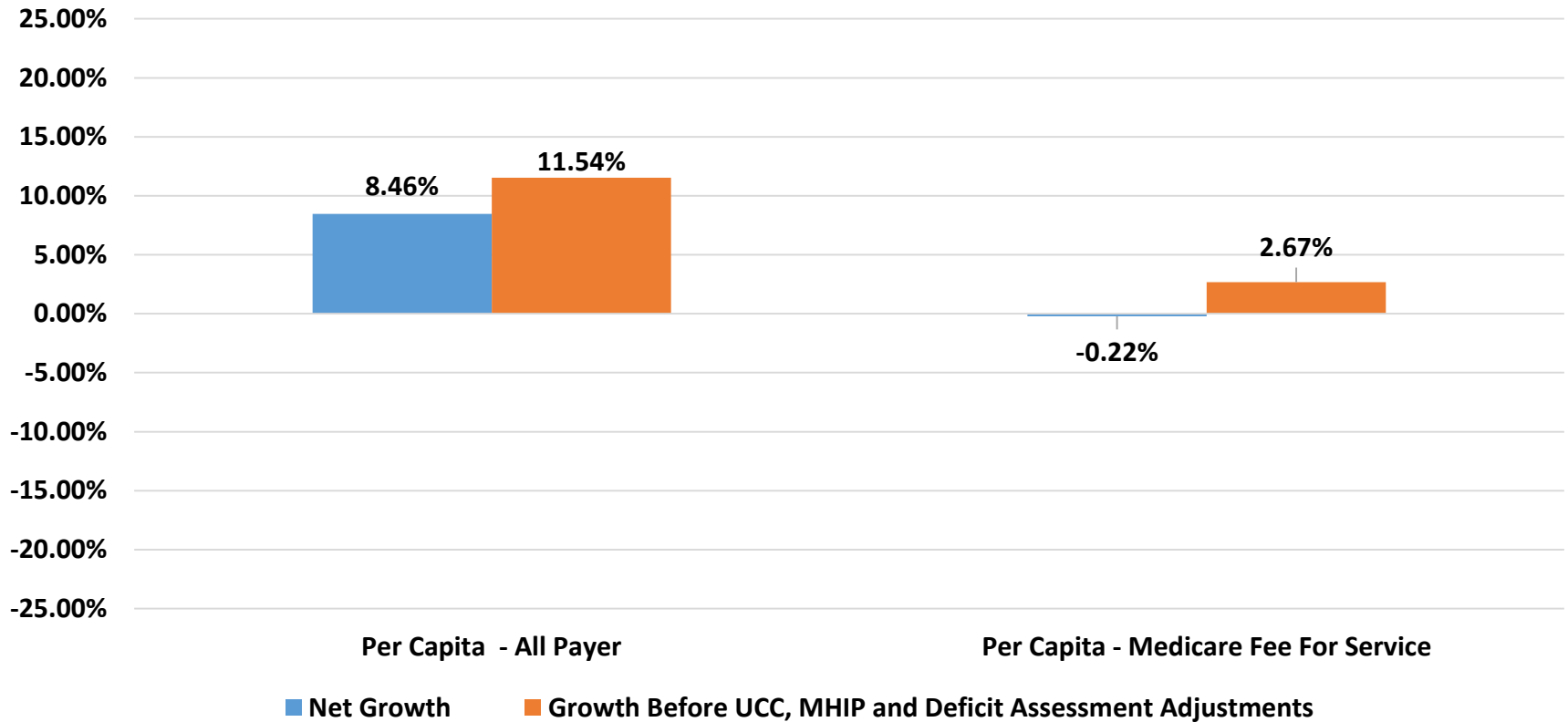
FY 2017 (Jul 2016 – April 2017 over Jul 2015 – April 2016) and CY 2017 (Jan-April 2017 over Jan-April 2016)



The State's Fiscal Year begins July 1

Hospital Revenue Per Capita: Actual and Underlying Growth

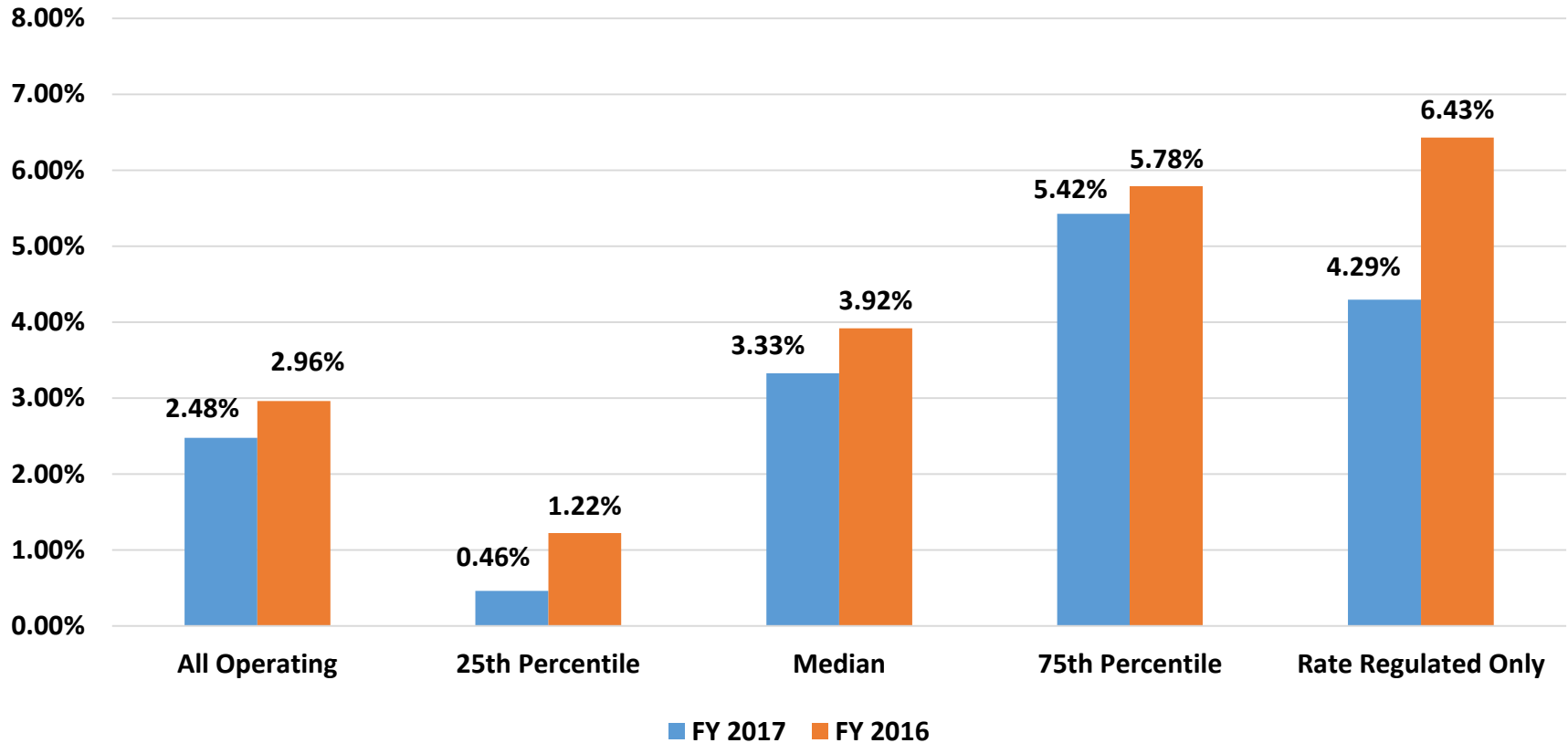
CY 2017 (Jan-April) over Base Year CY 2013 (Jan-April)



- Four year All Payer per capita growth rate is well below maximum allowable growth rate of 15.11% (growth of 3.58% per year)
- Underlying growth reflects adjustments for FY16 revenue decreases that were budget neutral for hospitals. 2.52% hospital bad debts, and elimination of MHIP assessment and FY17 revenue decreases of .49% UCC and 0.15% deficit assessment.

Operating Profits

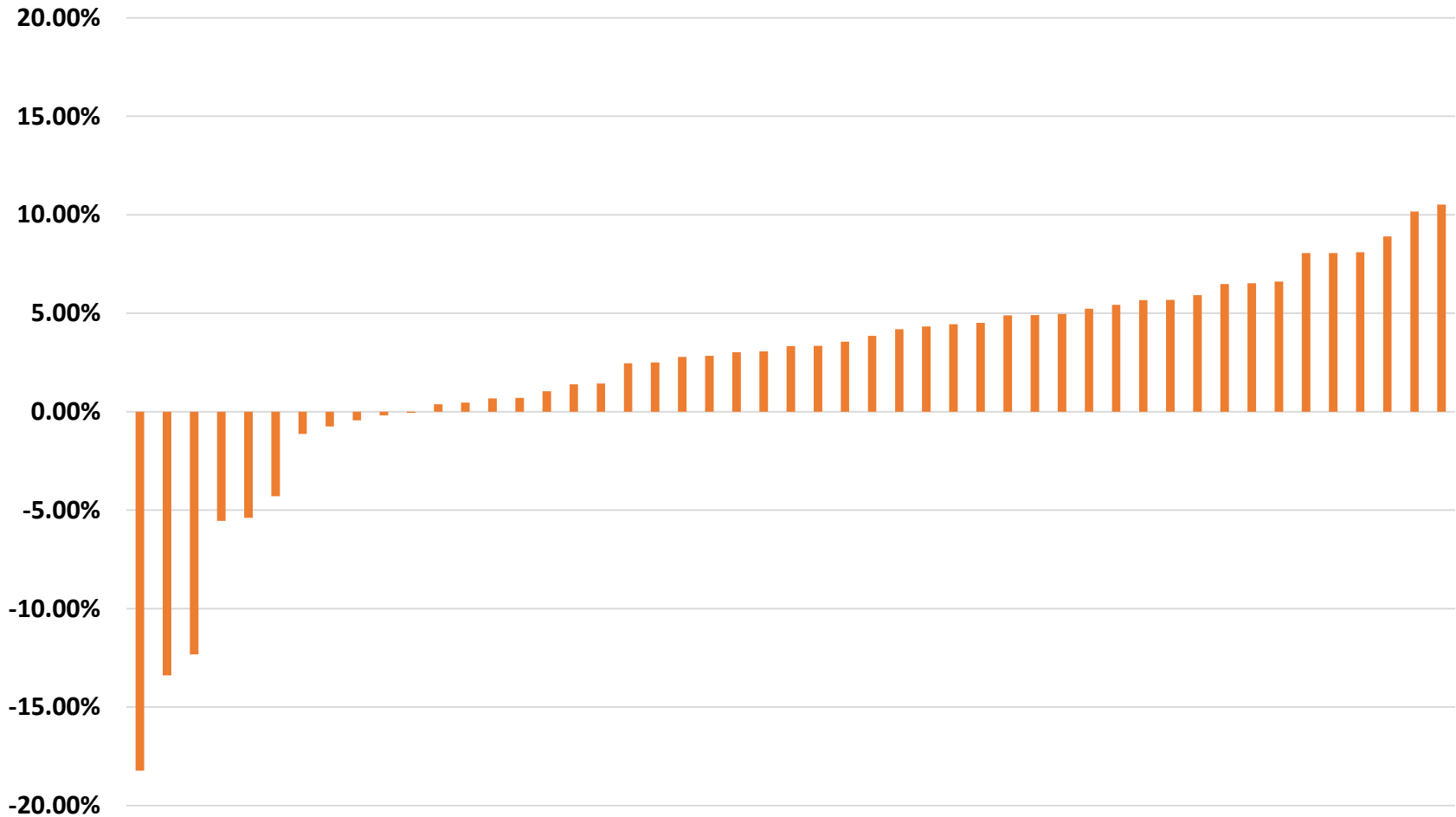
Fiscal Year 2017 (Jul 2016-April 2017) Compared to Same Period in Fiscal Year 2016 (Jul 2015 - April 2016)



FY 2017 unaudited hospital operating profits to date show a .48 percentage point decrease in total profits compared to the same period in FY 2016. Rate regulated profits have decreased by 2.14 percentage points compared to the same period in FY 2016.

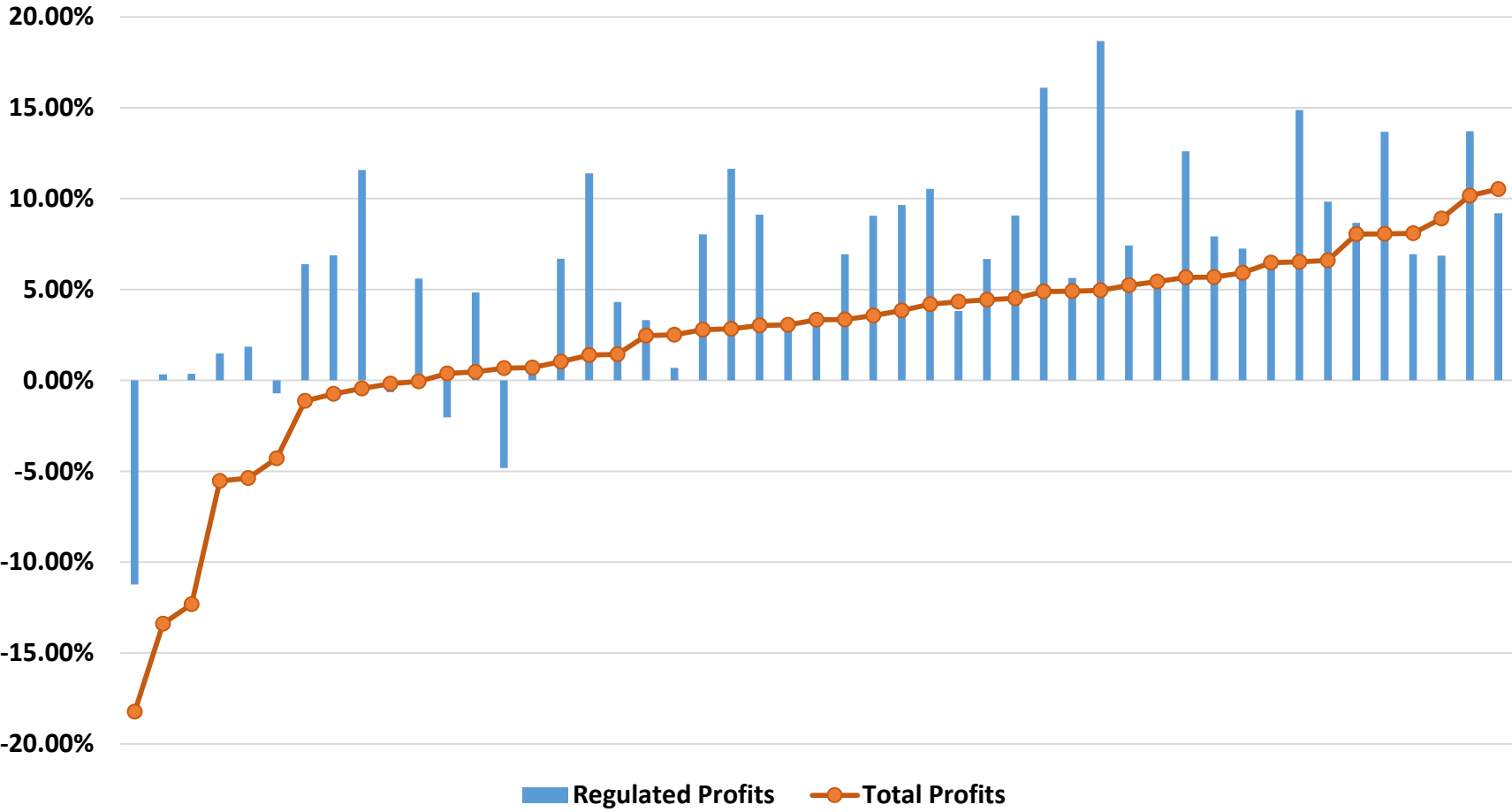
Total Operating Profits by Hospital

Fiscal Year 2017 (Jul 2016-April 2017)



Regulated and Total Operating Profits

Fiscal Year 2017 (Jul 2016 – April 2017)



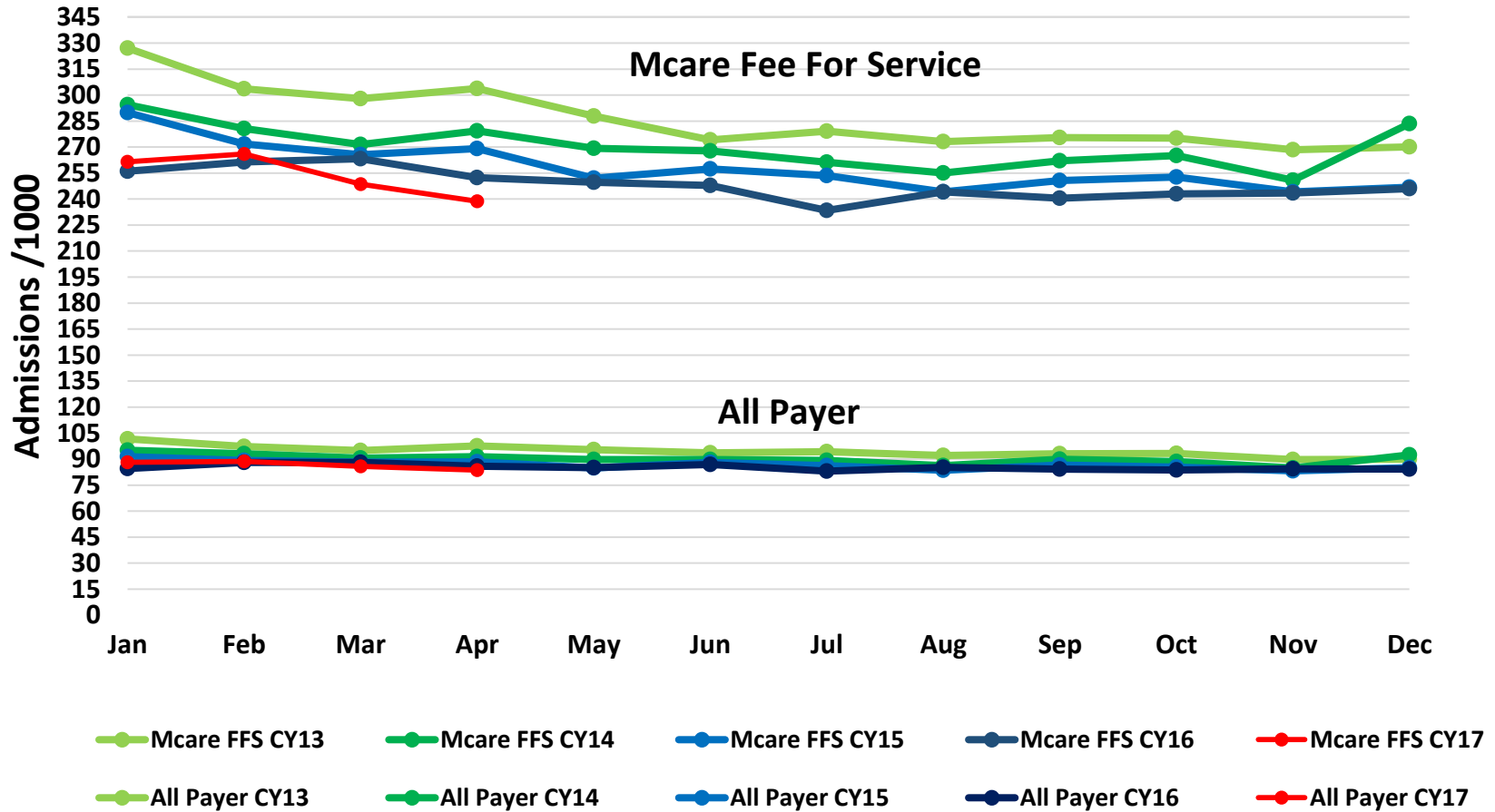
Monitoring Maryland Performance Financial/Utilization Data

Year to Date through April 2017

Source: Hospital Monthly Volume and Revenue Data

Annual Trends for ADK Annualized

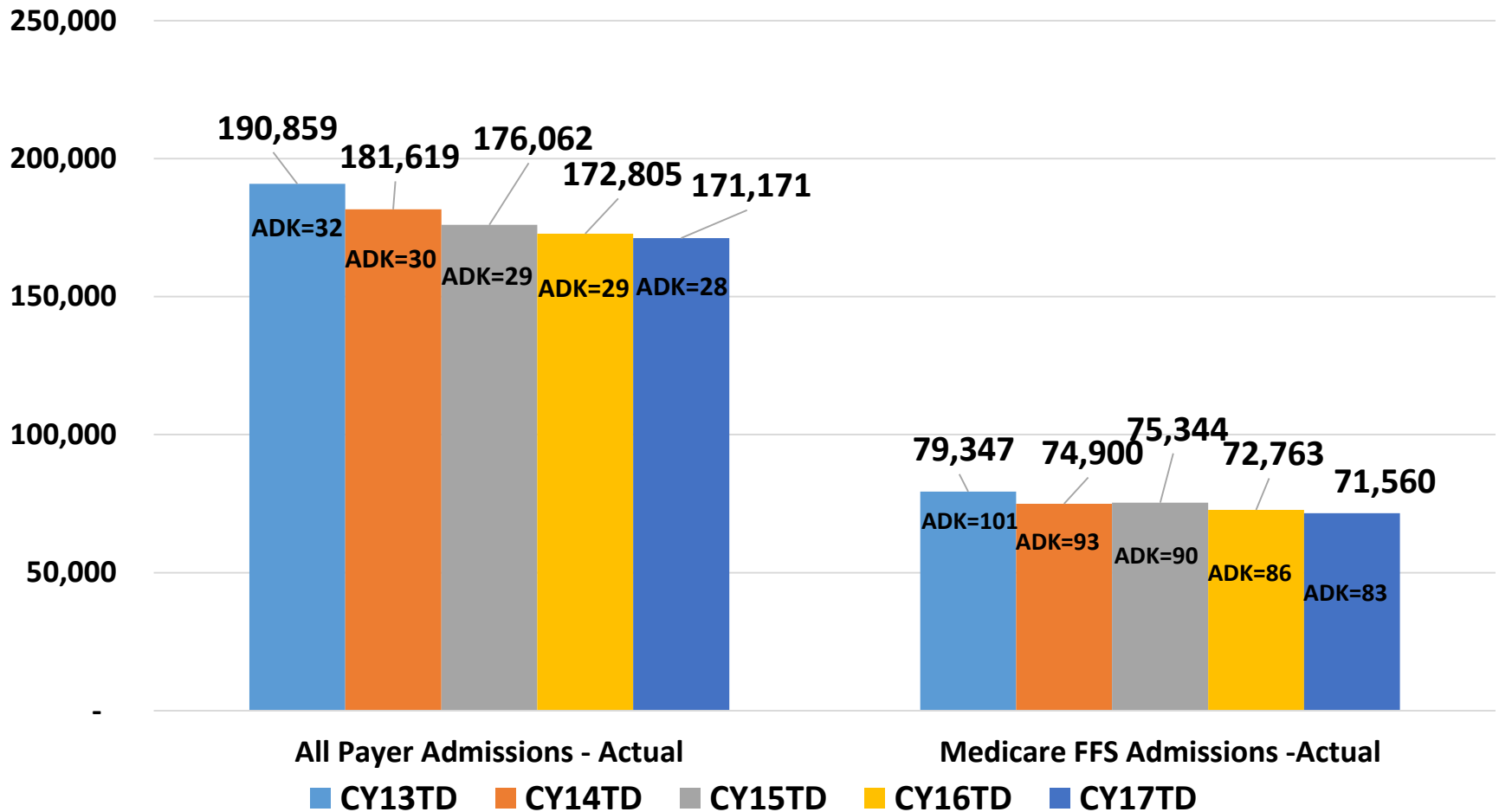
Medicare Fee For Service and All Payer (CY 2013 through CY 2017 April)



*Note - The admissions do not include out of state migration or specialty psych and rehab hospitals.

Actual Admissions by Calendar YTD April

(CY 2013 through CY 2017)



*Note - The admissions do not include out of state migration or specialty psych and rehab hospitals.

Change in Admissions by Calendar YTD April

(CY 2013 through CY 2017)

Change in All Payer Admissions CYTD13 vs. CYTD14 = -4.84%

Change in All Payer Admissions CYTD14 vs. CYTD15 = -3.06%

Change in All Payer Admissions CYTD15 vs. CYTD16 = -1.85%

Change in All Payer Admissions CYTD16 vs. CYTD17 = -0.95%

Change in ADK CYTD 13 vs. CYTD 14 = -5.42%

Change in ADK CYTD 14 vs. CYTD 15 = -3.51%

Change in ADK CYTD 15 vs. CYTD 16 = -2.20%

Change in ADK CYTD 16 vs. CYTD 17 = -0.95%

Change in Medicare FFS Admissions CYTD13 vs. CYTD14 = -5.60%

Change in Medicare FFS Admissions CYTD14 vs. CYTD15 = 0.59%

Change in Medicare FFS Admissions CYTD15 vs. CYTD16 = -3.43%

Change in Medicare FFS Admissions CYTD16 vs. CYTD17 = -1.65%

Change in Medicare FFS ADK CYTD 13 vs. CYTD 14 = -8.67%

Change in Medicare FFS ADK CYTD 14 vs. CYTD 15 = -2.60%

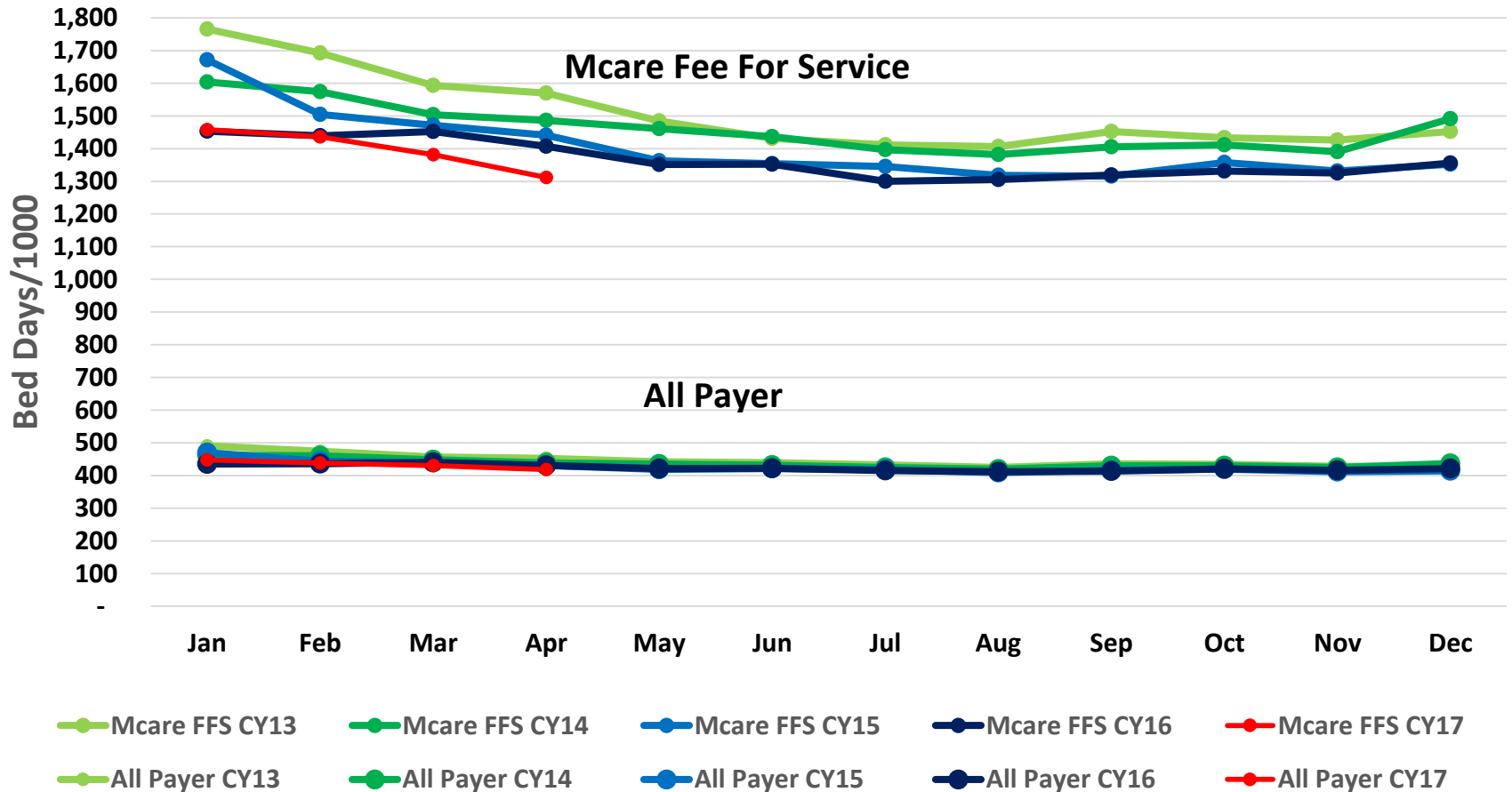
Change in Medicare FFS ADK CYTD 15 vs. CYTD 16 = -5.04%

Change in Medicare FFS ADK CYTD 16 vs. CYTD 17 = -2.65%



Annual Trends for BDK Annualized

Medicare Fee For Service and All Payer (CY 2013 through CY 2017 April)



*Note - The bed days do not include out of state migration or specialty psych and rehab hospitals.

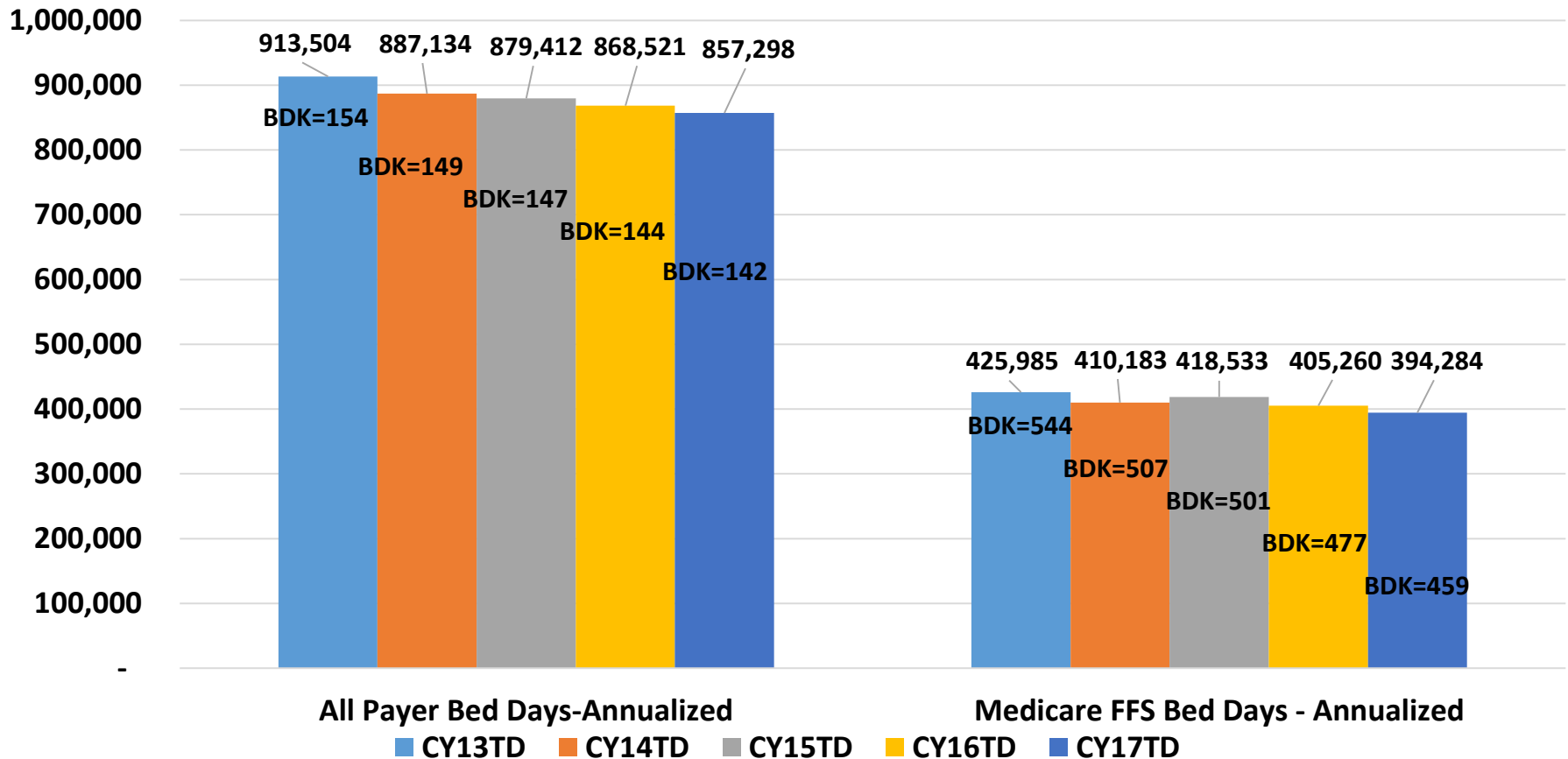
HSCRC

Health Services Cost Review Commission



Actual Bed Days by Calendar YTD April

(CY 2013 through CY 2017)



*Note - The bed days do not include out of state migration or specialty psych and rehab hospitals.

Change in Bed Days by Calendar YTD April

(CY 2013 through CY 2017)

Change in All Payer Bed Days CYTD13 vs. CYTD14 = -2.89%

Change in All Payer Bed Days CYTD14 vs. CYTD15 = -0.87%

Change in All Payer Bed Days CYTD15 vs. CYTD16 = -1.24%

Change in All Payer Bed Days CYTD16 vs. CYTD17 = -1.29%

Change in BDK CYTD 13 vs. CYTD 14 = -3.48%

Change in BDK CYTD 14 vs. CYTD 15 = -1.33%

Change in BDK CYTD 15 vs. CYTD 16 = -1.59%

Change in BDK CYTD 16 vs. CYTD 17 = -1.29%

Change in Medicare FFS Bed Days CYTD13 vs. CYTD14 = -3.71%

Change in Medicare FFS Bed Days CYTD14 vs. CYTD15 = 2.04%

Change in Medicare FFS Bed Days CYTD15 vs. CYTD16 = -3.17%

Change in Medicare FFS Bed Days CYTD16 vs. CYTD17 = -2.71%

Change in Medicare FFS BDK CYTD 13 vs. CYTD 14 = -6.84%

Change in Medicare FFS BDK CYTD 14 vs. CYTD 15 = -1.20%

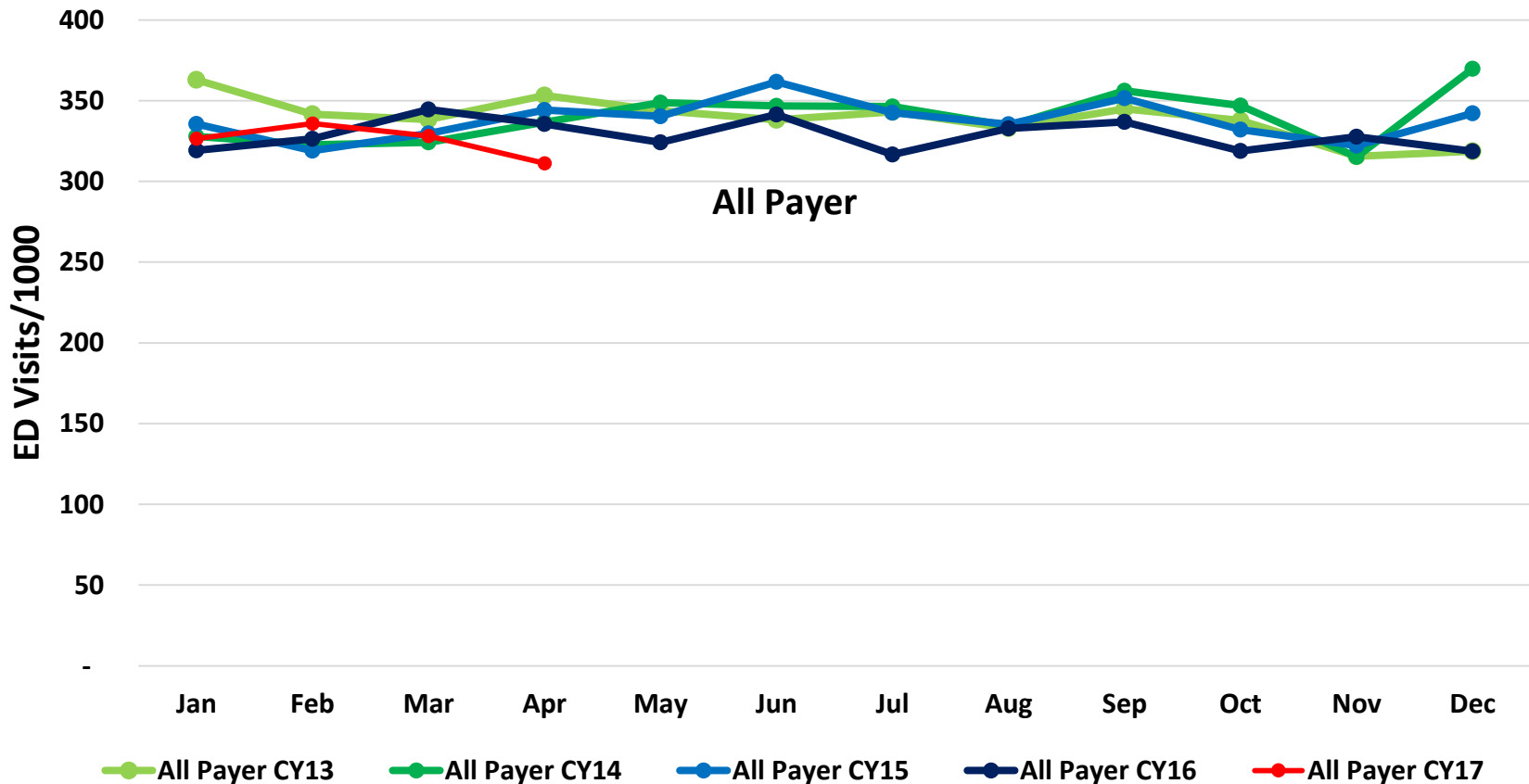
Change in Medicare FFS BDK CYTD 15 vs. CYTD 16 = -4.79%

Change in Medicare FFS BDK CYTD 16 vs. CYTD 17 = -3.70%



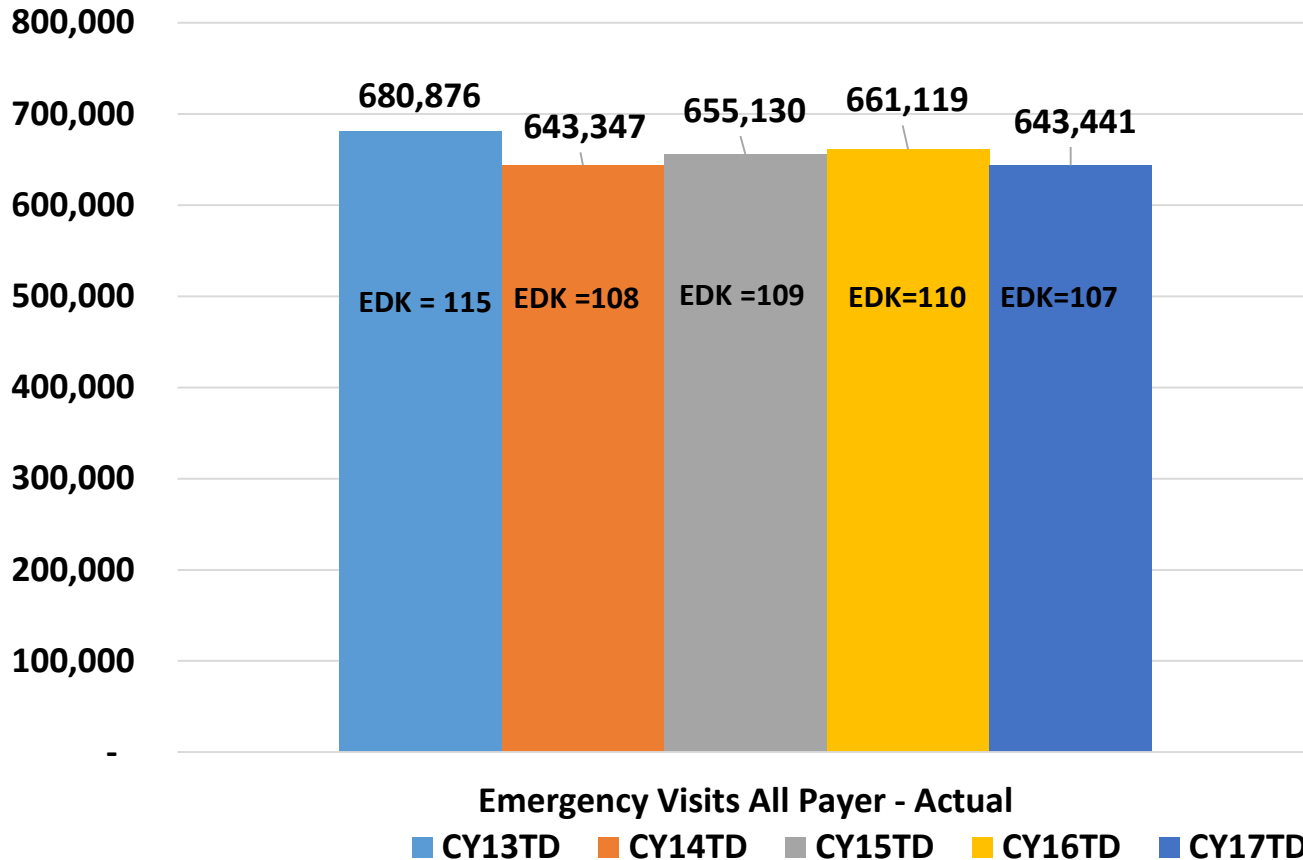
Annual Trends for EDK Annualized

All Payer (CY 2013 through CY2017 April)



*Note - The ED Visits do not include out of state migration or specialty psych and rehab hospitals.

Actual Emergency Department Visits by Calendar YTD April (CY 2013 through CY 2017)



*Note - The ED Visits do not include out of state migration or specialty psych and rehab hospitals.

Change in ED Visits by Calendar YTD April

(CY 2013 through CY 2017)

Change in ED Visits CYTD 13 vs. CYTD 14 = -5.51%

Change in ED Visits CYTD 14 vs. CYTD 15 = 1.83%

Change in ED Visits CYTD 15 vs. CYTD 16 = 0.91%

Change in ED Visits CYTD 16 vs. CYTD 17 = -2.67%

Change in EDK CYTD 13 vs. CYTD 14 = -6.08%

Change in EDK CYTD 14 vs. CYTD 15 = 1.36%

Change in EDK CYTD 15 vs. CYTD 16 = -0.55%

Change in EDK CYTD 16 vs. CYTD 17 = -2.67%

Purpose of Monitoring Maryland Performance

Evaluate Maryland's performance against All-Payer Model requirements:

All-Payer total hospital per capita revenue growth ceiling for Maryland residents tied to long term state economic growth (GSP) per capita

- 3.58% annual growth rate
- **Medicare payment savings** for Maryland beneficiaries compared to dynamic national trend. Minimum of \$330 million in savings over 5 years
- **Patient and population centered-measures** and targets to promote population health improvement
 - Medicare readmission reductions to national average
 - 30% reduction in preventable conditions under Maryland's Hospital Acquired Condition program (MHAC) over a 5 year period
 - Many other quality improvement targets

Data Caveats

- Data revisions are expected.
- For financial data if residency is unknown, hospitals report this as a Maryland resident. As more data becomes available, there may be shifts from Maryland to out-of-state.
- Many hospitals are converting revenue systems along with implementation of Electronic Health Records. This may cause some instability in the accuracy of reported data. As a result, HSCRC staff will monitor total revenue as well as the split of in state and out of state revenues.
- All-payer per capita calculations for Calendar Year 2015 and Fiscal 2016 rely on Maryland Department of Planning projections of population growth of .52% for FY 16 and .52% for CY 15. Medicare per capita calculations use actual trends in Maryland Medicare beneficiary counts as reported monthly to the HSCRC by CMMI.

Data Caveats cont.

- The source data is the monthly volume and revenue statistics.
- ADK – Calculated using the admissions multiplied by 365 divided by the days in the period and then divided by average population per 1000.
- BDK – Calculated using the bed days multiplied by 365 divided by the days in the period and then divided by average population per 1000.
- EDK – Calculated using the ED visits multiplied by 365 divided by the days in the period and then divided by average population per 1000.
- All admission and bed days calculations exclude births and nursery center.
- Admissions, bed days, and ED visits do not include out of state migration or specialty psych and rehab hospitals.



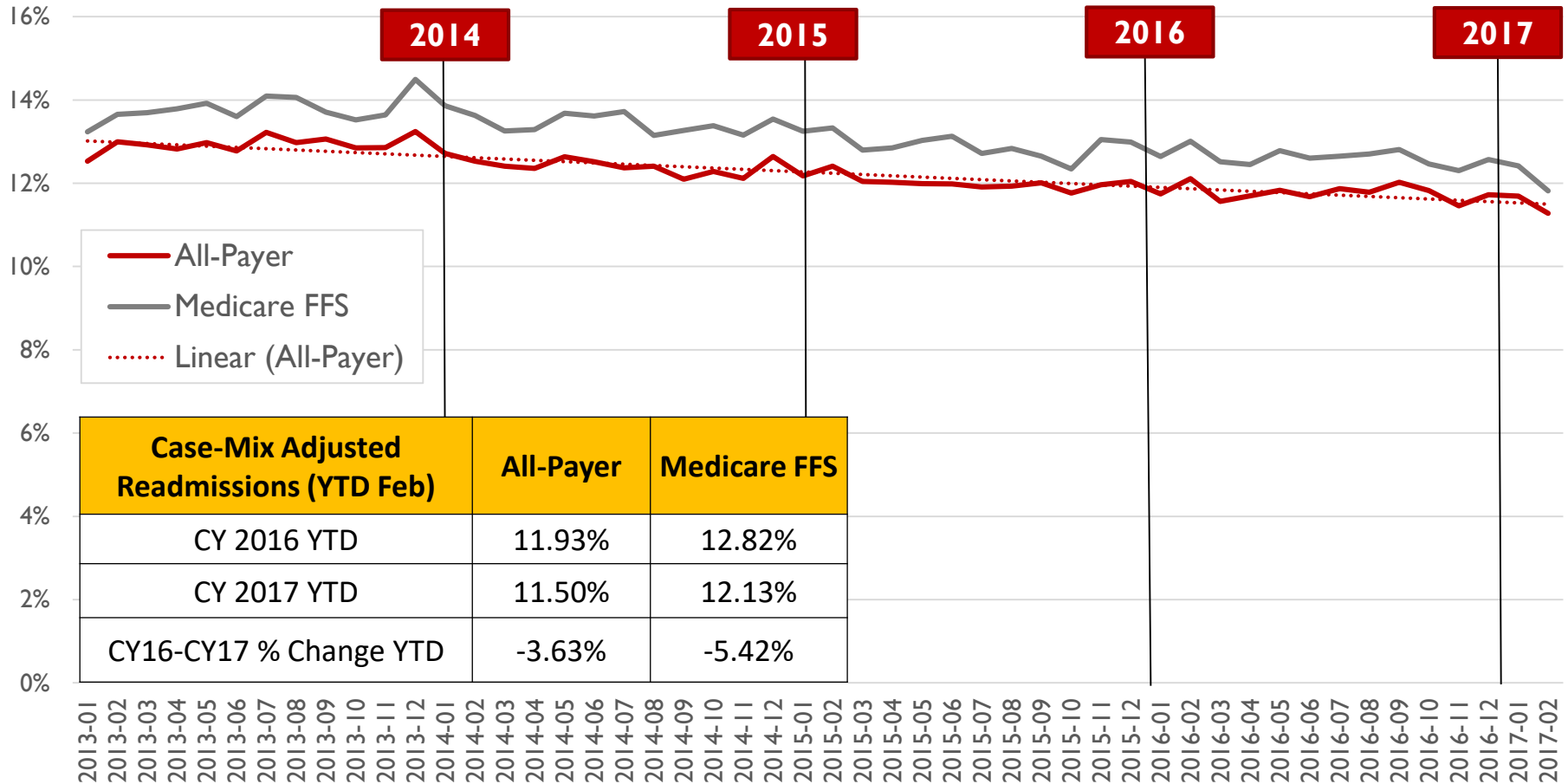
Monitoring Maryland Performance Quality Data

April 2017 Commission Meeting Update



Readmission Reduction Analysis

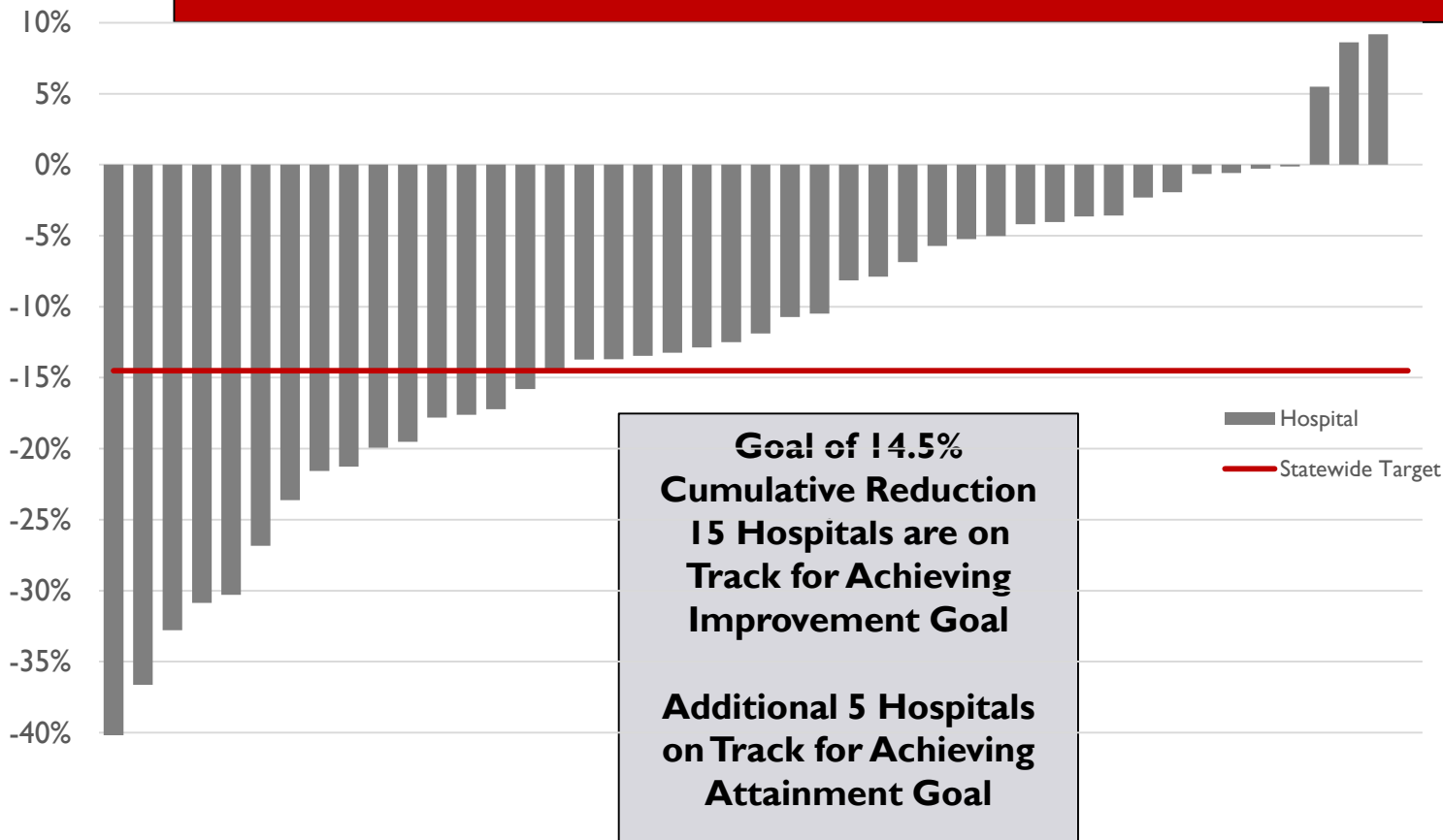
Monthly Case-Mix Adjusted Readmission Rates



Note: Based on final data for January 2012 – December 2016, preliminary data Jan-March 2017

Change in All-Payer Case-Mix Adjusted Readmission Rates by Hospital

Data Trends through CY 2017YTD (Jan-Mar)



Note: Based on final data for January 2012 – December 2016, preliminary through April 2017.

H.S.C.R.C's CURRENT LEGAL DOCKET STATUS (OPEN)

AS OF JUNE 7, 2017

A: PENDING LEGAL ACTION : NONE
 B: AWAITING FURTHER COMMISSION ACTION: NONE
 C: CURRENT CASES:

Docket Number	Hospital Name	Date Docketed	Decision Required by:	Rate Order Must be Issued by:	Purpose	Analyst's Initials	File Status
2371R	MedStar Franklin Square Medical Center	12/23/2016	7/12/2017	N/A	Capital	GS	OPEN
2372A	Doctors Community Hospital	1/5/2017	N/A	N/A	ARM	DK	OPEN
2384R	McCready Health	4/28/2017	6/27/2017	N/A	Rebundled MRI	CK	OPEN
2385A	University of Maryland Medical Center	5/9/2017	N/A	N/A	ARM	DNP	OPEN
2386A	University of Maryland Medical Center	5/9/2017	N/A	N/A	ARM	DNP	OPEN
2387A	University of Maryland Medical Center	5/9/2017	N/A	N/A	ARM	DNP	OPEN
2388A	MedStar Health	5/10/2017	N/A	N/A	ARM	DNP	OPEN
2389A	MedStar Health	5/10/2017	N/A	N/A	ARM	DNP	OPEN
2390N	McCready Health	5/19/2017	6/18/2017	N/A	IRC	CK	OPEN
2391A	Johns Hopkins Health Care	5/30/2017	N/A	N/A	ARM	DNP	OPEN
2392A	Johns Hopkins Health Care	5/30/2017	N/A	N/A	ARM	DNP	OPEN
2393A	Johns Hopkins Health Care	5/30/2017	N/A	N/A	ARM	DNP	OPEN

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

NONE

IN RE: THE PARTIAL RATE	*	BEFORE THE HEALTH SERVICES
APPLICATION OF	*	COST REVIEW COMMISSION
MCCREADY MEMORIAL	*	DOCKET: 2017
HOSPITAL	*	FOLIO: 2194
CRISFIELD, MARYLAND	*	PROCEEDING: 2384R

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Staff Recommendation

June 14, 2017

Introduction

On April 28, 2017, McCready Memorial Hospital (the “Hospital”) submitted a partial rate application to the Commission for a rebundled rate for Magnetic Resonance Imaging (MRI) services to be provided inpatients as the Hospital will no longer be providing MRI services on campus due to financial feasibility. This new rebundled rate would replace its currently approved MRI rate. A rebundled rate is approved by the Commission when a hospital provides non-physician services to inpatients through a third-party contractor off-site. By approving a rebundled rate, the Commission makes it possible for a hospital to bill for services provided off site, as required by Medicare. The Hospital requests that the MRI rate be set at the statewide median and be effective June 1, 2017.

Staff Evaluation

Based on Staff’s review, the statewide median for MRI services is \$41.22 per RVU.

Recommendation

After reviewing the Hospital’s application, the staff recommends as follows:

1. That a rebundled MRI rate of \$41.22 per RVU be approved June 1, 2017; and
2. That no change be made to the Hospital’s Global Budget Revenue for MRI services.

**IN RE: THE APPLICATION FOR
ALTERNATIVE METHOD OF RATE
DETERMINATION
UNIVERSITY OF MARYLAND
MEDICAL CENTER
BALTIMORE, MARYLAND**

*** BEFORE THE MARYLAND HEALTH
* SERVICES COST REVIEW
* COMMISSION
* DOCKET: 2017
* FOLIO: 2195
* PROCEEDING: 2385A**

Staff Recommendation

June 14, 2017

I. INTRODUCTION

University of Maryland Medical Center (“Hospital”) filed an application with the HSCRC on May 9, 2017 for an alternative method of rate determination under COMAR 10.37.10.06. The Hospital requests approval from the HSCRC for continued participation in global rates for solid organ transplant and blood and bone marrow transplants for one year with Aetna Health Inc. and Coventry Health Plan, Inc. beginning August 1, 2017.

II. OVERVIEW OF THE APPLICATION

The contract will be continue to be held and administered by University Physicians, Inc. (“UPI”), which is a subsidiary of the University of Maryland Medical System. UPI will manage all financial transactions related to the global price contract including payments to the Hospital and bear all risk relating to services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the global rates was developed by calculating recent historical charges for patients receiving the procedures for which global rates are to be paid. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospital will continue to submit bills to UPI for all contracted and covered services. UPI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between UPI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract.

V. STAFF EVALUATION

Staff reviewed the experience under this arrangement for the last year and found it to be favorable. Staff believes that the Hospital can continue to achieve favorable performance under this arrangement.

VI. STAFF RECOMMENDATION

Based on the Hospital's favorable performance, staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for solid organ transplant, and blood and bone marrow transplant services, for a one year period beginning August 1, 2017. The Hospital will need to file a renewal application to be considered for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospital for the approved contract. This document would formalize the understanding between the Commission and the Hospital, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, and confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

**IN RE: THE APPLICATION FOR
ALTERNATIVE METHOD OF RATE
DETERMINATION
UNIVERSITY OF MARYLAND
MEDICAL CENTER
BALTIMORE, MARYLAND**

*** BEFORE THE MARYLAND HEALTH
* SERVICES COST REVIEW
* COMMISSION
* DOCKET: 2017
* FOLIO: 2196
* PROCEEDING: 2386A**

Staff Recommendation

June 14, 2017

I. INTRODUCTION

The University of Maryland Medical Center (“Hospital”) filed an application with the HSCRC on May 9, 2017 for an alternative method of rate determination under COMAR 10.37.10.06. The Hospital requests approval to participate in a global rate arrangement with the Kaiser Foundation Hospitals and the Permanente Federation, LLC (“Kaiser”) for Heart Transplant and Mechanical Circulatory Support services for a period of one year beginning July 1, 2017.

II. OVERVIEW OF APPLICATION

The contract will be held and administered by University Physicians, Inc. (UPI), which is a subsidiary of the University of Maryland Medical System. UPI will manage all financial transactions related to the global price contract including payments to the Hospital and bear all risk relating to services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the global rates was developed by calculating historical charges for patients receiving the procedures for which global rates are to be paid. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospital will submit bills to UPI for all contracted and covered services. UPI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between UPI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract.

V. STAFF EVALUATION

The format used to calculate the cases rates, i.e., historical data for like cases, has been

utilized as the basis for other heart transplant cases in which the Hospital is currently participating. Staff believes that the Hospital can achieve a favorable experience under this arrangement.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for Heart Transplant and Mechanical Circulatory Support services, for a one year period commencing July 1, 2017. The Hospital will need to file a renewal application for review to be considered for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospital for the approved contract. This document would formalize the understanding between the Commission and the Hospital, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

**IN RE: THE APPLICATION FOR
ALTERNATIVE METHOD OF RATE
DETERMINATION
UNIVERSITY OF MARYLAND
MEDICAL CENTER
BALTIMORE, MARYLAND**

*** BEFORE THE MARYLAND HEALTH
* SERVICES COST REVIEW
* COMMISSION
* DOCKET: 2017
* FOLIO: 2197
* PROCEEDING: 2387A**

Staff Recommendation

June 14, 2017

I. INTRODUCTION

The University of Maryland Medical Center (“Hospital”) filed an application with the HSCRC on May 9, 2017 for an alternative method of rate determination under COMAR 10.37.10.06. The Hospital requests approval to continue its participation in a global rate arrangement with Maryland Physicians Care (“MPC”) for solid organ and blood and bone marrow transplant services for a period of one year beginning August 23, 2017.

II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by University Physicians, Inc. (UPI), which is a subsidiary of the University of Maryland Medical System. UPI will manage all financial transactions related to the global price contract including payments to the Hospital and bear all risk relating to services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the global rates was developed by calculating historical charges for patients receiving the procedures for which global rates are to be paid. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospital will continue to submit bills to UPI for all contracted and covered services. UPI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between UPI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract.

V. STAFF EVALUATION

Staff found that the actual experience under the arrangement for the last year has been favorable. Staff believes that the Hospital can continue to achieve favorable performance under

this arrangement.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for solid organ and blood and bone marrow transplant services, for a one year period commencing August 23, 2017. The Hospital will need to file a renewal application for review to be considered for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospital for the approved contract. This document would formalize the understanding between the Commission and the Hospital, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

**IN RE: THE APPLICATION FOR
ALTERNATIVE METHOD OF RATE
DETERMINATION
MEDSTAR HEALTH

BALTIMORE, MARYLAND**

*** BEFORE THE MARYLAND HEALTH
* SERVICES COST REVIEW
* COMMISSION
* DOCKET: 2016
* FOLIO: 2198
* PROCEEDING: 2388A**

Staff Recommendation

June 14, 2017

I. INTRODUCTION

MedStar Health filed an application with the HSCRC on May 10, 2017 on behalf of Union Memorial Hospital and Good Samaritan Hospital (the “Hospitals”) to participate in an alternative method of rate determination, pursuant to COMAR 10.37.10.06. Medstar Health requests approval from the HSCRC for continued participation in a global rate arrangement for joint replacement services with MAMSI for a one year period beginning September 1, 2017.

II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by Helix Resources Management, Inc. (HRMI). HRMI will manage all financial transactions related to the global price contract including payments to the Hospitals and bear all risk relating to services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the global rates was developed by calculating the mean historical charges for patients receiving the procedures for which global rates are to be paid. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospitals will continue to submit bills to HRMI for all contracted and covered services. HRMI is responsible for billing the payer, collecting payments, disbursing payments to the Hospitals at their full HSCRC approved rates, and reimbursing the physicians. The Hospitals contend that the arrangement between HRMI and the Hospitals holds the Hospitals harmless from any shortfalls in payment from the global price contract.

V. STAFF EVALUATION

The staff reviewed the experience under this arrangement for the last year and found that it was favorable. The staff believes that the Hospitals can continue to achieve a favorable experience under this arrangement.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospitals' request for continued participation in the alternative method of rate determination for orthopedic services, for a one year period, commencing September 1, 2017. The Hospitals will need to file a renewal application for review to be considered for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospitals for the approved contract. This document will formalize the understanding between the Commission and the Hospitals, and will include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, and confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

**IN RE: THE APPLICATION FOR
ALTERNATIVE METHOD OF RATE
DETERMINATION
MEDSTAR HEALTH

BALTIMORE, MARYLAND**

*** BEFORE THE MARYLAND HEALTH
* SERVICES COST REVIEW
* COMMISSION
* DOCKET: 2017
* FOLIO: 2199
* PROCEEDING: 2389A**

Staff Recommendation

June 14, 2017

I. INTRODUCTION

MedStar Health filed an application with the HSCRC on May 10, 2017 on behalf of Union Memorial Hospital (the “Hospital”) for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. Medstar Health requests approval from the HSCRC for continued participation in a global rate arrangement for cardiovascular services with the Kaiser Foundation Health Plan of the Mid-Atlantic, Inc. for one year beginning August 1, 2017.

II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by Helix Resources Management, Inc. (HRMI). HRMI will manage all financial transactions related to the global price contract including payments to the Hospital and bear all risk relating to services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the global rates was renegotiated in 2007. The remainder of the global rate is comprised of physician service costs. Also in 2007, additional per diem payments were negotiated for cases that exceed the outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospital will continue to submit bills to HRMI for all contracted and covered services. HRMI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between HRMI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract.

V. STAFF EVALUATION

The staff reviewed the results of last year’s experience under this arrangement and found that they were favorable.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospital's request for continued participation in the alternative method of rate determination for cardiovascular services for a one year period commencing August 1, 2017. The Hospital will need to file a renewal application for review to be considered for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospitals for the approved contract. This document will formalize the understanding between the Commission and the Hospital, and will include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, and confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

**IN RE: THE APPLICATION FOR
ALTERNATIVE METHOD OF RATE
DETERMINATION
JOHNS HOPKINS HEALTH
SYSTEM
BALTIMORE, MARYLAND**

*** BEFORE THE MARYLAND HEALTH
* SERVICES COST REVIEW
* COMMISSION
* DOCKET: 2017
* FOLIO: 2201
* PROCEEDING: 2391A**

Staff Recommendation

June 14, 2017

I. INTRODUCTION

Johns Hopkins Health System (System) filed an application with the HSCRC on May 30, 2017 on behalf of Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center (the Hospitals) for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC to continue to participate in an amended global rate arrangement for solid organ transplant, bone marrow transplant, and cardiovascular services with Global Excel Management, formerly Olympus Managed Health for a period of one year beginning July 1, 2017.

II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by Johns Hopkins HealthCare, LLC ("JHHC"), which is a subsidiary of the System. JHHC will manage all financial transactions related to the global price contract including payments to the Hospitals and bear all risk relating to regulated services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the global rates was developed by calculating mean historical charges for patients receiving kidney, bone marrow transplants, and cardiovascular services at the Hospitals. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospitals will continue to submit bills to JHHC for all contracted and covered services. JHHC is responsible for billing the payer, collecting payments, disbursing payments to the Hospitals at their full HSCRC approved rates, and reimbursing the physicians. The System contends that the arrangement among JHHC, the Hospitals, and the physicians holds the Hospitals harmless from any shortfalls in payment from the global price contract. JHHC maintains it has been active in similar types of fixed fee contracts for several years, and that JHHC is adequately capitalized to bear the risk of potential losses.

V. STAFF EVALUATION

Although there was no activity under this arrangement last year, staff believes that the Hospitals can achieve a favorable experience under this arrangement.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for solid organ, bone marrow transplant, and cardiovascular services for a one year period commencing July 1, 2017. The Hospitals will need to file a renewal application for review to be considered for continued participation. Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospitals for the approved contract. This document would formalize the understanding between the Commission and the Hospitals, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

**IN RE: THE APPLICATION FOR
ALTERNATIVE METHOD OF RATE
DETERMINATION
JOHNS HOPKINS HEALTH
SYSTEM
BALTIMORE, MARYLAND**

*** BEFORE THE MARYLAND HEALTH
* SERVICES COST REVIEW
* COMMISSION
* DOCKET: 2017
* FOLIO: 2202
* PROCEEDING: 2392A**

Staff Recommendation

June 14, 2017

I. INTRODUCTION

Johns Hopkins Health System (“System”) filed an application with the HSCRC on May 30, 2017 on behalf of its member hospitals (the “Hospitals”) for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC to continue to participate in a global arrangement to provide solid organ and bone marrow transplants services with Cigna Health Corporation. The System requests approval of the arrangement for a period of one year beginning July 1, 2017.

II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by Johns Hopkins HealthCare, LLC (“JHHC”), which is a subsidiary of the System. JHHC will continue to manage all financial transactions related to the global price contract including payments to the Hospitals and bear all risk relating to regulated services associated with the contract.

III. FEE DEVELOPMENT

The hospital portion of the new global rates for solid organ transplants was developed by calculating mean historical charges for patients receiving the procedures for which global rates are to be paid. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

IV. IDENTIFICATION AND ASSESSMENT OF RISK

The Hospitals will continue to submit bills to JHHC for all contracted and covered services. JHHC is responsible for billing the payer, collecting payments, disbursing payments to the Hospitals at their full HSCRC approved rates, and reimbursing the physicians. The System contends that the arrangement among JHHC, the Hospitals, and the physicians holds the Hospitals harmless from any shortfalls in payment from the global price contract. JHHC maintains it has been active in similar types of fixed fee contracts for several years, and that JHHC is adequately capitalized to bear risk of potential losses.

V. STAFF EVALUATION

Staff found that the experience under the arrangement for the last year has been favorable.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospitals' request for participation in an alternative method of rate determination for bone marrow and solid organ transplant services, for a one year period commencing July 1, 2017, and that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU"). The Hospitals will need to file a renewal application for review to be considered for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospitals for the approved contract. This document would formalize the understanding between the Commission and the Hospitals, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

H.S.C.R.C's CURRENT LEGAL DOCKET STATUS (OPEN)

AS OF JUNE 7, 2017

A: PENDING LEGAL ACTION : NONE
 B: AWAITING FURTHER COMMISSION ACTION: NONE
 C: CURRENT CASES:

Docket Number	Hospital Name	Date Docketed	Decision Required by:	Rate Order Must be Issued by:	Purpose	Analyst's Initials	File Status
2371R	MedStar Franklin Square Medical Center	12/23/2016	7/12/2017	N/A	Capital	GS	OPEN
2372A	Doctors Community Hospital	1/5/2017	N/A	N/A	ARM	DK	OPEN
2384R	McCready Health	4/28/2017	6/27/2017	N/A	Rebundled MRI	CK	OPEN
2385A	University of Maryland Medical Center	5/9/2017	N/A	N/A	ARM	DNP	OPEN
2386A	University of Maryland Medical Center	5/9/2017	N/A	N/A	ARM	DNP	OPEN
2387A	University of Maryland Medical Center	5/9/2017	N/A	N/A	ARM	DNP	OPEN
2388A	MedStar Health	5/10/2017	N/A	N/A	ARM	DNP	OPEN
2389A	MedStar Health	5/10/2017	N/A	N/A	ARM	DNP	OPEN
2390N	McCready Health	5/19/2017	6/18/2017	N/A	IRC	CK	OPEN
2391A	Johns Hopkins Health Care	5/30/2017	N/A	N/A	ARM	DNP	OPEN
2392A	Johns Hopkins Health Care	5/30/2017	N/A	N/A	ARM	DNP	OPEN
2393A	Johns Hopkins Health Care	5/30/2017	N/A	N/A	ARM	DNP	OPEN

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

NONE



LifeBridge Health

Population Health Update to the Health Services Cost Review Commission

June 14, 2017

Neil Meltzer, President and CEO, LifeBridge Health

David Krajewski, Executive Vice President/CFO, LifeBridge Health & President, LifeBridge Health Partners

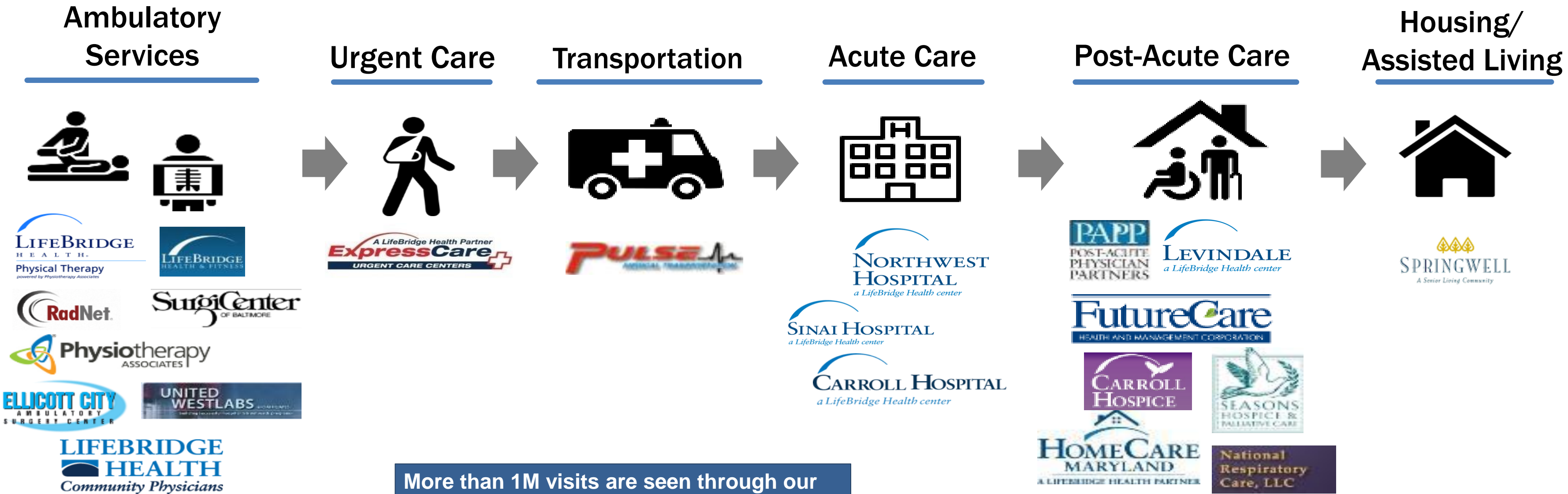
Jonathan Ringo, MD, President/COO, Sinai Hospital

LifeBridge Health



- \$2.1B Health System
- 4 Hospitals
- 5 Nursing Homes
- 840 Providers
- 10,500 Employees
- 31 Urgent Care Sites
- 100+ Locations

LifeBridge Health: Providing the Full Continuum of Care



More than 1M visits are seen through our extended providers:

- Primary Care Providers: 425,000
- Urgent Care Facilities : 550,000
- Homecare : 100,000



Population Health Infrastructure Spending

LifeBridge Health Population Health Infrastructure Spending				
Spending by FY				
Hospital	FY14	FY15	FY16	CUMMULATIVE
Spending (in millions)				
Sinai	3.0	7.4	11.3	21.6
Northwest	1.3	1.5	3.6	6.4
Levindale	0.2	0.5	0.6	1.3
Carroll	4.1	4.9	7.2	16.3
TOTAL	8.6	14.3	22.7	45.6

LifeBridge Health Population Health Infrastructure Spending			
Revenue Impact by FY (in millions)			
LifeBridge Health			
	FY14	FY15	FY16
Cumulative Revenue Received	3,314,175	6,319,544	10,328,842
Expenditures	8,557,083	14,310,981	22,693,424
Shortfall	(5,242,909)	(7,991,438)	(12,364,583)

Population Health Initiatives Focusing on Decreasing Cost and Utilization			
FY2016			
#	Initiatives *Sorted by Expense	Expense	FTE's
TOTAL		\$22,693,424	227.87
1	Sinai Community Care Clinic	\$ 2,377,649	39.00
2	Care Management/Care Navigation/Care Transitions	\$ 2,103,908	24.05
3	Population Health Administration	\$ 1,835,022	10.91
4	Clinical Call Centers	\$ 1,647,171	16.71
5	Disease Management Programs	\$ 1,564,345	8.70
6	ACO's	\$ 1,361,314	4.61
7	IS Infrastructure for Population Health	\$ 1,152,380	6.10
8	Risk Management Subsidies for Patient Care	\$ 869,927	0.30
9	Analytics Support for MHACs and Population Health	\$ 856,713	3.00
10	Community Health Education	\$ 715,138	6.06
11	Palliative Medicine and Community Palliative Programs	\$ 642,539	7.70
12	Violence Intervention Programs	\$ 611,281	10.17
13	Cerner HealthIntent Population Health Software	\$ 579,297	3.27
14	Access Carroll Clinic	\$ 502,752	2.40
15	Primary Care Physician Access	\$ 461,250	6.00
16	Outpatient Pharmacy Compliance and Medication Management	\$ 420,710	7.60
17	Mother-Baby Focused Programs	\$ 369,823	11.00
18	ED Navigation	\$ 364,706	6.90
19	Physician Engagement	\$ 364,685	3.09
20	The Partnership for a Healthier Carroll County	\$ 343,527	1.00
21	Advanced Health Collaborative	\$ 326,996	1.00
22	HIV Support Services	\$ 278,663	6.00

Population Health Initiatives Focusing on Decreasing Cost and Utilization			
FY2016			
#	Initiatives *Sorted by Expense	Expense	FTE's
23	Community Care Coordination	\$ 241,601	1.30
24	Hospital Collaborative	\$ 239,094	0.91
25	Housing Upgrades to Benefit Seniors- HUBS	\$ 210,972	1.20
26	ED Behavioral Health Services	\$ 204,693	4.50
27	Diabetes Medical Home Extender Program	\$ 200,668	5.35
28	Child Life Counseling	\$ 199,766	1.60
29	SNF Collaborative	\$ 194,867	1.80
30	Home Support Program	\$ 187,952	0.00
31	Ambulatory Outcomes Dept	\$ 175,521	0.55
32	Urgent Care Call Center	\$ 174,460	3.00
33	HomeCare Maryland and Home Health	\$ 129,599	4.00
34	Inpatient Pharmacy Education Program	\$ 124,907	1.70
35	Community Disease Prevention Programs	\$ 124,051	1.71
36	Community Initiatives- Administration	\$ 101,835	1.20
37	American Heart Association	\$ 75,000	0.05
38	Patient Portal Navigators and Certified Application Counselors	\$ 60,876	2.10
39	Telehealth pilot in ED	\$ 48,481	2.65
40	Care Plan Committee	\$ 46,035	0.35
41	Televox- Appt Reminder System	\$ 40,494	0.00
42	Maryland Faith Health Network	\$ 41,913	2.78
43	Happily Hungry Peds Nutrition Program	\$ 38,400	0.01
44	Chase Brexton Collaboration	\$ 36,000	1.25
45	Other Programs \$35,000 and under	\$ 46,443	4.29



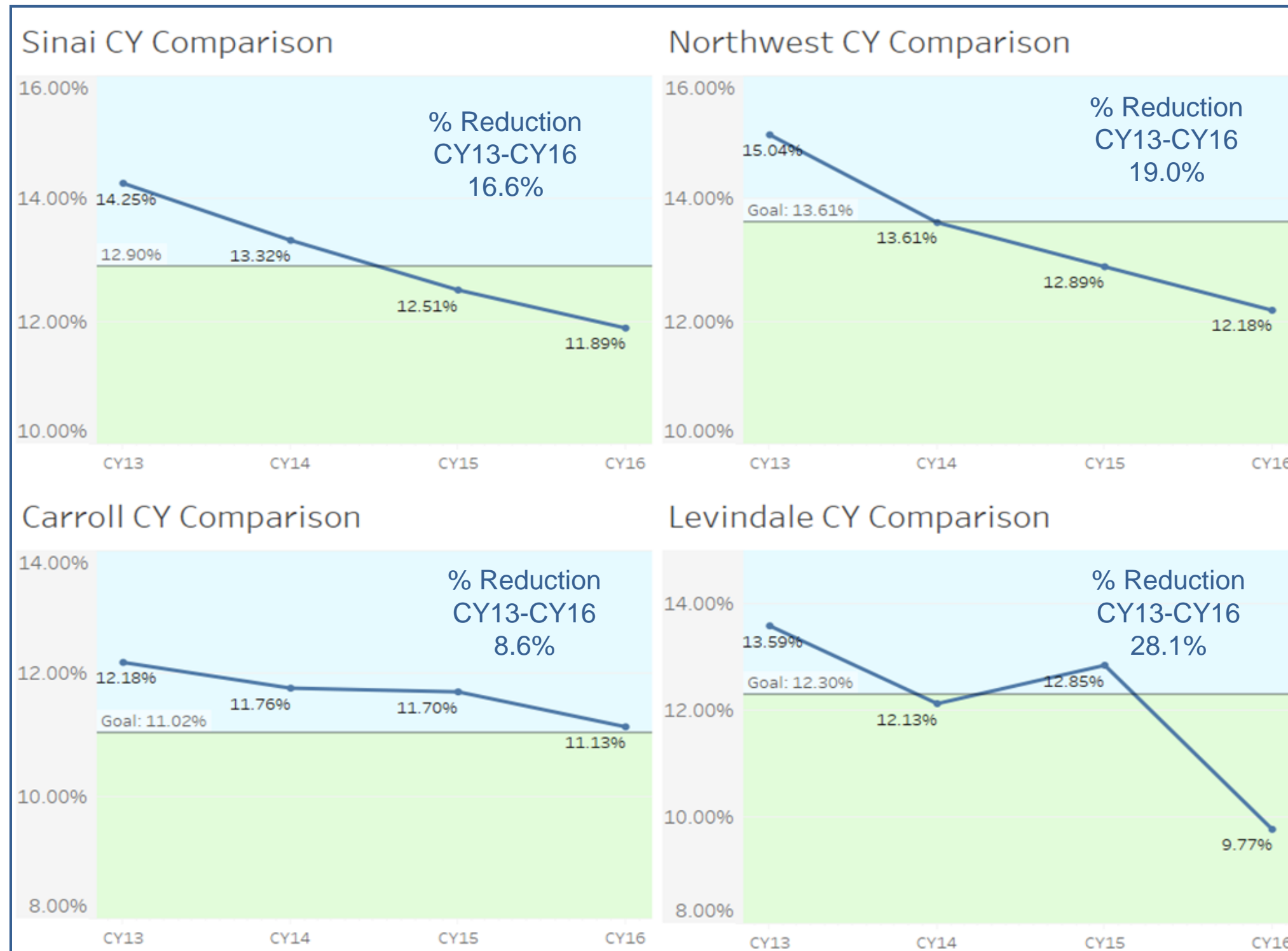
Performance Measurement from Infrastructure Reporting

LifeBridge Health							
Population Health Infrastructure Reported Outcomes							
Hospital	Measurement Period	Metric	Target Outcome	Observed Outcome	Estimated Reduced Hospital Billing/Savings*	# of Programs Included	# of Unique Patients Served
Sinai	FY16	Total Hospital Admissions	25% ↓	69% ↓	\$ 24,372,117	14	2,315
		ED Visits	25% ↓	32% ↓	\$ 309,542		862
		Readmissions	5% ↓	11% ↓	\$ 61,821		52
Northwest	FY16	Total Hospital Admissions	25% ↓	86% ↓	\$ 4,475,605	9	827
		ED Visits	25% ↓	58% ↓	\$ 153,468		492
		Readmissions	5% ↓	0% ↓	\$ -		4
Carroll	FY15- FY16	Total Hospital Admissions	5% ↓	7% ↓	\$ 1,018,012	11	10,145
		ED Visits	1% ↓	2% ↓	\$ 2,521,148		8,058
		Readmissions	10% ↓	8% ↓	\$ 1,361,016		108
GRAND TOTAL					\$ 34,272,729		14,805

*Estimated Reduced Hospital Billing/Savings indicated is savings to the payers.

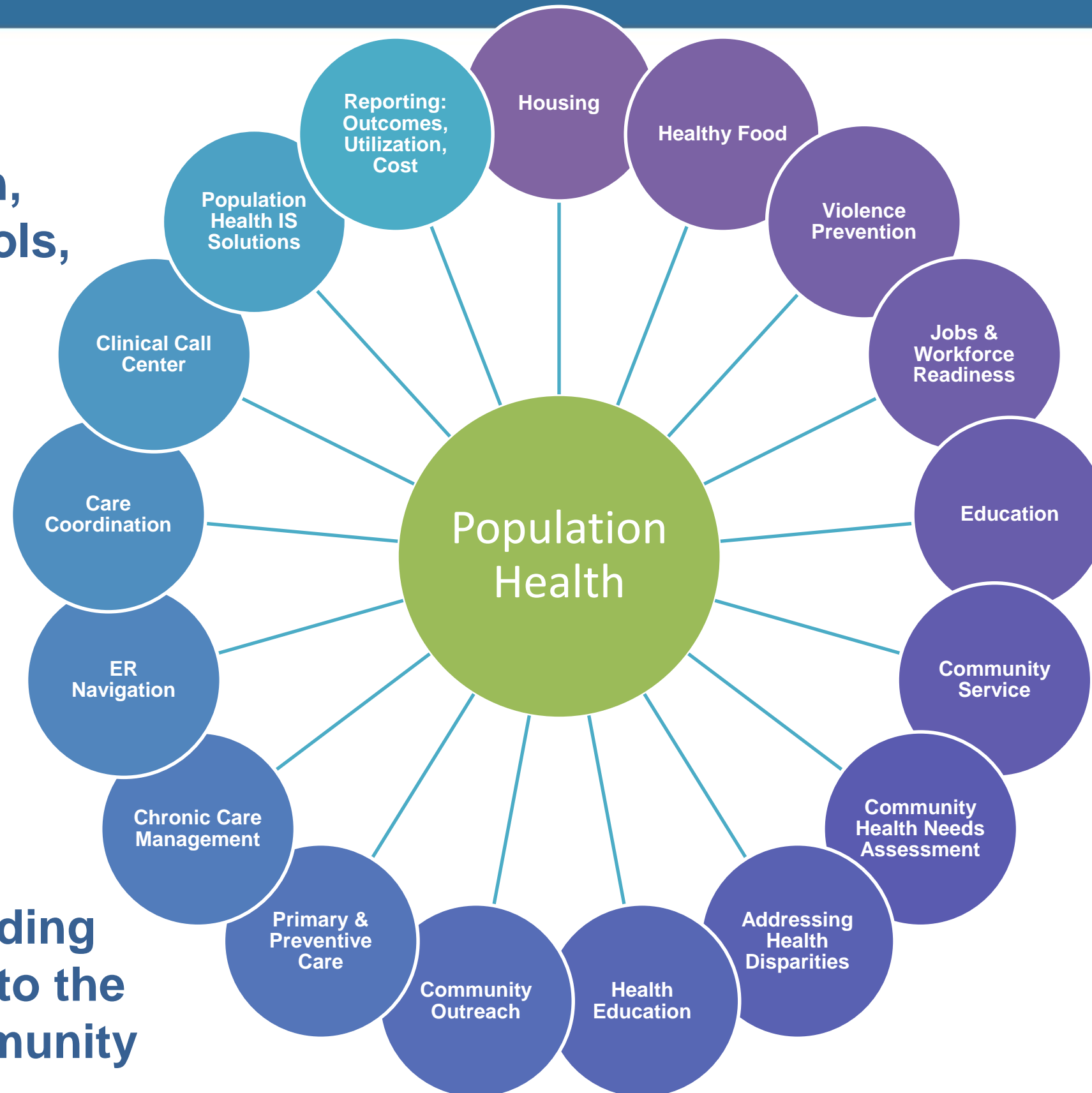
Readmission Reduction Incentive Program (RRIP)

Readmissions Rates



The Scope of Population Health

**Coordination,
Resources, Tools,
& Reports**



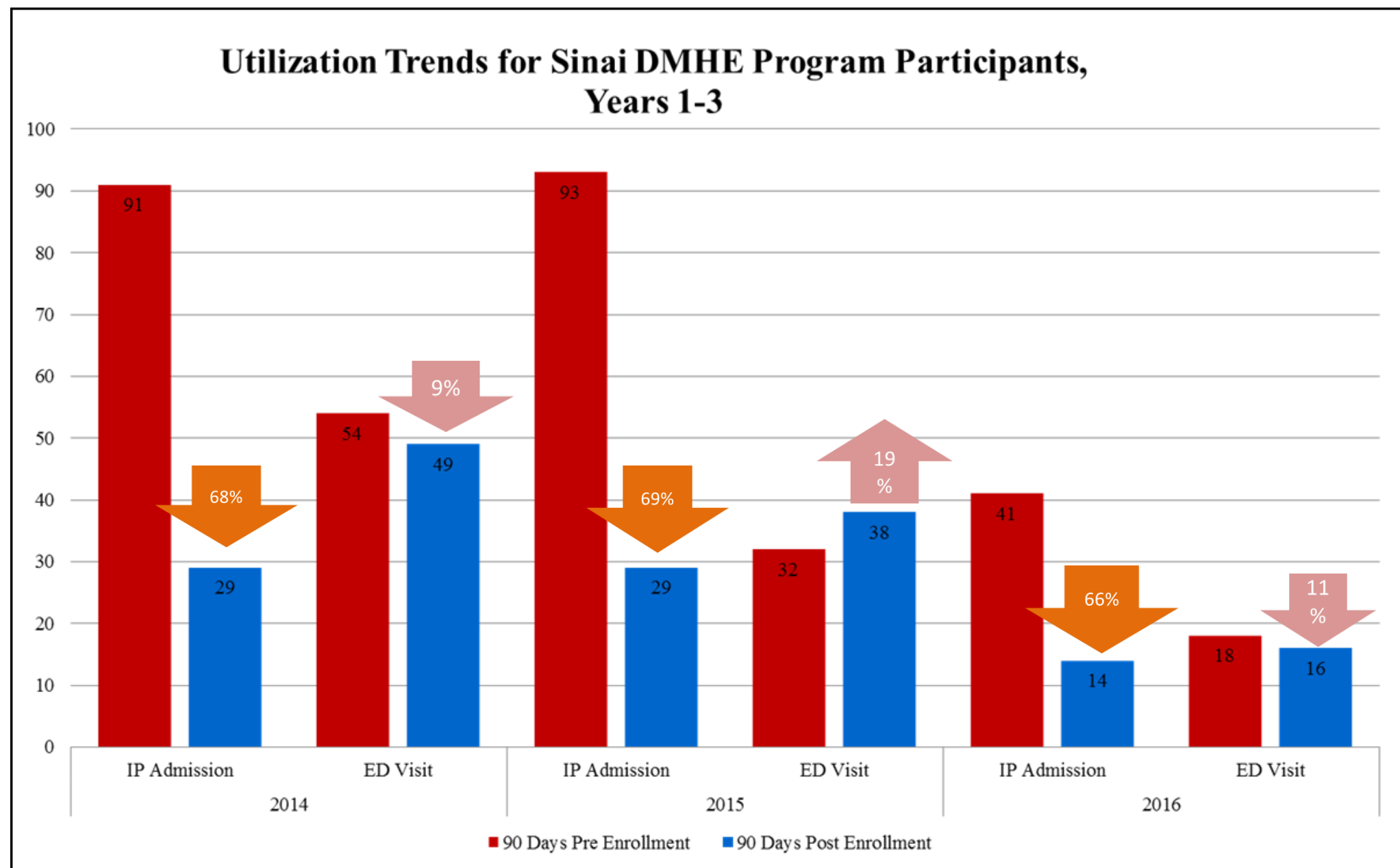
**Addressing the
Social Determinants
of Health**

**Providing
Care to the
Community**

Agenda

- **Diabetes Medical Home Extender Program**
- **SNF Collaborative**
- **Community Paramedicine**
- **LifeLink Clinical Call Center**
- **ED Care Navigation Programs**
- **Violence Intervention Programs**
- **Sinai Community Care**
- **ACOs**
- **CRISP Collaboration**

Diabetes Medical Home Extender Program



FREE IN-HOME DIABETES SUPPORT!!!

Do you care for patients admitted for diabetes-related issues?
Sinai's Diabetes Medical Home Extender Program is available for new referrals!

The Diabetes Medical Home Extender Program offers:

- In-home support visits from trained, compassionate community health workers and nurses post-discharge.
- Individual Service Plans
- Referrals
- Patient resources
- Health Care Planning
- And more...

Patients must meet the following qualifications to participate:

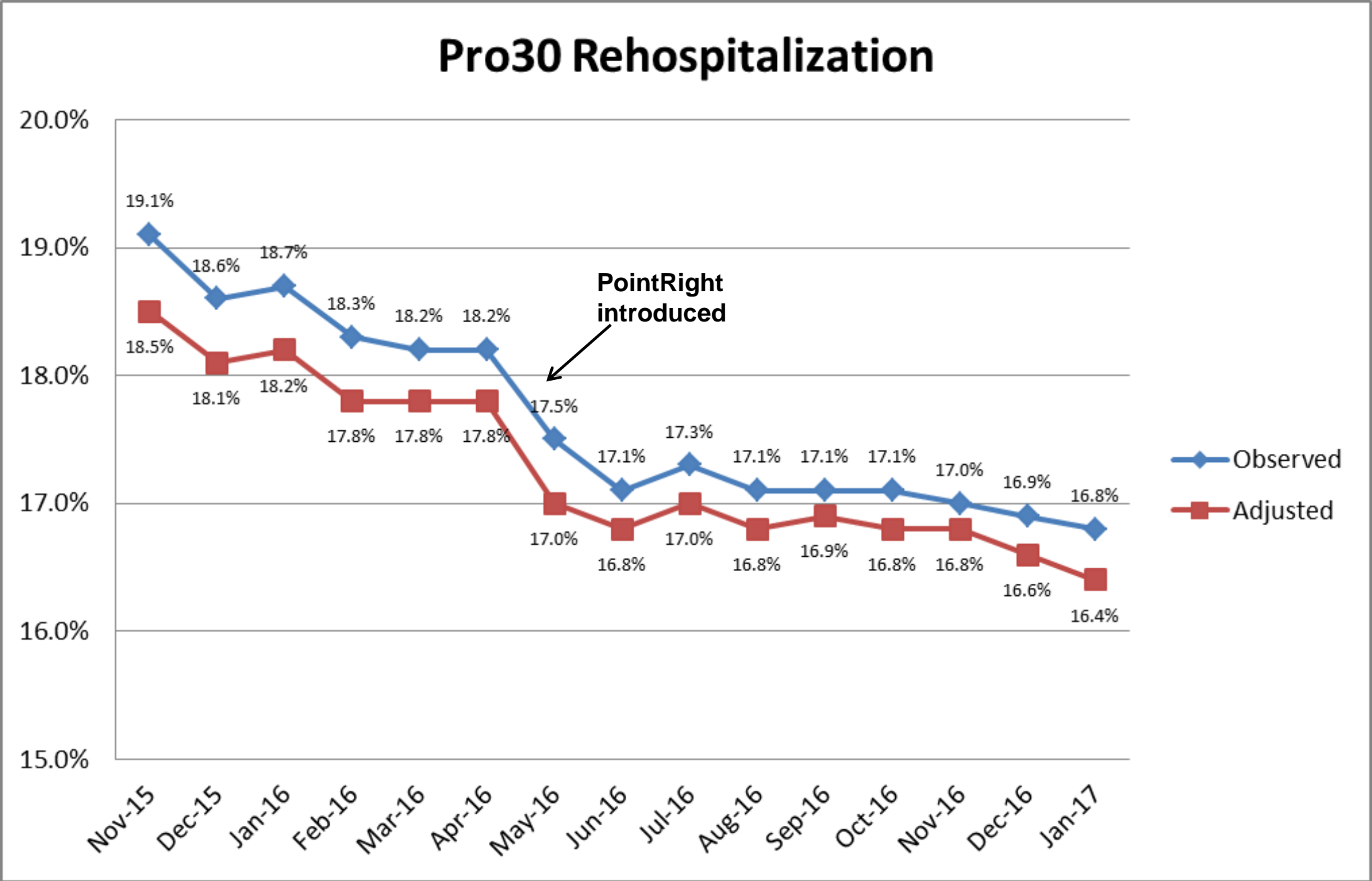
- Currently admitted and admitted at least one additional time to the hospital or ED within the last 12 months with a glucose greater than 300 mg/dl or hypoglycemia under 40 mg/dl and/or HbA1C greater than 9%
- Lives in the 21215, 21216, 21217, 21207, 21208, 21209, 21211, 21136 or 21244 zip codes.

Once you have secured the patient's interest and permission, our Community Health Workers will visit the patient in the room as soon as feasible to speak with them about the program. Services under this medically-supervised program are entirely free!!

SNF Collaborative

36 member SNFs

Since beginning of program showing a **12%** improvement in observed rehospitalization rate



The SNF Collaborative was developed to:

- Create a network that is focused on quality
- Enhance patient outcomes while ideally reducing the cost of care
- Standardize and share best practices across systems
- Enhance problem-solving and collective navigation within today's healthcare landscape

From 2/2/2016-1/31/2017, the nursing homes in the SNF collaborative:

- admitted 12,774 patients
- showed a **7.9%** improvement in re-hospitalization rates
- prevented **332** readmissions with an average cost of \$13,800
- saved **\$4.58M** in reduced admissions

Community Paramedicine Pilot Program

Coordinated Care Visits in the Home

Response to the home of patients with increased symptoms not requiring an ED visit. Once on site, the paramedics will consult with physicians via secure video connection.

Focus on CHF, Diabetes, and COPD



Assisting Patients Post Discharge

Answering patient questions, completing risk evaluations, and ensuring medication adherence



Premedication of Patients in the Home

Treatment and management of patients before testing and procedures in the home, shortening overall length of stay, while increasing patient satisfaction



Missed Appointments

Pilot program that sends a community paramedicine crew to follow-up with patients from the Heart Failure Clinic that miss appointments in their home



LifeLink Clinical Call Center: 180,000 Calls per Year

LifeLink

- KEYS to SUCCESS**
- ❖ Volume: 15,000 calls/month
 - ❖ Nurse-operated clinical call center
 - ❖ 24/7 availability
 - ❖ Provider contact preferences are stored within software and easily updated, seen as a big satisfier to providers
 - ❖ Support for other quality initiatives such as TCM, CCM, and PCMH that might require operational support
 - ❖ Proactive approach to support ACO patients and other patient populations to be put into place
 - ❖ Real-time updates to documentation within EMR, aligns efforts to accurately identify provider of care and contact information more effectively
 - ❖ Shared data with CRISP

Communicating with Physicians

Individually customized preferences define how the care team communicates with primary care



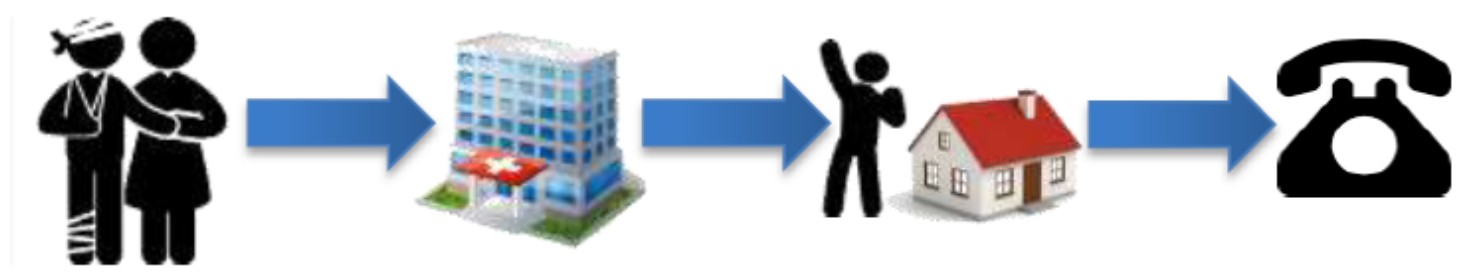
Coordinating Transfers

Manages inbound acute care transfers from throughout the region making a more simplified process for providers



Assisting Patients Post Discharge

Answering patient questions, scheduling follow-up visits, and coordinating transportation



Clinical Call Center: Discharge Calls Study at Sinai

Study to assess the impact of post-discharge phone calls in reducing readmissions for COPD and CHF patients

Table 1: Sample Demographics and Patient Characteristics			
	Total	Pre-Discharge Program	Post-Discharge Program
	(n = 4,482)	(n = 2,499)	(n = 1,983)
Age	69 (±14.5)	69 (±14.7)	69 (±14.3)
Urban	54%	53%	55%
Male	45%	47%	43%
African American	64%	64%	65%
LOS	6.5 (±6.1)	6.5 (±6.2)	6.4 (±5.9)
CHF Primary Diag	63%	63%	64%
COPD Primary Diag	58%	57%	58%
Readmission %	25%	27%	23%
Days to Readmission	12 (±8.8)	12 (±8.9)	12 (±8.7)

- All baseline characteristics, except for sex, were determined to be similar at the p=0.05 level, however, sex was shown to be a weak predictor of 30-day readmissions and did not impact the final odds ratio calculation.
- In the post-discharge phone call program group, 23% of patients experienced a hospital readmission compared to 27% in the group which did not have a post-discharge phone call attempted (p=0.0009)
- Patients seen by call center had **21.5 % lower odds** (AOR=0.785, 95% CI 0.68-0.90, p-value=0.0007) **of a 30-day readmission** than in the year prior when the call center program was not in place.
- The majority of 30-day readmissions for COPD and CHF patients **occur in the first two weeks** after discharge (mean readmission at 12 days)

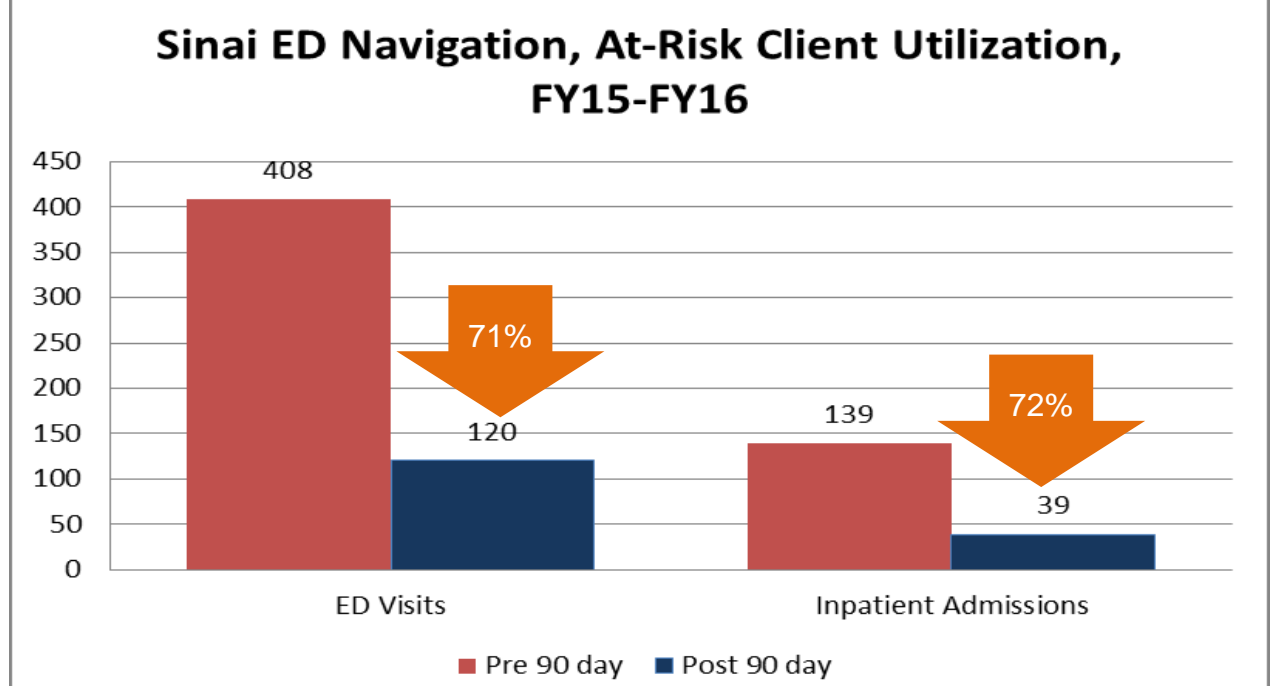
	Avg Medicare Cost for a 30-Day Readmission	Annual Admissions	Reduction in Readmissions due to Post-Discharge Phone Program (4.4%)	Total Preventable Medicare Costs
CHF/COPD	\$10,700	4,998	220	\$2,353,058

Preventable costs = annualized decrease in 30 day readmissions based on the reduction seen in the study, times the average Medicare cost for 30-day COPD and CHF readmissions (national benchmark)

ED Care Navigation

- Engage patients returning with unmanaged chronic conditions (somatic, behavioral, substance abuse) and provide intensive Care Coordination with home visits for 3 months to address social barriers to improved health
- Navigators embedded within ED (SWs and CHWs), work closely with providers and ED staff, providing warm handoffs
- Navigator completes Needs Assessment with client (target population has recent history of multiple hospital encounters, chronic conditions and unmet needs)
- Documentation in EMR triggers a daily report to CRISP to add to patient panel via auto-subscribe for ENS PROMPT (this is a unique enhancement piloted at Northwest)

Sinai Hospital Outcomes for At-Risk Clients



Sinai Hospital	Pre-Visit/Pre-Inpatient Stay	Post-Visit/Post-Inpatient Stay	% Reduction	Avoided Visits	Average Charge/Visit	Est. Avoided Charges
ED Visits	408	120	66%	269	\$1,181	\$317,689
Inpatient Stays	139	39	68%	81	\$9,935	\$804,735
Total				350		\$1,122,424

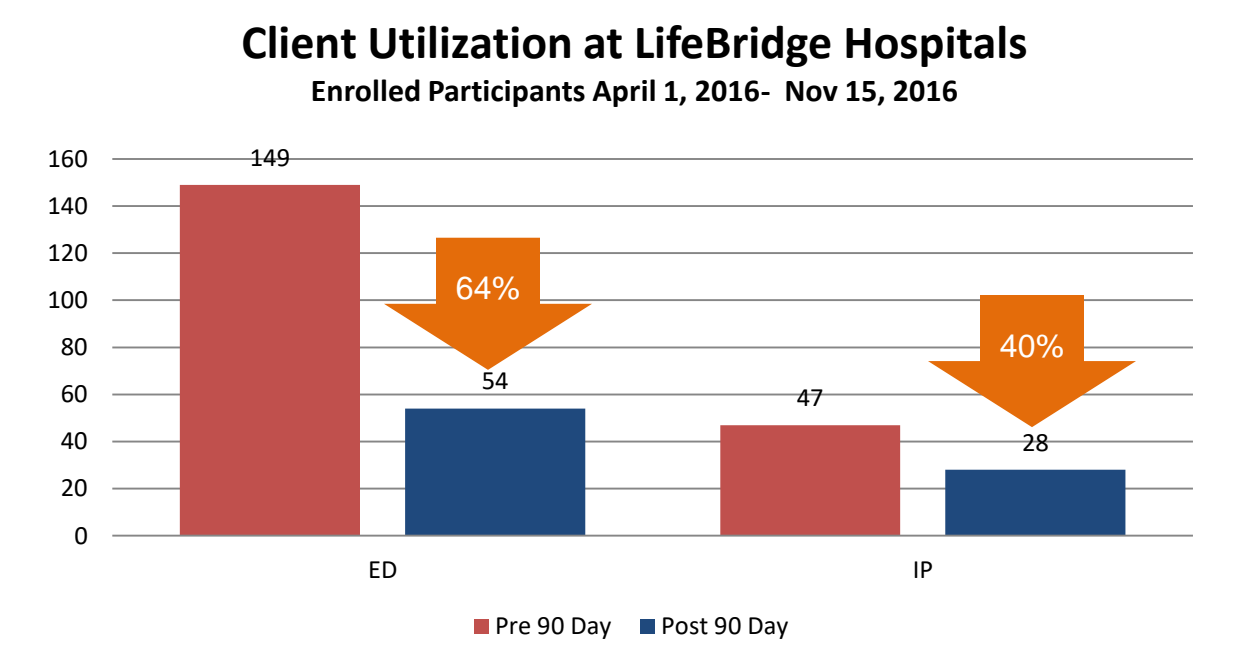
In the four months since their cases were closed, 60% had zero or just 1 subsequent visit

Super Utilizer (10+)
At Risk (3-9)
Low Risk (2)
Insurance Only (1)

#	%
19	3%
230	39%
191	33%
147	25%
587	100%

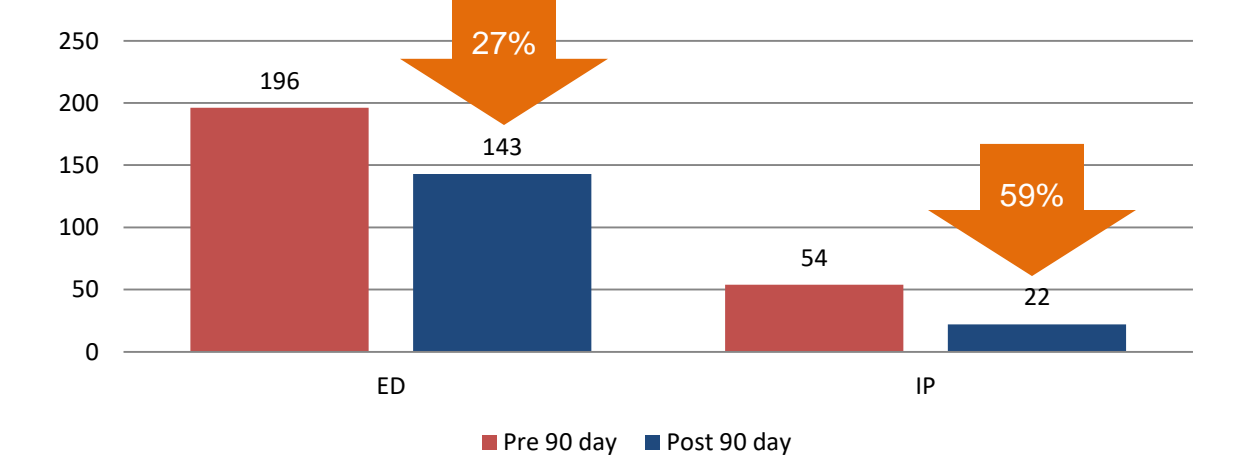
Examines Sinai pre and post-utilization and estimates avoided charges for at-risk category clients (230 potential) whose cases have been closed at least 4 months (n=119). Data from program start until May 2015

Northwest Hospital Outcomes for At-Risk Clients



Client Participant Utilization of Hospitals OUTSIDE of LifeBridge Health

Enrolled Participants April 1, 2016 - Nov 15, 2016



Examines Northwest pre and post-utilization for clients whose cases have been closed at least 3 months (n=54).



Violence Intervention: Safe Streets Expansion

CY16 costs
\$611,281

CY17 additional
funding
\$300,000
\$200K from HSCRC
\$100K from Sinai

HSCRC Jobs Grant & Safe Streets Funding for Sinai Hospital

Population Health Workforce Support for Disadvantaged Areas Grant	FY17			FY18		
	HSCRC	Sinai Match	Total Program	HSCRC	Sinai Match	Total Program
TOTAL FUNDING	\$293,225	\$146,613	\$439,838	\$471,091	\$235,546	\$706,637
PHWSDA Jobs Grant	\$ 93,225	\$ 46,613	\$ 139,838	\$ 271,091	\$ 135,546	\$ 406,637
Safe Streets Program	\$ 200,000	\$ 100,000	\$ 300,000	\$ 200,000	\$ 100,000	\$ 300,000



Park Heights 2016

- 4,120 crime incidents, including:
- 603 assaults
 - 48 shootings
 - 34 homicides (>10% of all Baltimore City homicides)

- ❖ Homicide is the leading cause of death among Baltimore City residents ages 15-34.
- ❖ Park Heights is a community in the 21215 zip code which has continually experienced significant street violence (resulting in hospitalization and death). Sinai Hospital is located in Park Heights.
- ❖ The Sinai Hospital CHNA indicated that violence is a major concern for our community.

Sinai Hospital's Street Violence Intervention Program/Kujichagulia Center

+
Safe Streets Park Heights
=

Safe Streets Expansion

- + **5.6 FTE's**
2.0 CHW Hospital Responders, 0.6 Hospital SW,
3.0 Safe Streets Violence Interrupters
- + **Funding provides staffing, shared oversight, training, office space**
- + **Integrated approach**

Sinai Community Care



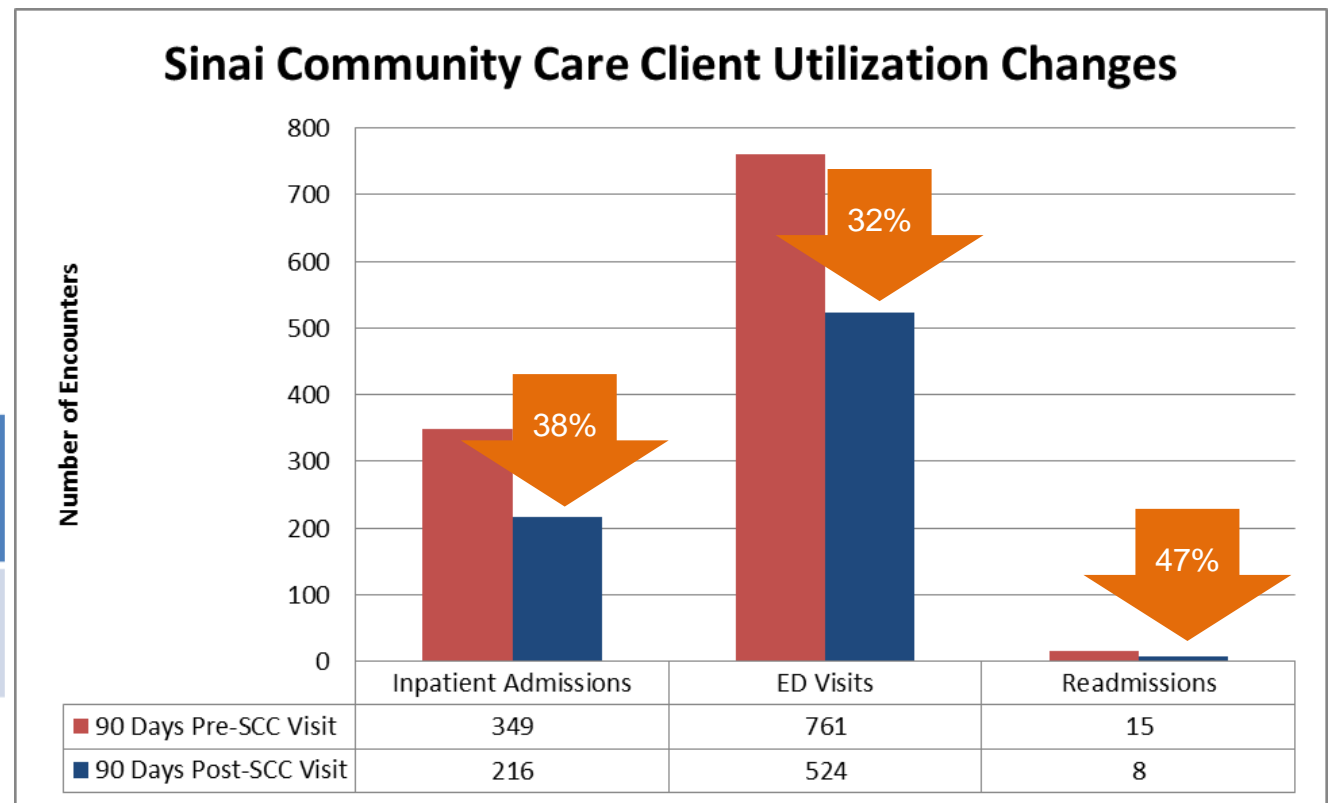
Sinai Community Care

- Internal Medicine, Pediatrics, OB-GYN,
- 3 Dedicated Social Workers—one in each clinic
- PCMH Level 1 Practice, Applying for Level 2 Designation
- Accept Medicare, Medicaid, MCO's, Commercial, Self-Pay with Sliding Fee Scale
- Health Insurance Enrollment
- Care Coordination (RN's, SW's and CHWs)
 - Addressing social determinants
 - Addressing high cost/high utilizing populations
 - Partnering with the community

Our Community		
Indicators	Pimlico/Arlington/Hilltop	Baltimore City
Race/Ethnicity	96.3% Black or African American	62.8% Black or African American
Household Income	\$32,410	\$41,819
Residents with No Health Insurance (adults 18 yrs and older)	13.7%	11.7%
Residents with No Health Insurance (children less than 18yrs old)	10.1%	4.4%
Unemployment	17.1%	13.1%
Non-Fatal Shooting Rate (per 10,000 residents)	12.4	6.9
Homicides (per 10,000 residents)	7.4	3.9
Life Expectancy	68.2	73.6



FY17 (July 1-Dec 31, 2016) N= 4,680 patients	Inpatient Admissions	ED Visits	Readmissions
% Change	38% Reduction	31% Reduction	47% Reduction



LifeBridge Health ACO's

LifeBridge Health ACO Statistics (Track 1) FY16

# of Physicians	\$ 431
% Employed Physicians	100%
Attributed Beneficiaries	\$ 14,980
Total Annual Spend	\$ 161,000,000
Benchmark	\$ 172,000,000
Total Savings	\$ 11,000,000
ACO Shared Savings	\$ 5,400,000
Shared Savings Distributed to Providers	\$ 2,100,000
Per Provider Distribution	up to \$65K
Medicare Savings per Beneficiary	\$ 734.31

In late 2016, LifeBridge Health ACO conducted a beneficiary outreach campaign:

<p>5,203 patients contacted</p> <ul style="list-style-type: none"> • 50,000+ total calls • Calls from 2-LINK RNs were highest yield 	<p>3,191 fall risk screens</p> <ul style="list-style-type: none"> • ~20% total population • Up to ~30 percentile bump in overall metric
<p>407 PCP visits scheduled</p> <ul style="list-style-type: none"> • Between 2 and 3% of all patients 	<p>25% Arranged transportation</p> <ul style="list-style-type: none"> • e.g. cab to PCP visit

LifeBridge Health and CRISP

- **ACO Utilization Information Enhancement**
- **Care Alert SPRINT Validation**
- **Pre and Post Utilization Report**
- **ENS Prompt Pilot**
- **Hospital Input to CRISP Product Sheet**



LIFEBRIDGE HEALTH[®]

The Future of Health Care is Here

APPENDIX

LifeBridge Health Presentation Summary

Summary					
Initiatives	Page #	Start Date	Highlights	FY 16 Costs	Program Savings*
Overview	1-8	-	LifeBridge Health system, continuum of care and commitment to Care Redesign, Infrastructure Spending, Performance Measurement, Readmissions, scope of Population Health	-	-
Diabetes Medical Home Extender Program	9	09/2013	Successful home visiting program for poorly controlled diabetics provides Nurse, SW, and CHW services to help resolve psychosocial barriers through behavior change	\$ 200,668	1.2M
SNF Collaborative	10	04/2015	Collaborative network of 36 SNF providers focusing on quality outcomes to drive cost of care reduction	\$ 194,867	4.6M
Community Paramedicine	11	01/2017	Unique partnership with Pulse Medical Transportation provides community supportive services--before, after and in lieu of a hospital visit	-	-
LifeLink Clinical Call Center	12	07/2105	Clinical Call center with 24/7 capability provides patient and physician coordination, support, and outreach	\$1,647,171	2.3M
ED Care Navigation Programs	14	06/2014	Embedded care navigators in ED engage patients returning with unmanaged chronic conditions and provide supportive services and home visits to address social barriers to improve health	\$ 364,706	1.1M
Violence Intervention Programs	15	06/2012	Addition of Safe Streets Expansion into existing violence intervention programming provides integrated approach to improve outcomes	\$ 611,281	-
Sinai Community Care	16	05/2015	Operating former FQHC as Community Clinic providing additional social work support and care coordination services	\$2,377,649	-
ACO's	17	01/2015	Two Track 1 ACOs with 25,000 beneficiaries yielding \$11M in total savings, \$5.4M in ACO shared savings, with 50% distributed to physicians	\$1,361,314	11M
CRISP Collaboration	18	01/2015	LifeBridge Health works extensively with CRISP to pilot programs, develop use cases, improve collaboration, and demonstrate value of CRISP information	-	-
Appendix					
Summary of Presentation	A1	-	Summary of presentation, key highlights, costs, and savings	-	-
SNF Collaborative Detail	A2-A3	04/2015	Performance Summary and magazine excerpt for SNF Collaborative	see above	see above
LifeLink Clinical Call Center Detail	A4	07/2105	Call Volume for Clinical Call center with 24/7 capability	see above	see above
Violence Intervention & Safe Streets Detail	A5	06/12	Maps of 21215, Park Heights, and Safe Streets	see above	see above
CRISP Collaboration Detail	A6-A10	01/2015	ACO ED High Utilizers CRISP data is significantly more comprehensive; Piloted single sign on with providers; Conducted Care Alert Sprint Validation; LBH use case drove CRISP Pre and Post Utilization Report; Piloted ENS PROMPT; Provided Hospital perspective to improve CRISP Product Sheet information;	-	-
Community Care Coordination Detail	A11-A12	06/2016	Partner in CHPB & established LBH Care Coordination program integrated with 24/7 clinical call center through LBH Transformation Grant	-	-

* The time period for Program Savings differs among initiatives listed. Detail is provided in remaining slides

SNF Collaborative Performance

Overall Performance Summary			PointRight Pro30 Rehospitalization Rate (MDS-based)			PointRight Return to Community LOS (MDS Based)			PointRight Quality Measures (MDS Based)			Family Experience Surveys (Maryland.gov)			Total Score
CMS ID	Name	County	Risk-Adjusted PointRight Pro30 Rate (All Payers)	Rank within LifeBridge	Score (0-40)	Average LOS Hospital to Community	Rank within LifeBridge	Score (0-20)	QM Points Related to Pro30 Adjusted Rates	Rank within LifeBridge	Score (0-20)	Overall Rating of Care (Scale of 1 to 10)	Rank within LifeBridge	Score (0-20)	
215335	Lorien Health Systems Mt Airy	Carroll	14.2%	13	40	22.5	8	18	445	7	18	9.3	1	20	96
215291	Northwest Hospital Subacute Unit	Baltimore	12.0%	6	40	13.9	1	20	490	2	18	8.1		16	94
215017	Longview Healthcare Center, LLC	Carroll	14.9%	14	40	30.0	24	12	540	1	20	9.1	4	20	92
215033	Levindale Hebrew Geriatric Center	Baltimore City	10.4%	4	40	22.0	6	18	395	17	16	8.8	6	18	92
215001	Ballenger Creek Center	Frederick	14.1%	12	40	21.3	5	18	460	4	18	8.1		16	92
215118	Future Care Old Court	Baltimore	12.4%	8	40	29.7	22	12	470	3	18	8.4	10	16	86
215037	Keswick MultiCare Center	Baltimore City	10.5%	5	40	25.3	13	14	385	19	16	8.2	15	16	86
215220	Mid-Atlantic Of Chapel Hill, LLC	Baltimore	13.6%	11	40	29.6	20	12	400	13	18	8.1	19	16	86
215130	Fairhaven, Inc.	Carroll	16.6%	19	35	25.9	15	14	350	27	16	9.2	2	20	85
215192	Future Care Cherrywood	Baltimore	9.5%	1	40	31.7	28	10	405	11	18	8.4	10	16	84
215207	Future Care Lochearn	Baltimore City	9.7%	2	40	34.9	34	10	425	9	18	8.0	22	16	84
215054	Manor Care - Towson	Baltimore	16.8%	20	35	25.0	12	16	360	26	16	8.4	10	16	83
215247	Brinton Woods Nursing & Rehab Center	Carroll	17.1%	21	30	22.1	7	18	400	13	18	8.2	15	16	82
215330	Brinton Woods Post Acute Care Cen.	Baltimore City	12.3%	7	40	34.1	33	10	375	23	16	8.1	19	16	82
215094	Golden Living - Westminster	Carroll	13.0%	9	40	29.3	19	12	265	35	14	8.0	22	16	82
215133	Carroll Lutheran Village	Carroll	15.7%	16	40	29.8	23	12	325	30	16	7.7	25	14	82
215348	Lorien Taneytown, Inc	Carroll	16.3%	17	35	32.6	31	10	385	19	16	9.2	2	20	81
215219	Future Care Irvington	Baltimore City	13.4%	10	40	30.7	26	10	385	19	16	7.7	25	14	80
215193	Augsburg Lutheran Home	Baltimore	10.2%	3	40	37.0	36	5	400	13	18	8.4	10	16	79
215128	Future Care Courtland	Baltimore	15.5%	15	40	30.4	25	10	385	19	16	7.0	31	12	78
215349	Brinton Woods at Arlington West	Baltimore City	17.6%	25	30	32.3	30	10	440	8	18	8.7	7	18	76
215085	Caton Manor	Baltimore City	17.8%	26	30	19.9	2	20	310	33	16	6.6	34	10	76
215084	Genesis Patapsco Valley Center	Baltimore	16.5%	18	35	31.3	27	10	250	36	14	8.1	19	16	75
215096	Genesis Multi-Medical Center	Baltimore	17.8%	27	30	33.3	32	10	365	25	16	8.6	9	18	74
215136	Transitions Healthcare Sykesville	Carroll	17.3%	22	30	27.6	16	12	345	28	16	8.2	15	16	74
215249	Future Care Homewood	Baltimore City	17.4%	23	30	29.6	20	12	330	29	16	8.0	22	16	74
215351	Lorien Mays Chapel	Baltimore	20.0%	30	20	22.8	9	16	425	9	18	8.3	14	16	70
215077	Manor Care - Ruxton	Baltimore	17.5%	24	30	28.7	18	12	285	34	14	7.2	29	12	68
215347	Manor Care - Woodbridge Valley	Baltimore	19.8%	29	20	28.1	17	12	400	13	18	8.2	15	16	66
215301	Manor Care - Roland Park	Baltimore City	20.4%	31	15	20.4	3	18	450	6	18	7.5	27	14	65
215031	Genesis Long Green Center	Baltimore City	19.4%	28	20	22.9	10	16	315	32	16	6.9	33	10	62
215226	Genesis PowerBack Rehab., Brightwood	Baltimore	22.5%	33	10	20.4	3	18	390	18	16	8.1		16	60
215109	Manor Care - Rossville	Baltimore	22.6%	34	10	25.5	14	14	405	11	18	7.2	29	12	54
215069	Manor Care - Dulaney	Baltimore	21.7%	32	15	32.1	29	10	320	31	16	7.3	28	12	53
215265	Copper Ridge	Carroll	25.3%	35	5	35.9	35	5	460	4	18	9.0	5	20	48
215074	Genesis Homewood Center	Baltimore City	29.6%	36	5	24.5	11	16	370	24	16	6.5	35	10	47
215082	Envoy Of Pikesville	Baltimore										7.0	31	12	
Group Average			16.4%		31	28		13	386		17	8.0		16	76



The ranking system enables the identification facilities who are beating, meeting, or still needing assistance with achieving performance benchmarks.

15.9	PointRight Pro30 Adjusted MD Average
16.9	PointRight Pro30 Adjusted National Average
359	QM MD Average
357	QM National Average
8.1	Overall Rating of Care MD Average

LifeBridge Health SNF Collaborative in the Spotlight

Excerpted from *Provider Magazine*, September 2016

Poised To Take The New Payment Leap

While some providers are collaborating with hospitals to join networks, others have been hesitant.

But if PruittHealth is the exception right now in extending its brand to health insurance, then what is the norm for SNFs when it comes to being active, or even included, in the Medicare program's value-based payment programs and pilots or those that commercial payers, hospital systems, and physician networks have established?

Susan Westgate, a consultant to Sinai Hospital of Baltimore, part of LifeBridge Health, is co-chair of the company's Skilled Nursing Facility Collaborative. The collaborative is a LifeBridge initiative to enhance the quality and performance outcomes of the partners in the group's network, which is a collection of SNF facilities that surround LifeBridge hospitals.

To support this goal, Westgate says, third-party vendor PointRight is a big asset in the collection and analysis of performance metrics vital to the program.

"They also assisted us with development of a performance dashboard and are lending their expertise with their post-acute predictive analytics capabilities that we will be using to identify and achieve key performance benchmarks," she says.

LifeBridge is a good candidate to take on such endeavors, since the providers under its umbrella range from home care companies to acute and post-acute facilities, to inpatient and outpatient centers, and since population health has been an organizing principle for some time.

"In many respects, even before some of the major shifts that have happened in health care, we have been positioning ourselves to meet the needs of the total patient, of the total community," Westgate says.

For her, there are multiple levels to what is happening in VBC.

"Certainly, you have what the government is issuing in terms of change, and so we are moving toward pay-for-performance and value-based purchasing to really anchor health care around quality. A lot of what the government has been doing mirrors what has been happening in many private industries," she says. "In many respects, large hospital institutions are trying to adapt to what is a completely fluid health care landscape."

Westgate says it is impossible to talk about payment without looking at some of the challenges that providers are facing, especially with increased patient acuity and complexity.

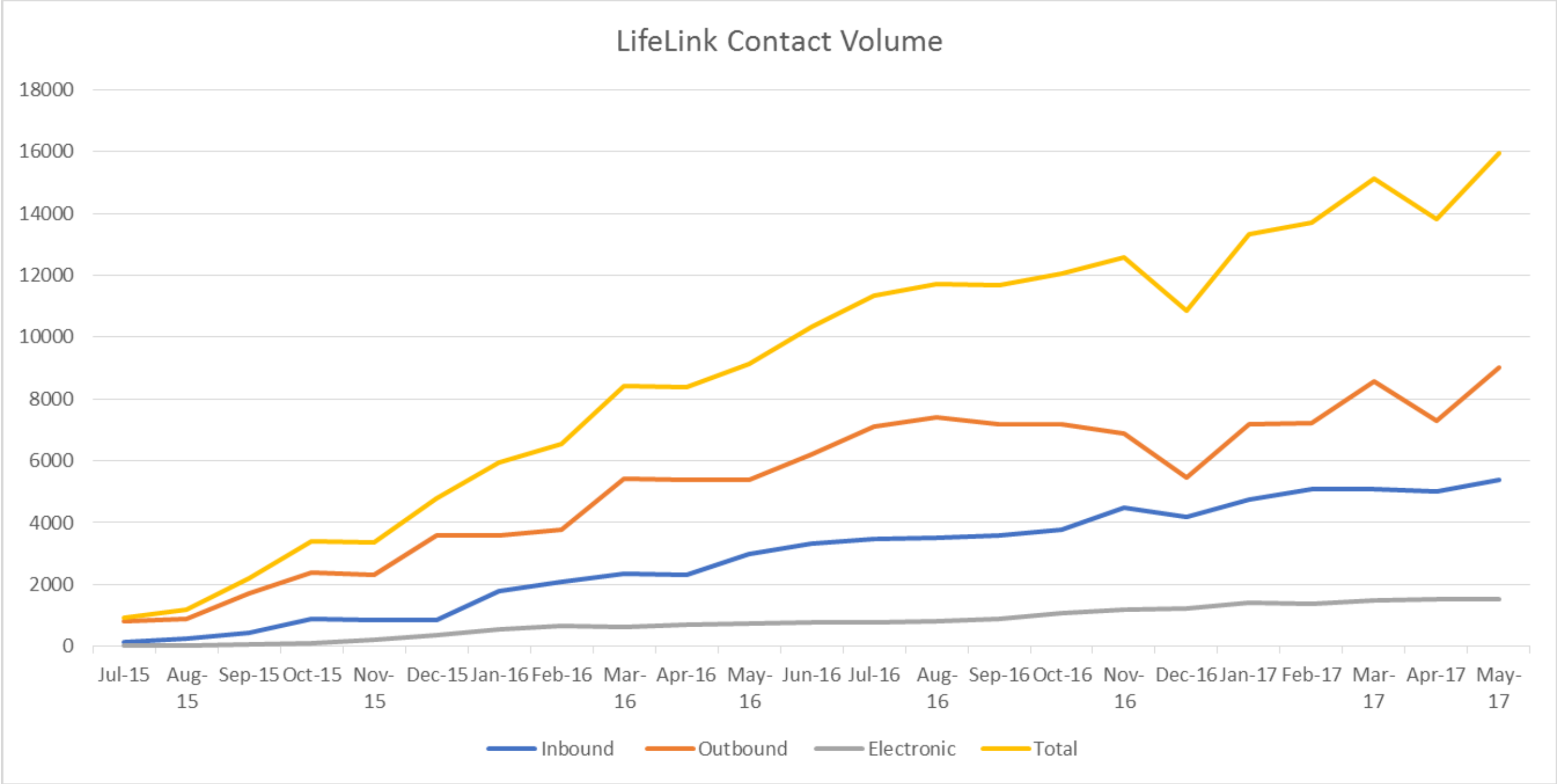
"There is this general migration to outpatient care, so it is a very tough landscape to navigate," she says. At the root of much of the VBC movement is reducing cost, reflected in government programs, with private payers taking on managed Medicaid in many states and the Medicare program looking to shrink payments.

"At the same time there is general pressure to reduce costs and reduce reimbursement for services, and that is directly in conflict with what is happening with patient care," Westgate says. "So we have sicker patients that are moving through the hospital system, we have sicker patients that need post-acute care services, and those less acute patients that used to be in post-acute care are now being managed in the outpatient realm."

Further, she sees this kind of cost reduction movement creating a complicated situation for hospitals and post-acute care facilities.

"In addition to that I think we also have this theme of risk. With population health we see a lot of the segmentation based on low, medium, and high risk, and those patients that are high risk are really difficult to manage." Those are going to be the patients that are moving back and forth between hospitals and post-acute facilities, and those patients who are in need of the most care are being seen as a potential liability, she says.

LifeLink Clinical Call Center

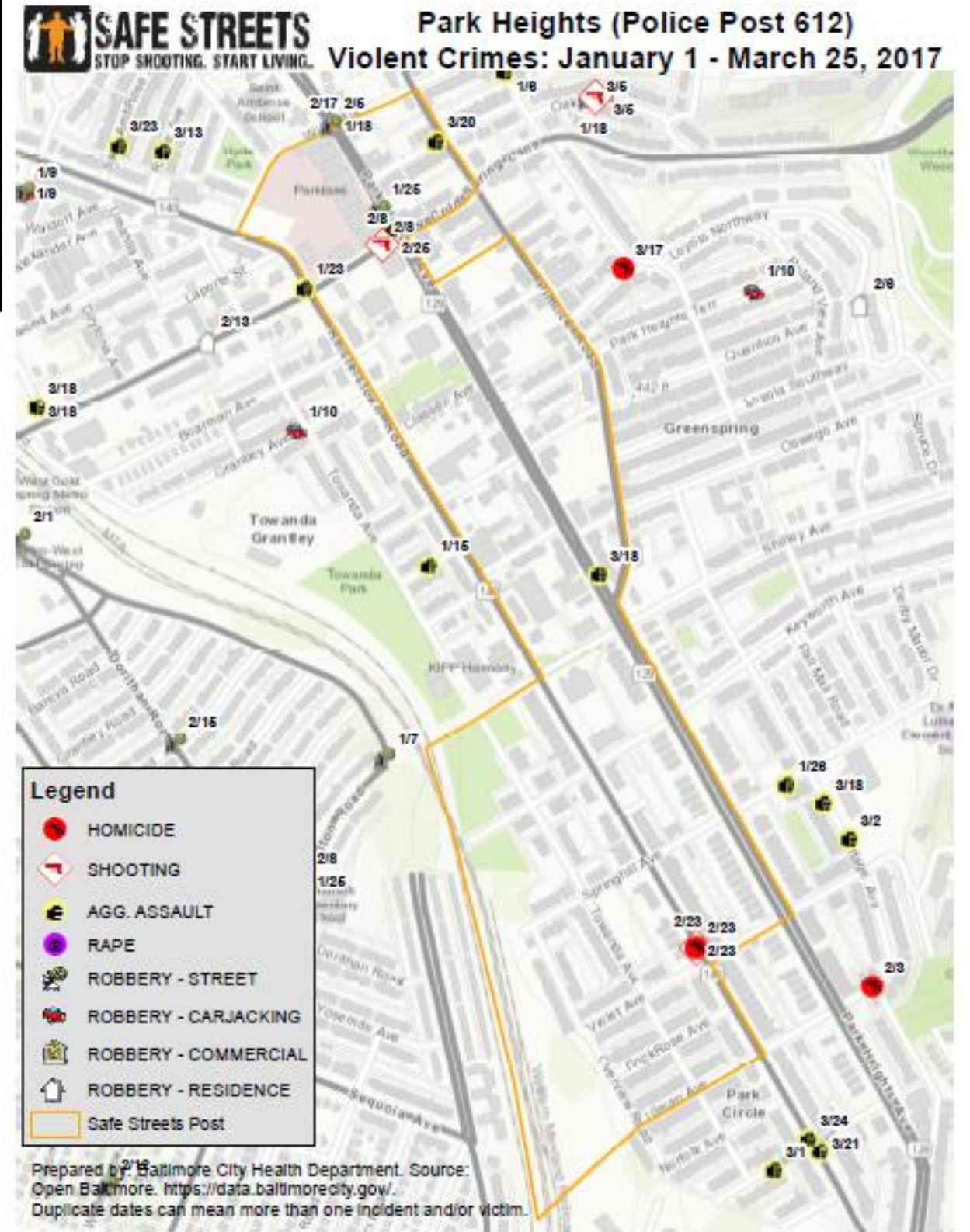
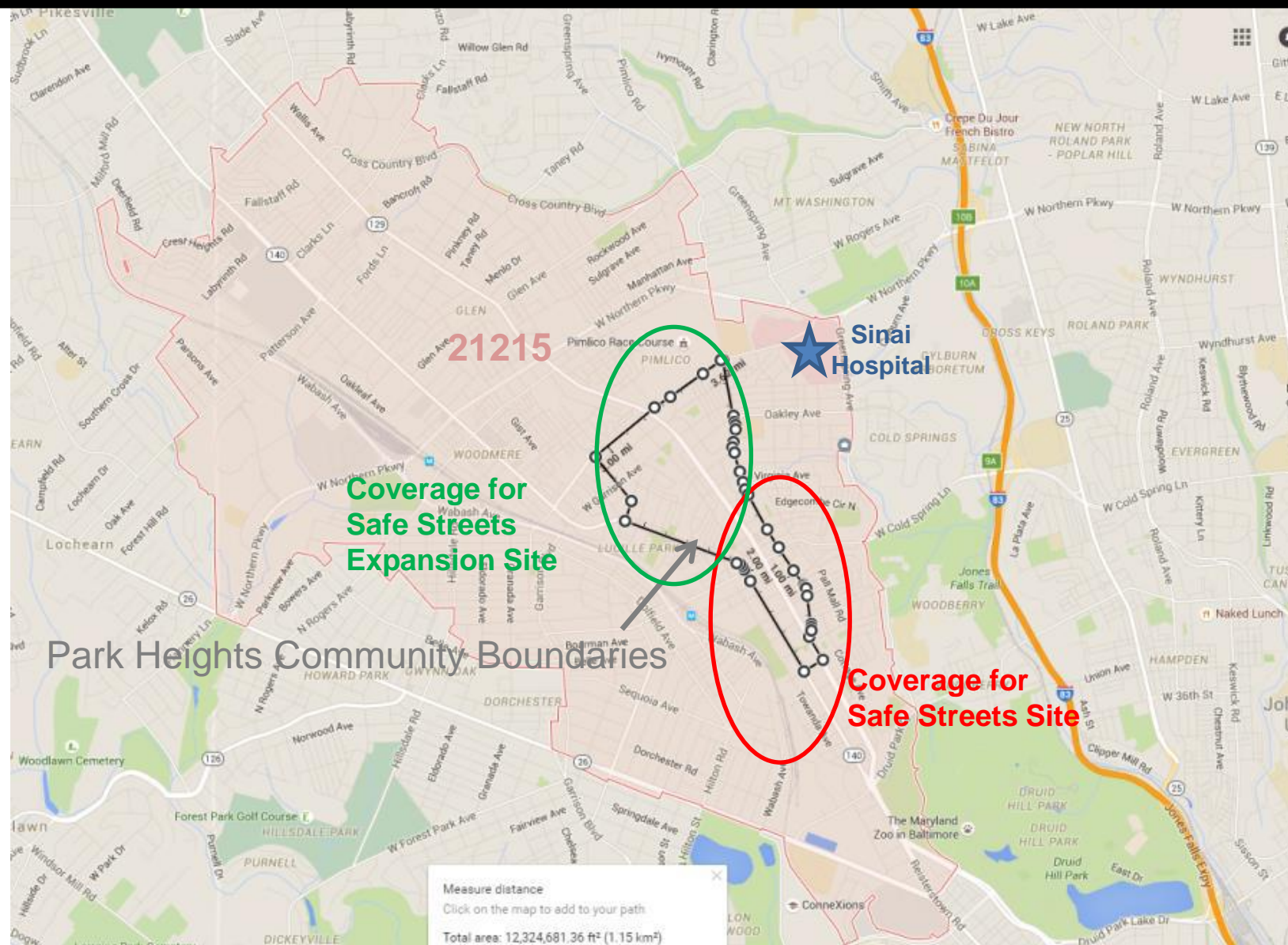


Violence Data and Maps

Sinai Hospital Assault/Trauma Impact FY16

	# of Patients	# of Encounters	Total Charges	# of 21215 Patients	# of 21215 Encounters	Total Charges for 21215	% 21215 Patients/Total Patients	% 21215 Encounters/Total Encounters	% 21215 Charges/Total Charges
Inpatient	115	147	\$3,207,122	37	48	\$1,015,309	32%	33%	32%
ED	872	991	\$1,485,175	342	398	\$527,492	39%	40%	36%
Total	987	1138	\$4,692,297	379	446	\$1,542,801	38%	39%	33%

FY16 data show a financial impact to Sinai Hospital of \$4.7M per year due to street violence, \$1.5M of this attributed to patients residing in 21215 (33% of total charges).



LifeBridge Health and CRISP: Improved ACO Information

25 Highest ED Utilizers in LifeBridge Health ACO		
Metric	LifeBridge Health data only	Full CRISP dataset
IP visits	2.04	4
Observation visits	0.56	0.96
ED visits	2.28	3.4
Total acute visits	4.88	8.36
Total spend (per)	\$43,289	\$79,891

ANALYTIC VALUE-ADD OF CRISP:

CRISP gives us access to 42% more data in the highest ACO utilizers, encompassing 46% of the total spend

LifeBridge Health and CRISP: Care Alert SPRINT Validation

CCPE Enhancements

Monthly Trend | Hospitals Summary | Monthly Report | Patient Summary | Patient List | Sources Summary | Notes

Care Coordination Program Enrollment Report Medicare FFS During the Last 12 Months

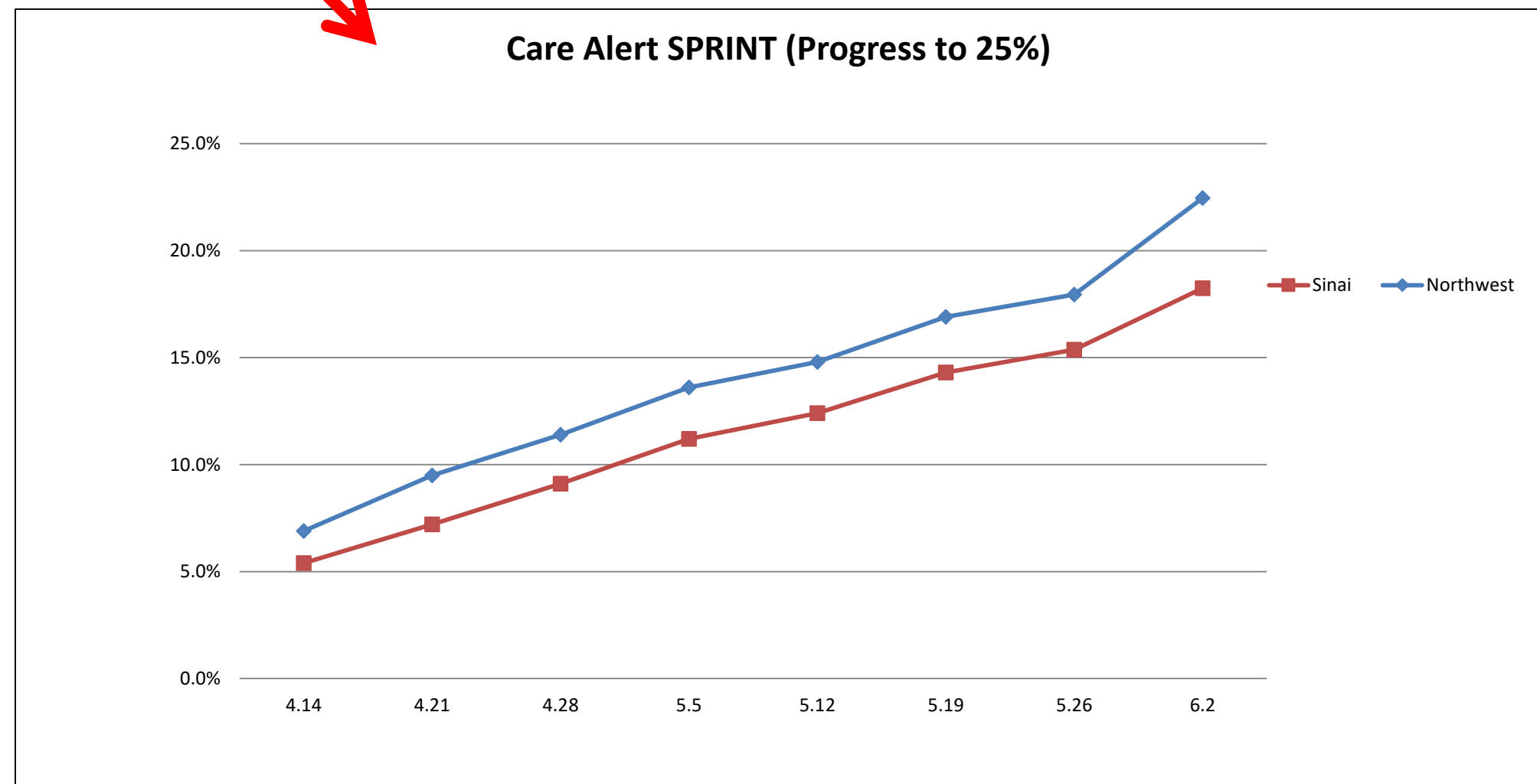
	High Need				Rising Need			
	% PCP	% CM	% Care Plan	% Care Alert	% PCP	% CM	% Care Plan	% Care Alert
Statewide	62.19%	15.14%	2.23%	4.97%	55.56%	7.75%	0.47%	0.91%

Medicare FFS Visit: Last Visit Only
Last X Months: 12

- ❖ Utilizing CRISP reporting, LifeBridge Health has exchanged real-time reports of progress for submitting Care Coordination efforts, especially for the MHA's Care Alert SPRINT initiative.
- ❖ CRISP has utilized the LBH reporting to validate the accuracy of the information exchange.

New Payor Filter and Monthly Time Range Filter Added

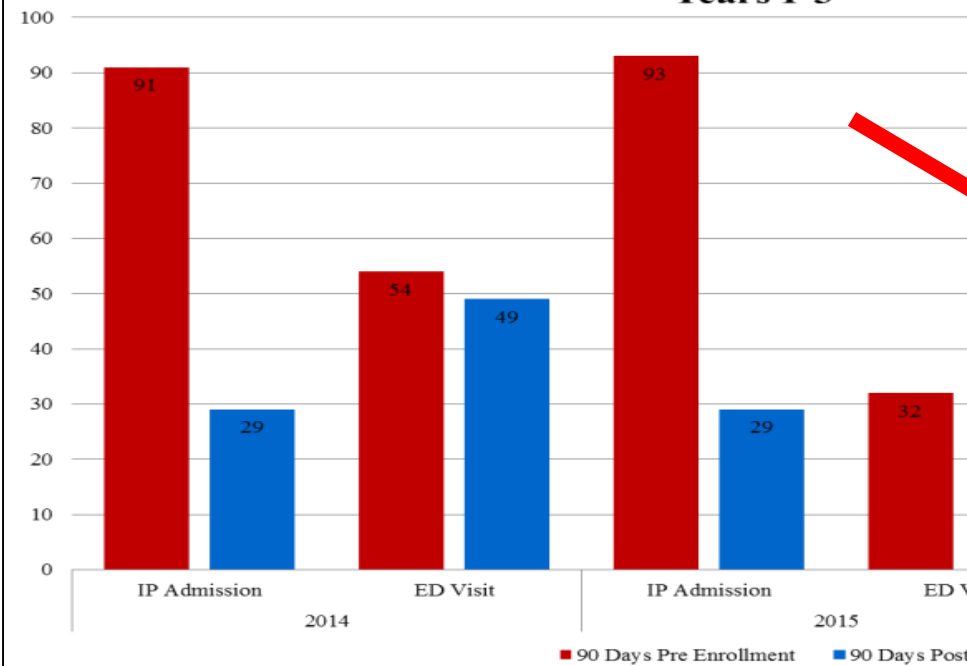
- New filter for High/Rising need patients by Medicare FFS payor:
 - On Last Visit Only
 - At Least One Visit
- New filter for High/Rising need patients by variable timeframe (12 months max)



LifeBridge Health and CRISP: Pre and Post Utilization Report

Enhancing LifeBridge Health's internal Pre and Post utilization to include CRISP information. View into the "total cost of care" and spending across all Maryland hospitals.

Utilization Trends for Sinai DMHE Program Participants, Years 1-3



Pre/Post Analysis

Analysis of Pre and Post Metrics Based on Enrollment Date

The analysis is based on discharges before and after the enrollment date. Please select the number of months, the types of visit to include in the analysis and sorting order for other hospitals. Depending on the number of months selected, some participants might not be included in the analysis if they do not have data for the entire period before and after the analysis. Total Number of Members in the Analysis shows the number of members are included in the report for a given selection.

All Hospitals



Total Number of Members in the Analysis

200

Hospital details

Hospital	Before	After	Before	After	Before	After
Hospital 1	\$1855K	\$1620K	519	448	177	142
Hospital 2	\$274K	\$271K	90	58	25	17
Hospital 3	\$51K	\$198K	53	34	19	16
Hospital 4	\$247K	\$183K	118	75	31	22
Hospital 5	\$207K	\$164K	76	60	33	29
Hospital 6	\$43K	\$156K	28	25	16	14
Hospital 7	\$129K	\$115K	53	51	21	18
Hospital 8	\$17K	\$112K	16	19	<10	<10

Before or After Enrollment

- Before
- After

Months of Analysis

Months

Visit Type

- (All)
- ED
- IP
- OP

Sorting Option for Hospitals

Total Charges - After Enrollm...

Hospital Name

(All)

LifeBridge Health and CRISP: ENS PROMPT Pilot



Featured Super User: LifeBridge Health

Problem: Partnership leaders in charge of identifying the high needs patients attributed to the hospitals in their region and find a real time way to monitor these patients as they encounter various touchpoints of the healthcare system.

The screenshot displays the ENS PROMPT web application. At the top, there is a search bar and a filter button labeled 'Add Filters'. Below this, there are four filter buttons: 'All', 'Not Started', 'In Progress', and 'Completed'. A red arrow points to the 'All' button, and a red circle highlights all four filter buttons. The main content area shows a list of patient events. The first event is from Bon Secours Hospital, dated 10/19/16 10:40 AM, with the event type 'ER Admit' and the complaint 'Mental Health Problems'. The second event is also from Bon Secours Hospital, dated 10/19/16 10:33 AM, with the event type 'ER Registration' and the complaint 'Mental Health Problems'. The third event is from Sinai Hospital, dated 10/18/16 11:25 AM, with the event type 'ER Registration'. On the right side of the interface, there is a 'Most Recent Event' section with details for the 10/19/16 10:33 AM event, including Event Date, Event Type, Event Location, Practice Location, Hospital Service, Patient Diagnosis, Discharge Disposition, Discharge to Location, Patient Complaint, and Admit Source. Below this is a 'Status Log' and an 'Event History' section.

[Case Study] LifeBridge Health Upgrades Care Coordination Services

PROMPT, a care coordination platform deployed through CRISP and developed by Audacious Inquiry (Ai), enhances LifeBridge Health's care teams workflow to benefit patients and minimize resource utilization.

Background and The Need:

LifeBridge Health's Northwest Hospital is a community hospital located in Randallstown, serving the health care needs of the northwest Baltimore metro area. Focused on patient-centered care, Northwest Hospital provides a variety of quality care services to the community, especially within the Emergency Department where patients are provided care navigation services. To provide extensive services, LifeBridge Health has partnered with HealthCare Access Maryland (HCAM) to assist patients with transitions of care and avoid acute-care encounters within the health system.

Chesapeake Regional Information System for our Patients (CRISP), the statewide Maryland Health Information Exchange (HIE), launched its Encounter Notification Service® (ENS®) service in early 2012, to inform caregivers when patients under their care were in contact with a healthcare system.

LifeBridge Health and CRISP: Collaboration Creates Improved Understanding

- ❖ LBH translated an early version of CRISP's product information sheet into an easier to understand product guide, depicting the Who, What, Why of each CRISP offering.
- ❖ LBH then shared this user-friendly version with CRISP, which has led to improved Product Sheets with easier to understand language.

CRISP System Location	CRISP Name	Type	What Is it?	Why use it?	Target Population	Target Audience	LBH Provisioning Process	LBH Use Case & Comments
CRISP Query Portal	Provider Query Portal	Tool	Online portal with clinical details for patients from any hospital encounter.	To view clinical information available on patient from multiple hospital sources	Any patient within the health system	Physician, RN, SW, Care Managers	Any new providers are automatically enrolled in the portal via user information in Cerner. Others register through the CRISP website, train with CRISP, and are then approved by LBH as being employed by LBH. Users MUST have a LBH email address in Lawson to be approved. *At Carroll, each CRISP user has a physician sponsor	Sinai, Northwest, Physician practices have access to query portal -LPBN: all employed primary care practices are signed up; regardless of Cerner EMR Notes- available via Cerner for provider view only -information is not stored in record -Single Sign On
	In-Context Alerts	Tool	CRISP In-Context Alerts and Notifications allow providers to receive specific information concerning a patient's clinical and pharmacological history while working in the context of Cerner PowerChart	Direct integration with the CRISP portal into Cerner PowerChart	Any patient within the health system	Physician, RN, SW, Care Managers	Any new providers are automatically enrolled in the portal via user information in Cerner.	Under development for Cerner hospitals
	PDMP (Prescription Drug Monitoring Program)	Report	The PDMP monitors the prescribing and dispensing of drugs that contain controlled dangerous substances (CDS). The goal of the PDMP is to assist in the identification and prevention of prescription drug abuse. It also promotes a balanced use of prescription data that preserves the professional practice of healthcare providers and legitimate access to optimal pharmaceutical care.	To assist in the identification and prevention of prescription drug abuse.			New LifeBridge providers starting after October 2016 are registered on request through a Cerner ticket to	All providers have been registered with the CRISP PDMP
	Care Alert	Doc	A real time alert containing "need to know" information about complex patients to assist in decision making regarding treatment, procedures, testing, and admissions	High priority, action oriented message that is 2-3 sentences long. 1 element of a Care Plan. Used for decision making regarding treatment, procedures, testing, and admissions based on previous provider encounters				

CRISP Reporting Services - Current and Planned Information Products

Updated March 15, 2017

Report Name	Type	Description	Required Credentials	Availability	Location	Data Through	Specifications Owner	Data Source
1. COP Care Partner List	Report	This report is a workbook containing contact information for community-based providers located in each hospital's side PAs, for hospitals considering participating in the HSRC COP program.	Portal/Summary Users	No updates planned	Casimira Folder	December 2016	HSRC	CMMI, HSRC
2. Total Cost of Care Report	Report	This report is a workbook developed by the HSRC to show a Maryland-specific analysis of Medicare data. The information presented is aggregate, with breakdowns by county, service type, patient characteristics, and cost.	Portal/Summary Users	Updated monthly	Casimira Folder	September 2016	HSRC	CMS - Medicare Chronic Condition Warehouse (CCW)
3. Total Cost of Care Report by County	Report	This report provides Medicare Total Cost of Care data for CY 2016 through the current monthly available data from CMS. Data is presented by Maryland county.	Portal/Summary Users	Deployed with 2016 - 2016 Medicare Data. Updated monthly	Casimira Folder	September 2016	CRISP	CMS - Medicare Chronic Condition Warehouse (CCW)
4. Maryland Hospital Acquired Conditions (MHAC) Summary	Report	This report is a series of worksheets showing all hospital MHAC data including facility specific benchmarks, PPC codes, and conditions.	Portal/Summary Users	Updated monthly	MHAC Folder	December 2016	HSRC	Casimira
5. MHAC Details	Report	This visit-level MHAC report shows APR-DRGs, PPCs, MDCs, and admit and discharge dates.	Portal/Patient-Level Users Only	Updated monthly	MHAC Folder	December 2016	CRISP/HSRC	Casimira
6. MHAC Details - Data Dictionary	Report	This document defines all fields in the MHAC Details file.	Portal/Patient-Level Users Only	No updates planned	MHAC Folder	N/A	HSRC	N/A
7. MHAC RY16 Base Year Documentation	Documentation	This document defines and clarifies how the HSRC calculates the base year for the MHAC Program.	Portal/Summary Users	No updates planned	MHAC Folder	N/A	HSRC	HSRC
8. MHAC RY16 Performance Year Documentation	Documentation	This document defines and clarifies how the HSRC calculates the performance year for the MHAC Program.	Portal/Summary Users	Updated annually	MHAC Folder	N/A	HSRC	HSRC
9. MHAC RY16 Base Year - SAS Code	Documentation	This document contains the SAS code used to calculate the base year for the MHAC Program.	Portal/Summary Users	Updated annually	MHAC Folder	N/A	HSRC	N/A
10. MHAC RY16 Performance Year - SAS Code	Documentation	This file contains the SAS code used to calculate the performance year for the MHAC Program.	Portal/Summary Users	Updated annually	MHAC Folder	N/A	HSRC	N/A
11. Potentially Avoidable Utilization (PAU) Summary	Report	This hospital-specific report shows PAU information by payer, broken down by volume and cost. Includes PC, PPC, and Readmission contribution (actual & percentage) to a hospital's PAU.	Portal/Summary Users	Updated monthly	PAU Folder	January 2017	HSRC	Casimira
12. PAU PC Summary	Report	This summary report shows year-to-date admissions by specific PC, and percentage of discharges with PC present for all hospitals.	Portal/Summary Users	Updated monthly	PAU Folder	January 2017	HSRC	Casimira
13. PAU Details	Report	This visit-level PAU report shows patient demographics, ICD, conditions and cost.	Portal/Patient-Level Users Only	Updated monthly	PAU Folder	January 2017	HSRC	Casimira
14. PAU RY16 Documentation	Documentation	This document defines and clarifies how the HSRC calculates the PAU reports.	Portal/Summary Users	Updated annually	PAU Folder	N/A	HSRC	HSRC
15. RY16 Readmissions by Discharge Service Line	Report	This hospital-specific report shows discharges by service line (based on APR-DRGs) resulting in readmissions, with state-wide comparisons.	Portal/Summary Users	Updated monthly	Readmit Folder	December 2016	HSRC	Casimira
16. RY16 Readmissions Trends	Report	This hospital-specific report shows monthly readmission trends with a statewide comparison and the number of readmissions to different hospitals.	Portal/Summary Users	Updated monthly	Readmit Folder	December 2016	HSRC	Casimira
17. RY16 Readmissions Reduction Program Comparison	Report	This aggregate report shows data for all hospital performance in the HSRC Readmission Reduction Incentive Program (RRIP), with comparisons to base year.	Portal/Summary Users	Updated monthly	Readmit Folder	December 2016	HSRC	Casimira
18. RY16 Out-of-State Readmission Ratios for RRP Attachment	Report	This report provides ongoing preliminary Medicare readmission numbers for hospitals assessed on the basis of attachment in the HSRC Readmission Reduction Incentive Program (RRIP).	Portal/Summary Users	Updated monthly	Readmit Folder	December 2016	HSRC	CMMI, HSRC
19. RY16 Readmissions Documentation	Documentation	This document defines and clarifies how the HSRC calculates RY16 Readmissions reports.	Portal/Summary Users	Proposed delivery in Oct 2016	Readmit Folder	N/A	HSRC	N/A
20. Readmissions RY16 - SAS Code	Documentation	This document contains the SAS code used to calculate the RY16 Readmissions reports.	Portal/Summary Users	Proposed delivery in Oct 2016	Readmit Folder	N/A	HSRC	N/A
21. RY16 Discharge Details IP	Report	This hospital-specific, visit-level report provides all eligible and excluded IP discharges, readmissions, including APR-DRGs and ICD details.	Portal/Patient-Level Users Only	Updated monthly	Readmit Folder	December 2016	HSRC	Casimira
22. AMC Transfers	Report	This report shows all hospital summary data on transfers to academic medical centers.	Portal/Summary Users	Updated monthly	Transfer Folder	January 2017	HSRC	Casimira



Community Care Coordination: CHPB

Community Health Partnership of Baltimore

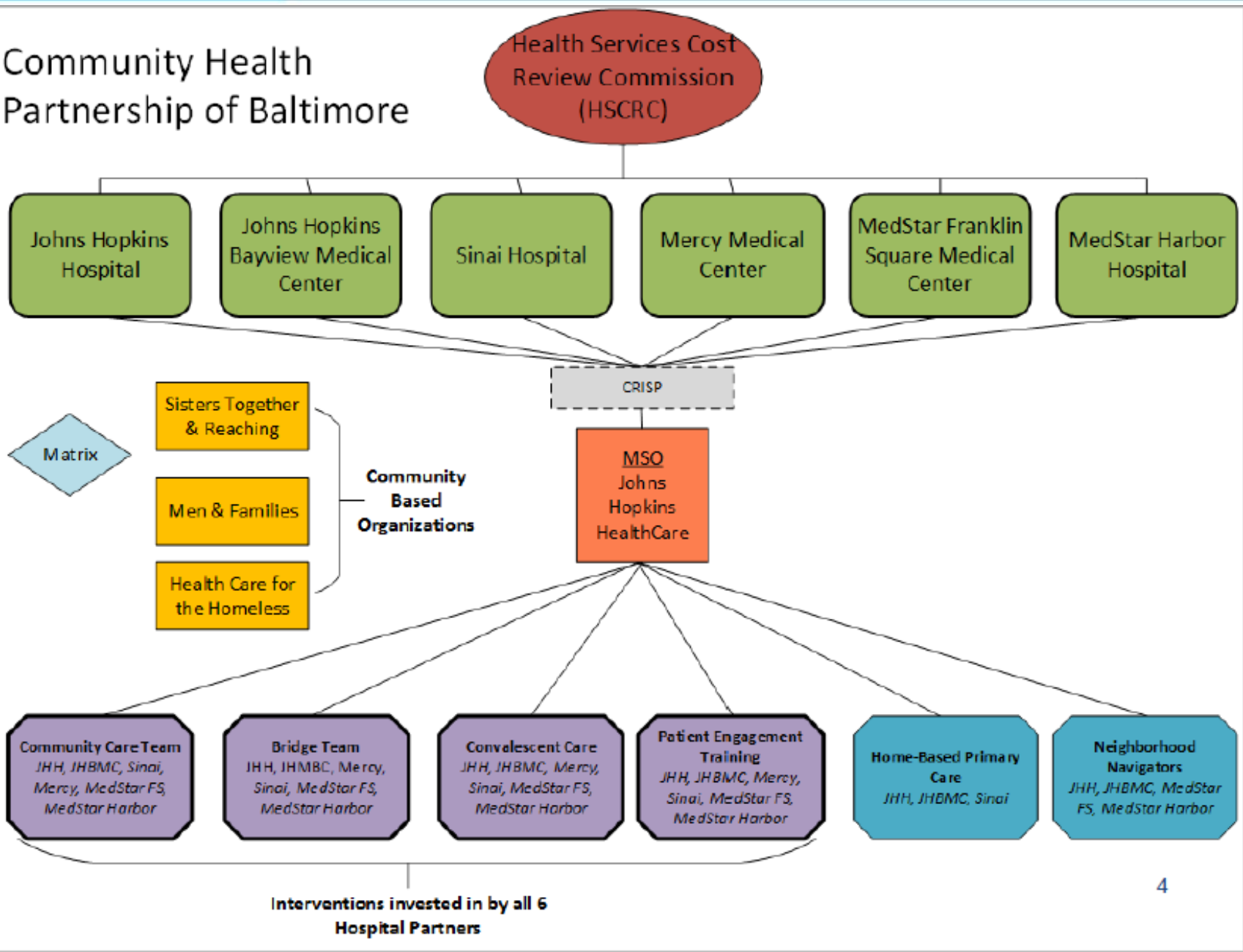
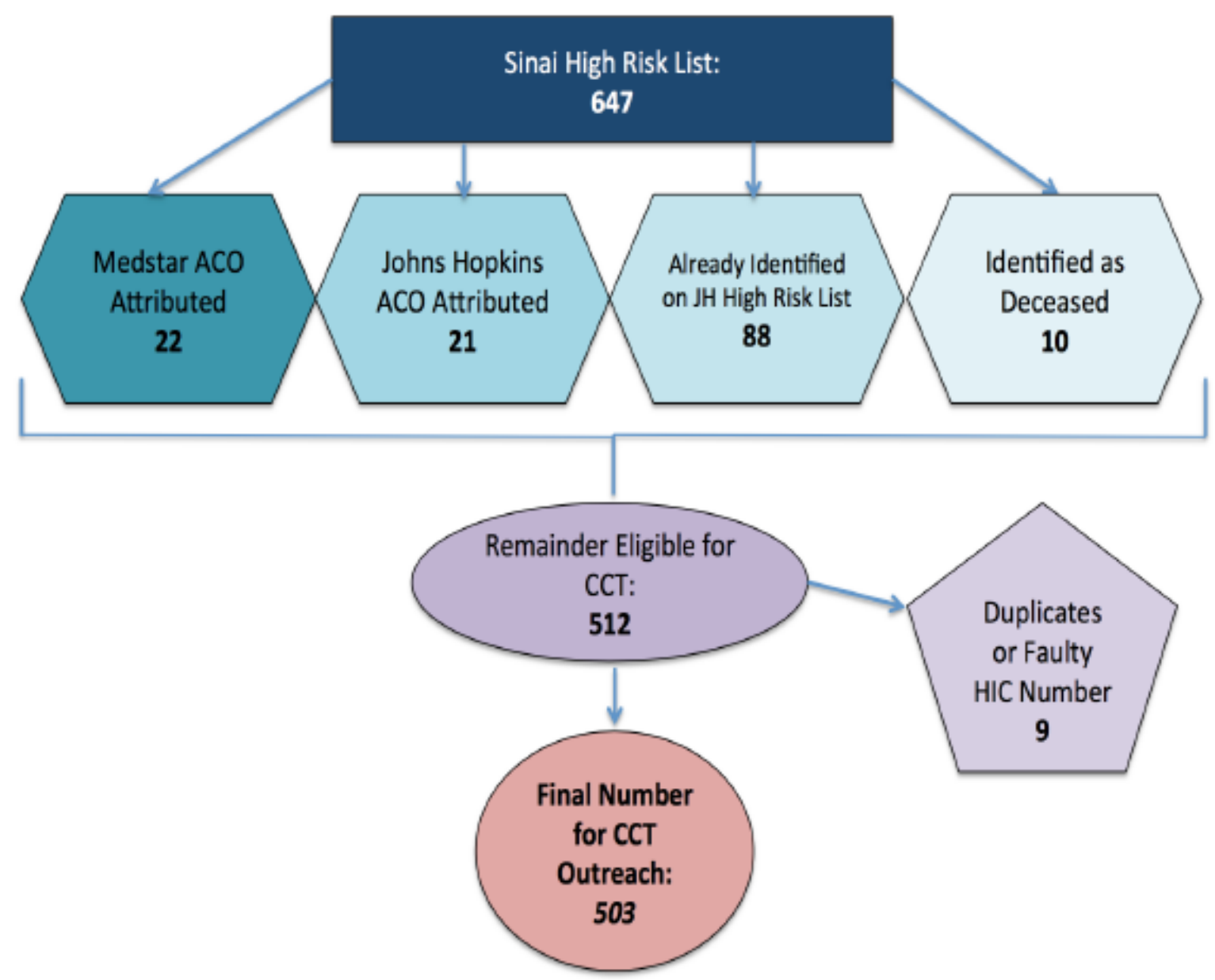


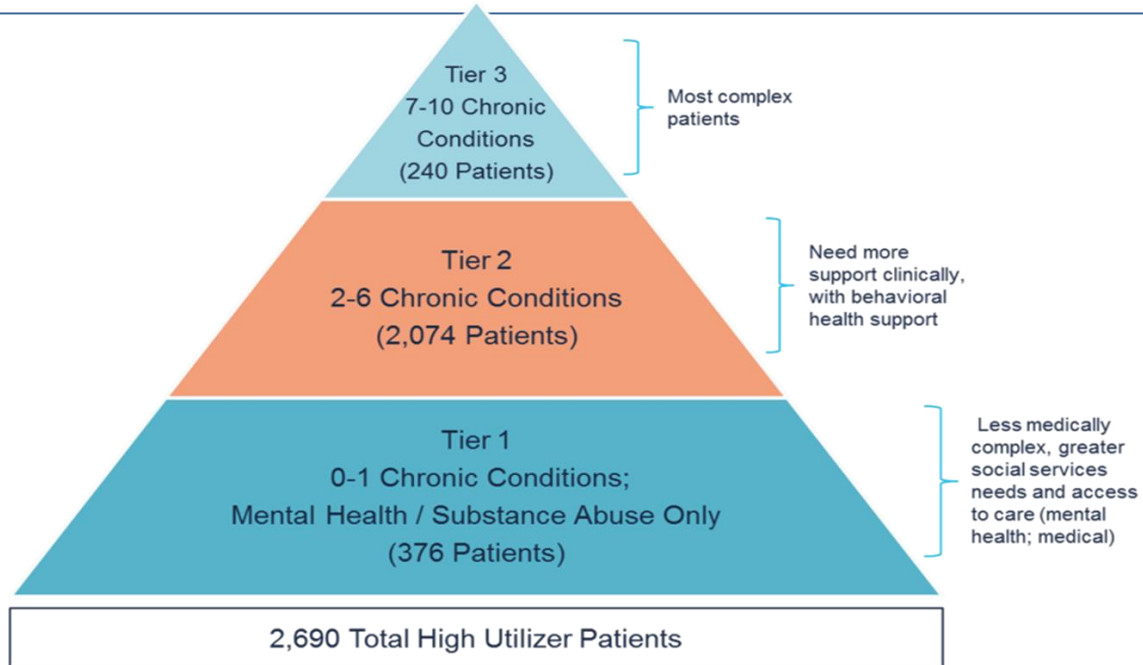
Diagram 1: Distribution of Sinai High Risk List Patients



Awarded \$774K/year for Sinai Hospital through the Community Health Partnership of Baltimore Transformation Grant

Community Care Coordination: LBH

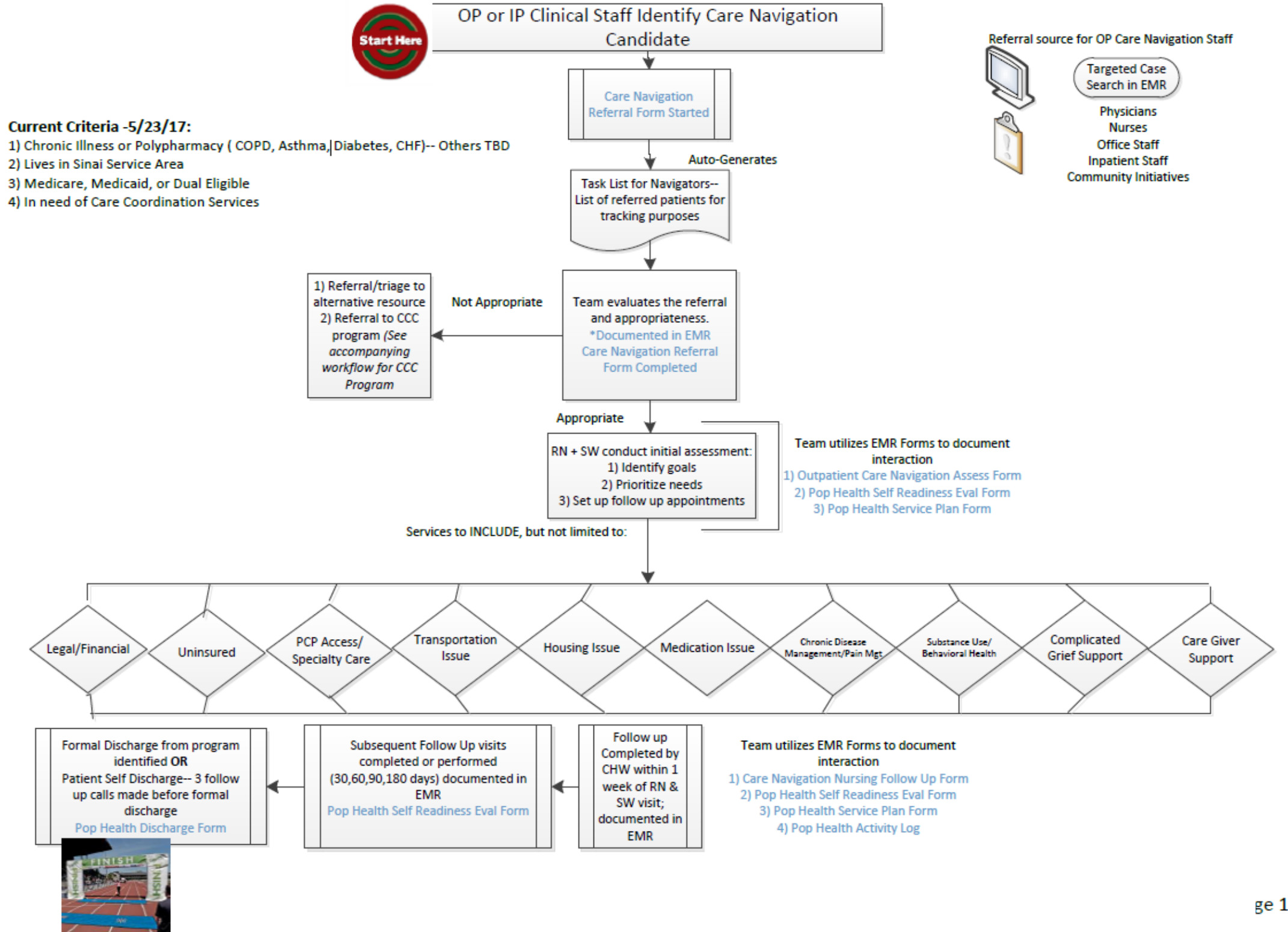
- ❖ Established a comprehensive, seamless, inpatient, outpatient, and community care coordination system integrated with a 24/7 call center. Hired 9 team members, including Director of Community Care Coordination.
- ❖ Team integrates with hospital care management and care navigation programs and supports the LifeBridge Health Transformation Grant, the Community Health Partnership of Baltimore, the ACO, CCIP programming, and other identified populations needing care coordination
- ❖ Multi-year program to reduce preventable hospital utilization for 2,690 "high-utilizers"* across the three LBH hospitals, with work in year 1 targeting the 1,256 Medicare high utilizers who accounted for total charges of \$75.7M in FY15.



Awarded \$1.35M /year through the HSCRC LifeBridge Health Transformation Grant

OP Care Navigation

05.23.17 LK



Referral source for OP Care Navigation Staff

- Targeted Case Search in EMR
- Physicians
- Nurses
- Office Staff
- Inpatient Staff
- Community Initiatives

Rate Year (RY) 2018 Potentially Avoidable
Utilization Savings Policy Final
Recommendation

Background

- ▶ Ensure savings to the purchasers from incentive programs and satisfy exemption requirements from Medicare programs
- ▶ Started in RY 2014 in conjunction with the Admission Readmission Revenue (ARR) Program
- ▶ RY 2017 PAU Savings policy was updated to align the measure with the PAU definitions used in the market shift adjustment
 - ▶ Added Prevention Quality Indicators (PQI)*
 - ▶ Readmissions counted at the receiving hospital
 - ▶ Added observation stays lasting 23 hour or longer to inpatient discharges

*Developed by Agency For Health Care Quality and Research

http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx

Also known as Ambulatory Care Sensitive Conditions, that is conditions for which good outpatient care can potentially prevent the hospitalization.

R.Y. 2018 PAU Savings State-Wide Calculation

Statewide Results		Value		
R.Y. 2017 Total Approved Permanent Revenue	A	\$15.8 billion		
Total R.Y.18 PAU %	B	10.86%		
Total R.Y.18 PAU \$	C	\$1.7 billion		
<hr/>				
Statewide Total Calculations		Total	Last year	Net
Proposed R.Y. 2018 Revenue Adjustment %	D	-1.45%	-1.25%	-0.20%
Proposed R.Y. 2018 Revenue Adjustment \$	E=A*D	-\$228.4 million	-\$194.4 million	-\$34.0 million



RY 2018 PAU Savings Final Recommendations

- ▶ Set the value of the PAU savings amount to 1.45 percent of total permanent revenue in the state, which is a 0.20 percent net reduction in RY 2018.
 - ▶ All hospitals contribute to the statewide PAU savings, however, each hospital's reduction is proportional to their percent PAU revenue.
- ▶ Cap the PAU savings reduction at the statewide average reduction for hospitals with higher socio-economic burden.
- ▶ Evaluate further expansion of PAU definitions for RY 2019 to incorporate additional categories of unplanned admissions.

Final Recommendation for the Potentially Avoidable Utilization Savings Policy for Rate Year 2018

June 14, 2017

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Table of Contents

List of Abbreviations	1
Introduction.....	2
Background.....	2
Exemption from CMS Quality-Based Payment Programs	4
Assessment.....	4
Potentially Avoidable Utilization Performance	4
Proposed Required Revenue Reduction.....	5
Hospital Protections	6
Future Expansion of PAU.....	6
Recommendations.....	7
Appendix I. Analysis of PQI Trends.....	8
Appendix II. Percent of Revenue in PAU by Hospital	9
Appendix III. Modeling Results Proposed PAU Savings Policy Reductions for RY 2018 ..	12

LIST OF ABBREVIATIONS

ADI	Area deprivation index
ARR	Admission-Readmission Revenue Program
CMS	Centers for Medicare & Medicaid Services
CY	Calendar year
DRG	Diagnosis-related group
ECMAD	Equivalent case-mix adjusted discharge
FFY	Federal fiscal year
FY	Fiscal year
GBR	Global budget revenue
HRRP	Hospital Readmissions Reduction Program
HSCRC	Health Services Cost Review Commission
IPPS	Inpatient prospective payment system
PAU	Potentially avoidable utilization
PQI	Prevention quality indicators
RRIP	Readmissions Reduction Incentive Program
RY	Rate year
SOI	Severity of Illness
TPR	Total patient revenue

INTRODUCTION

The Maryland Health Services Cost Review Commission (HSCRC or Commission) operates a potentially avoidable utilization (PAU) savings policy as part of its portfolio of value-based payment policies. This policy was formerly known as the readmission shared savings policy, but its name changed to account for the expanded definition of avoidable utilization. The PAU savings policy is an important tool to maintain hospitals' focus on improving patient care and health through reducing PAU and its associated costs. The PAU savings policy is also important for maintaining Maryland's exemption from the Centers for Medicare & Medicaid Services (CMS) quality-based payment programs, as this exemption allows the state to operate its own programs on an all-payer basis.

In this recommendation, staff is proposing to continue the PAU methodology used in rate year 2017, to increase the level of savings derived from the policy, and to specify the calculations and application of the policy in conjunction with the state fiscal year (FY) 2018 update. The purpose of this report is to present background information and supporting analyses for the PAU savings recommendation for rate year (RY) 2018.

BACKGROUND

The United States ranks behind most countries on many measures of health outcomes, quality, and efficiency. Physicians face particular difficulties in receiving timely information, coordinating care, and dealing with administrative burden. Enhancements in chronic care— with a focus on prevention and treatment in the office, home, and long-term care settings—are essential to improving indicators of healthy lives and health equity. As a consequence of inadequate chronic care and care coordination, the healthcare system currently experiences an unacceptably high rate of preventable hospital admissions and readmissions. Maryland's new All-Payer Model was approved by CMS effective January 1, 2014. This Model aims to demonstrate that an all-payer system with accountability for the total cost of hospital care is an effective model for advancing better care, better health, and reduced costs.

HSCRC, together with stakeholders, has adapted and developed a series of policies and initiatives to improve care and care coordination, with a particular focus on reducing PAU.

Under the state's previous Medicare waiver, the Commission approved a savings policy on May 1, 2013, which reduced hospital revenues based on case-mix adjusted readmission rates using specifications set forth in the HSCRC's Admission-Readmission Revenue (ARR) Program.¹ Nearly all hospitals in the state participated in the ARR program, which incorporated 30-day readmissions into a hospital episode rate per case, or in the Total Patient Revenue (TPR) system, a global budget for more rural hospital settings. With the implementation of the ARR and the

¹ A readmission is an admission to a hospital within a specified time period after a discharge from the same or another hospital.

advent of global budgets, the HSCRC created a Savings policy to ensure that payers received savings that would be similar to those that would have been expected from the federal Medicare HRRP. Unlike the federal Hospital Readmissions Reduction Program (HRRP) which provides savings to payers by avoiding readmissions, the Maryland system “locks in” those savings into the hospital budget, so a separate savings policy is necessary. Under the new All-Payer Model, the Commission continued to use the savings adjustment to ensure a focus on reducing readmissions, to ensure savings to purchasers, and to meet the exemption requirements for “revenue at-risk” under Maryland’s value-based programs.

For RYs 2014 and 2015, the HSCRC calculated a case-mix adjusted readmission rate based on ARR specifications for each hospital for the previous calendar year.^{2,3} The statewide savings percentage was converted to a required reduction in readmission rates, and each hospital’s contribution to savings was determined by its case-mix adjusted readmission rates. Based on 0.20 percent annual savings, the total reduction percentage was 0.40 percent of total revenue in RY 2015.

In RY 2016, the HSCRC updated the methodology for calculating the savings reduction to use the case-mix adjusted readmission rate based on the specifications for the Readmissions Reduction Incentive Program (RRIP).⁴ Based on 0.20 percent annual savings, the total reduction percentage was 0.60 percent of total revenue in RY 2016.

In RY 2017, the Commission expanded the savings policy to align the measure with the potentially avoidable utilization (PAU) definition used in the market shift adjustment, incorporating readmissions, as well as admissions for ambulatory care sensitive conditions as measured by the Agency for Health Care Research and Quality’s Prevention Quality Indicators (PQIs).⁵ Aligning the readmissions measure with the PAU definition changed the focus of the readmissions measure from “sending” hospitals to “receiving” hospitals. In other words, the updated PAU methodology calculated the percentage of revenue associated with readmissions that occur at the hospital, regardless of where the original (index) admission occurred. Assigning readmissions to the receiving hospital should incentivize hospitals to work within their service areas to reduce readmissions, regardless of where the index stay took place. Additionally, the savings associated with readmission reductions will accrue to the receiving hospital. Finally, aligning the readmission measure with the PAU definition enabled the measure to include observation stays that are longer than 23 hours in the calculation of both readmissions and PQIs. In RY 2017, the Commission increased the total reduction percentage to 1.25% of total revenue.

² Only same-hospital readmissions were counted, and stays of one day or less and planned admissions were excluded.

³ The case-mix adjustment was based on a total of observed readmissions vs. expected readmissions, which is calculated using the statewide average readmission rate for each diagnosis-related group (DRG) severity of illness (SOI) cell and aggregated for each hospital.

⁴ This measures 30-day all-cause, all hospital readmissions with planned admission and other exclusions.

⁵ PQIs measure inpatient admissions for ambulatory care sensitive conditions. For more information on these measures, see http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx.

Exemption from CMS Quality-Based Payment Programs

Section 3025 of the Affordable Care Act established the federal Medicare Hospital Readmission Reduction Program in federal fiscal year (FFY) 2013, which requires the Secretary of the U.S. Department of Health and Human Services to reduce payments to inpatient prospective payment system (IPPS) hospitals with excess readmissions for patients in fee-for-service Medicare.^{6,7} According to the IPPS rule published for FFY 2015, the Secretary is authorized to exempt Maryland hospitals from the Medicare Hospital Readmissions Reduction Program if Maryland submits an annual report describing how a similar program in the State achieves or surpasses the nationally measured results for patient health outcomes and cost savings under the Medicare program. As mentioned in other HSCRC quality-based payment recommendations reports, the new All-Payer Model changed the criteria for maintaining exemptions from the CMS programs. As part of the new All-Payer Model Agreement, the aggregate amount of revenue at-risk in Maryland quality/performance-based payment programs must be equal to or greater than the aggregate amount of revenue at-risk in the CMS Medicare quality programs. The PAU savings adjustment is one of the performance-based programs used for this comparison. In contrast to HSCRC's other quality programs that reward or penalize hospitals based on performance, the PAU Savings policy is intentionally designed to assure savings to payers.

ASSESSMENT

A central focus of the new All-Payer Model is the reduction of PAU through improved care coordination and enhanced community-based care. While hospitals have achieved significant progress in transforming the delivery system to date, there needs to be a continued emphasis on care coordination, improving quality of care, and providing care management for complex and high-needs patients. For this reason, staff suggests that the HSCRC continue to focus the savings program on PAU, defined to include both readmissions and PQIs.

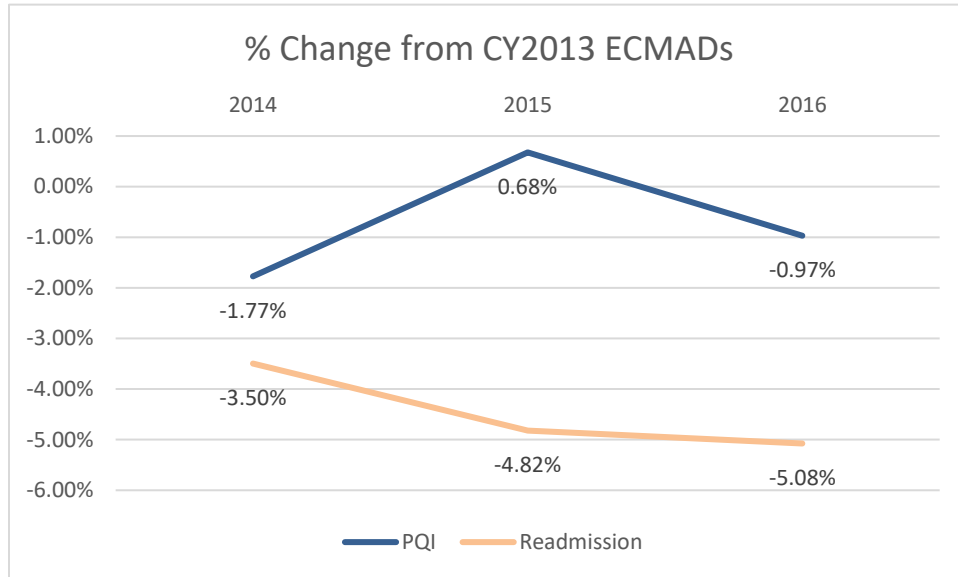
Potentially Avoidable Utilization

Calendar year (CY) 2017 trends indicate that readmission improvement is accelerating, while progress in reducing PQIs remains limited. Figure 1 below shows trends in readmissions and PQIs since CY 2013. While the CY 2016 equivalent case-mix adjusted readmission discharges (ECMADs) declined by 5.08 percent over CY 2013, PQIs declined by 0.97 percent, which was preceded by a 0.68 percent PQI increase in CY 2015. Appendix I shows more detailed information on specific PQI trends. PQI trends between CY 2015 and CY 2016 should be interpreted with caution due to differences in PQI logic because of ICD-10 implementation.

⁶ Patient Protection and Affordable Care Act, 124 Stat. 119 (2010) (codified as amended at 42 U.S.C. § 1395ww(q) (Supp. 2010)).

⁷ For more information on this program, see <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>.

Figure 1. Changes in Maryland’s Readmission and PQI Rates over CY 2013



Proposed Required Revenue Reduction

HSCRC staff proposes to adjust the annual savings amount from last year’s annual reduction of 0.65% to an annual reduction of 0.20%, which will result in a statewide PAU savings adjustment

Figure 2. Proposed RY 2018 Statewide Savings

Estimated PAU Revenue	Formula	Value		
RY 2017 Total Approved Permanent Revenue	A	\$15.8 billion		
Total RY18 PAU %	B	10.86%*		
Total RY18 PAU \$ (Eligible Savings)	C	\$1.7 billion		
Statewide Savings Calculations	Formula	Total	Last year	Net
Proposed RY 2018 Revenue Adjustment %	D	-1.45%	-1.25%	-0.20%
Proposed RY 2018 Revenue Adjustment \$ (Expected Savings)	E=A*D	-\$228.4 million**	-\$194.4 million	-\$34.0 million

*Based on CY2016 Performance Data

**Expected Savings constitutes 13.35% of estimated PAU in RY18.

As previously mentioned, efforts to improve care and health and reduce PAU are essential to the success of the All-Payer Model. The RY 2018 recommendation continues to emphasize Maryland hospitals’ commitment to these goals, while providing PAU savings to purchasers. This year’s proposal also helps ensure that Maryland quality programs continue to meet or exceed the revenue at-risk in Medicare quality programs.

The PAU savings adjustment has a number of advantages, including the following:

- All Maryland hospitals contribute to the statewide PAU savings of 1.45%; however, each hospital's reduction is proportional to the hospital's amount of revenue associated with PAU in the most recent year. See Appendix II for more information on PAU by hospital.
- The PAU savings adjustment amount is not related to year-over-year improvement in PAU during the rate year, hence providing an incentive for all hospitals to reduce PAU. Hospitals that reduce their PAU beyond the savings benchmark during the rate year will retain 100 percent of the difference between their actual reduction and the savings benchmark.
- As the PAU Savings policy is applied prospectively, the HSCRC sets a targeted dollar amount for savings, and thus guarantees a fixed amount of savings.

Hospital Protections

The Commission and stakeholders wish to ensure that hospitals that treat a higher proportion of disadvantaged patients have the needed resources for care delivery and improvement, while not excusing poor quality of care, or inadequate care coordination, for these patients. Staff proposes to continue to apply the methodology used in last year's PAU Savings Policy and to cap the PAU savings contributions at the state average if a hospital has a high proportion of disadvantaged populations. The measure includes the percentage of Medicaid and Self-pay or Charity ECMADs for inpatient and observation cases with 23 hours or longer stays, with protection provided to those hospitals in the top quartile. For RY 2019, HSCRC staff is developing risk-adjustment approaches for measuring hospital PAU revenue with Commission contractor Mathematica Policy Research.

Appendix III provides the results of the PAU savings policy based on the proposed 0.20 percent annual (1.45 percent total) reduction in total patient revenues with and without these protections.

Comments Received on Proposed Savings Policy Recommendation

The Maryland Hospital Association (MHA) submitted a comment letter on 5/15/17 (Appendix IV) expressing concern with the use of Prevention Quality Indicators (PQIs). HSCRC staff has examined the issue and determined that PQI software is used in multiple payment programs, such as the CMS Physician Value-Based Modifier⁸, ACO quality metrics⁹, and Medicaid Adult Core Measures Set¹⁰. However, HSCRC staff does recognize that the denominator used with PQIs varies among the programs. The PAU Savings Policy uses revenue as the PQI denominator,

⁸ <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/2015-ACSC-MIF.pdf>

⁹ <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharesavingsprogram/Downloads/2017-Reporting-Year-Narrative-Specifications.pdf>

¹⁰ <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2017-adult-core-set.pdf>

rather than an attribution-based denominator used in other programs. For the purposes of the PAU Savings Policy, the HSCRC staff believes that the use of PQIs with a denominator of total approved revenue is appropriate. The Savings Policy indicates the Commission's focus for the upcoming year, but allows hospitals to generate savings through other reductions in avoidable utilization. If hospitals exceed their PAU savings benchmark, which represents 13.35% of the identified PAU related revenue, the hospitals may retain 100% of the additional savings. Staff believes the PAU Savings Policy provides a mechanism to generate savings for payers and ensures the success of the All-Payer Model by adjusting for needed reductions in PAUs that are a key focus of the Model.

Future Expansion of PAU

Staff will continue to consider additional categories of admissions to the PAU measures. Areas of future focus for additional PAU measures include sepsis and other avoidable admissions from long-term care and post-acute settings, unplanned medical admissions through the emergency department setting, and readmissions that occur in a 60-day or 90-day period after index admission.

RECOMMENDATIONS

Based on this assessment, staff recommends the following for the PAU savings policy for RY 2018:

1. Set the value of the PAU savings amount to 1.45 percent of total permanent revenue in the state, which is a 0.20 percent net reduction in RY 2018.
2. Cap the PAU savings reduction at the statewide average reduction for hospitals with higher socioeconomic burden, which is defined for this purpose as above 75th percentile of Medicaid and Self-pay or Charity ECMADs.
3. Evaluate further expansion of PAU definitions for RY 2019 to incorporate additional categories of unplanned admissions.

APPENDIX I. ANALYSIS OF PQI TRENDS

PQIs—developed by the Agency for Healthcare Research and Quality—measure inpatient admissions for ambulatory care sensitive conditions. The following figure presents an analysis of the change in PQI rates between CYs 2015 and 2016. However, overall total PQI trends and trends for PQI 08 and 13 should be interpreted with caution due to the impact of ICD-10 and AHRQ PQI version changes.¹¹ From 2015 to 2016, there were improvements in the rates of PQI 03 (diabetes long-term complications), 07 (hypertension), 05 (chronic obstructive pulmonary disease or asthma in older adults), and 11 (bacterial pneumonia) However, there were continuing increases in PQI 10 (dehydration) and 14 (uncontrolled diabetes).

Appendix I. Figure 1. PQI Trends, CY 2015-CY 2016

PQI Admission Rate	CY 2015 PQI COUNT	CY 2016 PQI COUNT	CY 2015-2016 %CHANGE	CY 2015-2016 PQI Count	CY 2016 % CONTRIBUTION
	A	B	C=B/A-1	D=B-A	
PQI 01 Diabetes Short-Term Complications	2,971	2,993	0.74%	22	0.98%
PQI 02 Perforated Appendix	1,071	1,207	12.70%	136	6.06%
PQI 03 Diabetes Long-Term Complications	4,324	3,525	-18.48%	- 799	-35.62%
PQI 05 COPD or Asthma in Older Adults	13,489	13,043	-3.31%	- 446	-19.88%
PQI 07 Hypertension	2,897	2,319	-19.95%	- 578	-25.77%
PQI 08 Heart Failure *	14,720	11,402	-22.54%	- 3,318	-147.93%
PQI 10 Dehydration	5,245	7,342	39.98%	2,097	93.49%
PQI 11 Bacterial Pneumonia	9,649	9,179	-4.87%	- 470	-20.95%
PQI 12 Urinary Tract Infection	7,683	7,712	0.38%	29	1.29%
PQI 13 Angina Without Procedure*	880	1,780	102.27%	900	40.12%
PQI 14 Uncontrolled Diabetes	965	2,192	127.15%	1,227	54.70%
PQI 15 Asthma in Younger Adults	1,078	927	-14.01%	- 151	-6.73%
PQI 16 Lower-Extremity Amputation among Patients with Diabetes	704	782	11.08%	78	3.48%
Total PQI, Unduplicated	65,114	62,871	-3.44%	- 2,243	100.00%

¹¹ AHRQ updated to PQI software version 6 in October 2016. The major changes in version 6 include the retirement of PQI 13 (Angina without Procedure), and a correction to an incorrect decrease in PQI 08 (Heart Failure) under ICD-10.

APPENDIX II. PERCENT OF REVENUE IN PAU BY HOSPITAL

The following figure presents the total non-PAU revenue for each hospital, total PAU revenue by PAU category (PQI, readmissions, and total), total hospital revenue, and PAU as a percentage of total hospital revenue for CY 2016. Overall, PAU revenue comprised 10.86 percent of total statewide hospital revenue.

Appendix II. Figure 1. PAU Percentage of Total Revenue by Hospital, CY 2016

Hosp ID	Hospital Name	Non-PAU Revenue A	Readmission Revenue B	PQI Revenue C	Total PAU Revenue D=B+C	Grand Total Hospital Revenue E=A+D	% Readmission F=B/E	% PQI G=C/E	% PAU H=F+G
210001	MERITUS	\$283,289,310	\$23,494,447	\$17,431,874	\$40,926,321	\$324,215,631	7.25%	5.38%	12.62%
210002	UMMC	\$1,435,191,399	\$93,675,647	\$20,684,230	\$114,359,877	\$1,549,551,276	6.05%	1.33%	7.38%
210003	PRINCE GEORGE	\$246,688,579	\$22,850,811	\$14,644,428	\$37,495,238	\$284,183,818	8.04%	5.15%	13.19%
210004	HOLY CROSS*	\$449,274,541	\$39,116,459	\$19,456,706	\$58,573,165	\$507,847,706	7.70%	3.83%	11.53%
210005	FREDERICK MEMORIAL	\$319,528,571	\$22,787,248	\$17,033,173	\$39,820,420	\$359,348,991	6.34%	4.74%	11.08%
210006	HARFORD	\$84,734,904	\$11,413,170	\$7,405,362	\$18,818,532	\$103,553,436	11.02%	7.15%	18.17%
210008	MERCY	\$488,967,333	\$18,196,792	\$8,910,342	\$27,107,134	\$516,074,467	3.53%	1.73%	5.25%
210009	JOHNS HOPKINS	\$1,983,907,849	\$149,286,161	\$37,525,052	\$186,811,213	\$2,170,719,063	6.88%	1.73%	8.61%
210010	DORCHESTER	\$37,560,890	\$4,428,502	\$4,790,869	\$9,219,371	\$46,780,260	9.47%	10.24%	19.71%
210011	ST. AGNES	\$373,518,101	\$34,126,243	\$26,439,581	\$60,565,824	\$434,083,925	7.86%	6.09%	13.95%
210012	SINAI	\$671,374,840	\$46,429,824	\$22,084,279	\$68,514,103	\$739,888,943	6.28%	2.98%	9.26%
210013	BON SECOURS	\$90,243,822	\$14,576,531	\$6,427,626	\$21,004,157	\$111,247,979	13.10%	5.78%	18.88%
210015	FRANKLIN SQUARE	\$434,451,376	\$48,312,713	\$28,450,630	\$76,763,343	\$511,214,718	9.45%	5.57%	15.02%
210016	WASHINGTON ADVENTIST	\$230,211,335	\$20,384,557	\$12,259,135	\$32,643,691	\$262,855,026	7.76%	4.66%	12.42%
210017	GARRETT COUNTY	\$47,907,285	\$1,301,034	\$2,951,330	\$4,252,364	\$52,159,649	2.49%	5.66%	8.15%
210018	MONTGOMERY GENERAL	\$157,121,596	\$13,179,066	\$8,061,244	\$21,240,310	\$178,361,906	7.39%	4.52%	11.91%
210019	PRMC	\$375,726,858	\$27,944,511	\$21,591,418	\$49,535,929	\$425,262,787	6.57%	5.08%	11.65%
210022	SUBURBAN	\$268,526,295	\$21,158,297	\$11,703,782	\$32,862,079	\$301,388,373	7.02%	3.88%	10.90%

Final Recommendations for the Potentially Avoidable Utilization Savings Policy

Hosp ID	Hospital Name	Non-PAU Revenue A	Readmission Revenue B	PQI Revenue C	Total PAU Revenue D=B+C	Grand Total Hospital Revenue E=A+D	% Readmission F=B/E	% PQI G=C/E	% PAU H=F+G
210023	ANNE ARUNDEL	\$531,467,116	\$28,422,056	\$21,567,332	\$49,989,388	\$581,456,503	4.89%	3.71%	8.60%
210024	UNION MEMORIAL	\$387,563,521	\$27,863,344	\$15,148,428	\$43,011,772	\$430,575,293	6.47%	3.52%	9.99%
210027	WESTERN MARYLAND	\$292,514,732	\$21,538,583	\$13,559,716	\$35,098,299	\$327,613,031	6.57%	4.14%	10.71%
210028	ST. MARY	\$165,372,543	\$11,055,617	\$10,236,061	\$21,291,678	\$186,664,221	5.92%	5.48%	11.41%
210029	HOPKINS BAYVIEW	\$533,626,396	\$51,181,366	\$24,245,810	\$75,427,176	\$609,053,573	8.40%	3.98%	12.38%
210030	CHESTERTOWN	\$45,378,104	\$3,668,205	\$4,218,472	\$7,886,676	\$53,264,780	6.89%	7.92%	14.81%
210032	UNION HOSPITAL OF CECIL	\$139,474,644	\$8,679,051	\$11,444,321	\$20,123,372	\$159,598,016	5.44%	7.17%	12.61%
210033	CARROLL COUNTY	\$207,735,335	\$17,628,425	\$16,110,880	\$33,739,305	\$241,474,641	7.30%	6.67%	13.97%
210034	HARBOR	\$166,109,732	\$15,972,533	\$11,126,689	\$27,099,222	\$193,208,954	8.27%	5.76%	14.03%
210035	CHARLES REGIONAL	\$127,077,125	\$10,590,715	\$10,156,771	\$20,747,486	\$147,824,611	7.16%	6.87%	14.04%
210037	EASTON	\$176,562,941	\$10,657,173	\$12,058,895	\$22,716,068	\$199,279,009	5.35%	6.05%	11.40%
210038	UMMC MIDTOWN	\$177,671,741	\$23,608,371	\$7,850,769	\$31,459,140	\$209,130,881	11.29%	3.75%	15.04%
210039	CALVERT	\$124,008,743	\$7,173,390	\$8,766,775	\$15,940,165	\$139,948,908	5.13%	6.26%	11.39%
210040	NORTHWEST	\$214,136,851	\$22,904,526	\$18,580,729	\$41,485,254	\$255,622,105	8.96%	7.27%	16.23%
210043	BALTIMORE WASHINGTON	\$352,763,331	\$36,132,870	\$24,334,401	\$60,467,272	\$413,230,603	8.74%	5.89%	14.63%
210044	G.B.M.C.	\$394,487,807	\$22,088,927	\$15,900,674	\$37,989,601	\$432,477,409	5.11%	3.68%	8.78%
210045	MCCREADY	\$14,664,665	\$527,671	\$1,039,034	\$1,566,705	\$16,231,370	3.25%	6.40%	9.65%
210048	HOWARD COUNTY	\$262,331,613	\$21,701,488	\$15,597,612	\$37,299,100	\$299,630,713	7.24%	5.21%	12.45%
210049	UPPER CHESAPEAKE	\$291,541,981	\$20,665,762	\$14,816,885	\$35,482,648	\$327,024,629	6.32%	4.53%	10.85%
210051	DOCTORS	\$193,700,410	\$23,307,784	\$16,057,893	\$39,365,677	\$233,066,087	10.00%	6.89%	16.89%
210055	LAUREL REGIONAL	\$76,524,079	\$8,204,956	\$4,280,226	\$12,485,181	\$89,009,261	9.22%	4.81%	14.03%
210056	GOOD SAMARITAN	\$249,052,413	\$26,757,469	\$16,434,629	\$43,192,098	\$292,244,511	9.16%	5.62%	14.78%
210057	SHADY GROVE	\$349,193,037	\$24,088,433	\$14,101,319	\$38,189,752	\$387,382,790	6.22%	3.64%	9.86%
210058	REHAB & ORTHO	\$101,744,779	\$324,691		\$324,691	\$102,069,470	0.32%		0.32%

Final Recommendations for the Potentially Avoidable Utilization Savings Policy

Hosp ID	Hospital Name	Non-PAU Revenue A	Readmission Revenue B	PQI Revenue C	Total PAU Revenue D=B+C	Grand Total Hospital Revenue E=A+D	% Readmission F=B/E	% PQI G=C/E	% PAU H=F+G
210060	FT. WASHINGTON	\$41,152,352	\$3,063,270	\$4,465,871	\$7,529,141	\$48,681,493	6.29%	9.17%	15.47%
210061	ATLANTIC GENERAL	\$97,618,544	\$3,908,166	\$4,882,142	\$8,790,307	\$106,408,852	3.67%	4.59%	8.26%
210062	SOUTHERN MARYLAND	\$230,216,619	\$24,002,657	\$18,299,811	\$42,302,468	\$272,519,087	8.81%	6.72%	15.52%
210063	UM ST. JOSEPH	\$367,993,303	\$21,653,327	\$12,826,818	\$34,480,145	\$402,473,448	5.38%	3.19%	8.57%
210064	LEVINDALE	\$52,996,890	\$4,390,825		\$4,390,825	\$57,387,715	7.65%		7.65%
210065	HOLY CROSS GERMANTOWN*	\$78,854,583	\$6,919,516	\$5,463,433	\$12,382,949	\$91,237,532	7.58%	5.99%	13.57%
	STATEWIDE	\$14,461,534,140	\$1,121,343,178	\$641,423,453	\$1,762,766,631	\$16,224,300,772	6.91%	3.95%	10.86%

*Holy Cross and Holy Cross Germantown are combined for PAU Savings adjustments (combined CY 2016 PAU % is 11.84%).

APPENDIX III. Modeling Results Proposed PAU Savings Policy Reductions for RY 2018

The following figure presents the proposed PAU savings reduction policy for each hospital for RY 2018.

Appendix III. Figure 1. Proposed PAU Savings Policy Reductions for RY 2018, by Hospital

Hospital ID	Hospital Name	FY17 Permanent Total Revenue	CY16 PAU %	FY18 PAU Savings Adjustment	FY18 PAU Savings Adjustment Before Protections	CY 16 % ECMAD Inpatient Medicaid & Self Pay Charity	FY18 PAU Savings Adjust w/ Protection (%)	FY 18 PAU Savings with Protections Revenue Impact (\$)	FY17 PAU Savings Adjustment with Protection (\$)	Net Impact to RY 2018 Inflation Factor	Net RY 18 Revenue Impact
		A	B	C=B* -13.9 ¹²	D = A*C	E	F	G = A*F	H	K=(G-H)/A	L=K*A
210001	MERITUS	\$314,827,422	12.62%	-1.75%	-\$5,520,664	18.70%	-1.75%	-\$5,520,664	-\$4,350,206	-0.37%	-\$1,170,528
210002	UMMC	\$1,316,372,491	7.38%	-1.03%	-\$13,498,782	30.64%	-1.03%	-\$13,498,782	-\$11,958,459	-0.12%	-\$1,540,156
210003	PRINCE GEORGE	\$286,573,599	13.19%	-1.83%	-\$5,252,190	42.75%	-1.51%	-\$4,324,396	-\$3,608,563	-0.25%	-\$715,861
210004	HOLY CROSS*	\$479,646,983	11.84%	-1.65%	-\$7,893,731	22.24%	-1.65%	-\$7,893,731	-\$6,837,249	-0.22%	-\$1,056,662
210005	FREDERICK MEMORIAL	\$329,156,555	11.08%	-1.54%	-\$5,067,592	7.36%	-1.54%	-\$5,067,592	-\$4,326,716	-0.23%	-\$740,931
210006	HARFORD	\$99,998,182	18.17%	-2.52%	-\$2,524,681	18.01%	-2.52%	-\$2,524,681	-\$2,058,207	-0.47%	-\$466,492
210008	MERCY	\$502,208,027	5.25%	-0.73%	-\$3,663,552	24.46%	-0.73%	-\$3,663,552	-\$3,375,724	-0.06%	-\$287,765
210009	JOHNS HOPKINS	\$2,229,450,835	8.61%	-1.20%	-\$26,672,300	23.44%	-1.20%	-\$26,672,300	-\$23,369,402	-0.15%	-\$3,301,817
210010	DORCHESTER	\$48,094,357	19.71%	-2.74%	-\$1,317,165	25.45%	-1.51%	-\$725,744	-\$1,202,307	0.99%	\$476,567
210011	ST. AGNES	\$416,466,586	13.95%	-1.94%	-\$8,072,607	23.43%	-1.94%	-\$8,072,607	-\$6,807,387	-0.30%	-\$1,265,225
210012	SINAI	\$709,153,890	9.26%	-1.29%	-\$9,124,538	24.01%	-1.29%	-\$9,124,538	-\$7,716,249	-0.20%	-\$1,408,380
210013	BON SECOURS	\$114,232,763	18.88%	-2.62%	-\$2,996,761	59.97%	-1.51%	-\$1,723,772	-\$1,584,298	-0.12%	-\$139,478
210015	FRANKLIN SQUARE	\$492,402,641	15.02%	-2.09%	-\$10,276,606	26.75%	-1.51%	-\$7,430,356	-\$6,318,376	-0.23%	-\$1,111,845
210016	WASHINGTON ADVENTIST	\$258,319,310	12.42%	-1.73%	-\$4,457,978	30.47%	-1.51%	-\$3,898,038	-\$3,278,301	-0.24%	-\$619,708

¹² Required % reduction in PAU revenue= [Savings (-1.45%) + the statewide impact of Medicaid Protection (-0.06%)] / % PAU (10.86%) = -13.90%.

Final Recommendations for the Potentially Avoidable Utilization Savings Policy

Hospital ID	Hospital Name	FY17 Permanent Total Revenue	CY16 PAU %	FY18 PAU Savings Adjustment	FY18 PAU Savings Adjustment Before Protections	CY 16 % ECMAD Inpatient Medicaid & SelfPay Charity	FY18 PAU Savings Adjust w/ Protection (%)	FY 18 PAU Savings with Protections Revenue Impact (\$)	FY17 PAU Savings Adjustment with Protection (\$)	Net Impact to RY 2018 Inflation Factor	Net RY 18 Revenue Impact
		A	B	C=B* -13.9 ¹²	D = A*C	E	F	G = A*F	H	K=(G-H)/A	L=K*A
210017	GARRETT COUNTY	\$53,507,634	8.15%	-1.13%	-\$605,944	15.88%	-1.13%	-\$605,944	-\$484,974	-0.23%	-\$120,981
210018	MONTGOMERY GENERAL	\$169,927,186	11.91%	-1.65%	-\$2,812,121	15.26%	-1.65%	-\$2,812,121	-\$2,351,779	-0.27%	-\$460,333
210019	PENINSULA REGIONAL	\$419,622,018	11.65%	-1.62%	-\$6,792,718	18.01%	-1.62%	-\$6,792,718	-\$5,584,916	-0.29%	-\$1,207,672
210022	SUBURBAN	\$296,104,140	10.90%	-1.51%	-\$4,484,669	8.47%	-1.51%	-\$4,484,669	-\$3,310,346	-0.40%	-\$1,174,349
210023	ANNE ARUNDEL	\$575,908,245	8.60%	-1.19%	-\$6,881,944	11.90%	-1.19%	-\$6,881,944	-\$5,776,774	-0.19%	-\$1,105,168
210024	UNION MEMORIAL	\$414,710,552	9.99%	-1.39%	-\$5,756,652	18.79%	-1.39%	-\$5,756,652	-\$5,370,044	-0.09%	-\$386,510
210027	WESTERN MARYLAND	\$316,661,093	10.71%	-1.49%	-\$4,712,416	14.37%	-1.49%	-\$4,712,416	-\$3,839,345	-0.28%	-\$873,035
210028	ST. MARY	\$172,574,583	11.41%	-1.59%	-\$2,736,037	19.47%	-1.59%	-\$2,736,037	-\$2,134,757	-0.35%	-\$601,250
210029	HOPKINS BAYVIEW	\$620,440,469	12.38%	-1.72%	-\$10,672,844	29.09%	-1.51%	-\$9,362,447	-\$7,898,881	-0.24%	-\$1,463,619
210030	CHESTERTOWN	\$54,289,889	14.81%	-2.06%	-\$1,117,206	12.33%	-2.06%	-\$1,117,206	-\$847,354	-0.50%	-\$269,875
210032	UNION HOSP OF CECIL	\$156,358,285	12.61%	-1.75%	-\$2,739,652	26.43%	-1.51%	-\$2,359,447	-\$1,987,435	-0.24%	-\$371,976
210033	CARROLL COUNTY	\$223,662,684	13.97%	-1.94%	-\$4,341,595	13.67%	-1.94%	-\$4,341,595	-\$3,958,120	-0.17%	-\$383,582
210034	HARBOR	\$190,469,979	14.03%	-1.95%	-\$3,713,160	32.39%	-1.51%	-\$2,874,192	-\$2,461,177	-0.22%	-\$412,939
210035	CHARLES REGIONAL	\$143,723,289	14.04%	-1.95%	-\$2,803,843	17.95%	-1.95%	-\$2,803,843	-\$2,386,640	-0.29%	-\$417,229
210037	EASTON	\$195,481,707	11.40%	-1.58%	-\$3,096,495	17.25%	-1.58%	-\$3,096,495	-\$2,642,856	-0.23%	-\$453,713
210038	UMMC MIDTOWN	\$228,124,869	15.04%	-2.09%	-\$4,767,381	42.15%	-1.51%	-\$3,442,404	-\$2,895,546	-0.24%	-\$546,815
210039	CALVERT	\$141,821,983	11.39%	-1.58%	-\$2,244,537	16.25%	-1.58%	-\$2,244,537	-\$1,865,860	-0.27%	-\$378,665
210040	NORTHWEST	\$248,058,564	16.23%	-2.26%	-\$5,594,125	21.22%	-2.26%	-\$5,594,125	-\$4,615,117	-0.39%	-\$979,087
210043	BALTIMORE WASHINGTON	\$398,733,080	14.63%	-2.03%	-\$8,105,616	17.50%	-2.03%	-\$8,105,616	-\$7,057,541	-0.26%	-\$1,048,269
210044	G.B.M.C.	\$435,420,575	8.78%	-1.22%	-\$5,312,059	10.34%	-1.22%	-\$5,312,059	-\$4,050,196	-0.29%	-\$1,261,849
210045	MCCREADY	\$15,530,984	9.65%	-1.34%	-\$208,250	14.53%	-1.34%	-\$208,250	-\$121,592	-0.56%	-\$86,663
210048	HOWARD COUNTY	\$291,104,867	12.45%	-1.73%	-\$5,035,913	15.50%	-1.73%	-\$5,035,913	-\$4,020,574	-0.35%	-\$1,015,374

Final Recommendations for the Potentially Avoidable Utilization Savings Policy

Hospital ID	Hospital Name	FY17 Permanent Total Revenue	CY16 PAU %	FY18 PAU Savings Adjustment	FY18 PAU Savings Adjustment Before Protections	CY 16 % ECMAD Inpatient Medicaid & SelfPay Charity	FY18 PAU Savings Adjust w/ Protection (%)	FY 18 PAU Savings with Protections Revenue Impact (\$)	FY17 PAU Savings Adjustment with Protection (\$)	Net Impact to RY 2018 Inflation Factor	Net RY 18 Revenue Impact
		A	B	C=B* -13.9 ¹²	D = A*C	E	F	G = A*F	H	K=(G-H)/A	L=K*A
210049	UPPER CHESAPEAKE	\$325,619,300	10.85%	-1.51%	-\$4,909,071	11.39%	-1.51%	-\$4,909,071	-\$4,286,879	-0.19%	-\$622,258
210051	DOCTORS	\$226,126,371	16.89%	-2.35%	-\$5,306,892	18.75%	-2.35%	-\$5,306,892	-\$4,318,086	-0.44%	-\$988,851
210055	LAUREL REGIONAL	\$98,343,286	14.03%	-1.95%	-\$1,917,175	29.37%	-1.51%	-\$1,484,000	-\$1,310,667	-0.18%	-\$173,379
210056	GOOD SAMARITAN	\$284,642,445	14.78%	-2.05%	-\$5,845,659	20.39%	-2.05%	-\$5,845,659	-\$5,130,445	-0.25%	-\$715,306
210057	SHADY GROVE	\$376,694,222	9.86%	-1.37%	-\$5,160,898	19.17%	-1.37%	-\$5,160,898	-\$4,461,883	-0.19%	-\$699,144
210058	REHAB & ORTHO	\$117,465,701	0.32%	-0.04%	-\$8,357	24.04%	-0.01%	-\$8,357	-\$6,651	0.00%	-\$1,762
210060	FT. WASHINGTON	\$47,023,363	15.47%	-2.15%	-\$1,010,796	18.46%	-2.15%	-\$1,010,796	-\$802,982	-0.44%	-\$207,796
210061	ATLANTIC GENERAL	\$102,841,659	8.26%	-1.15%	-\$1,180,344	12.82%	-1.15%	-\$1,180,344	-\$1,032,629	-0.14%	-\$147,681
210062	SOUTHERN MARYLAND	\$269,769,528	15.52%	-2.16%	-\$5,817,602	21.05%	-2.16%	-\$5,817,602	-\$5,253,518	-0.21%	-\$564,088
210063	UM ST. JOSEPH	\$388,253,807	8.57%	-1.19%	-\$4,623,341	11.27%	-1.19%	-\$4,623,341	-\$3,595,241	-0.26%	-\$1,028,096
210064	LEVINDALE	\$57,520,942	7.65%	-1.06%	-\$611,430	5.70%	-1.06%	-\$611,430	-\$435,119	-0.31%	-\$176,302
210065	HOLY CROSS GERMANTOWN*	\$100,218,431	11.84%	-1.65%	-\$1,649,332	21.98%	-1.65%	-\$1,649,332	-\$1,271,536	-0.38%	-\$377,823
	STATEWIDE	\$15,753,659,372	10.86%	-1.51%	-\$237,722,720	20.85%		-\$228,429,107		-0.22%	-\$34,069,720
					Top Quartile=	24.14%					

* Holy Cross Germantown is combined with Holy Cross Hospital for PAU Savings calculations but PAU percent's in Appendix II are presented separately for reference.



Maryland
Hospital Association

May 15, 2017

Alyson Schuster, Ph.D.
Associate Director, Performance Measurement
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Ms. Schuster:

On behalf of the 64 hospital and health system members of the Maryland Hospital Association (MHA), we appreciate the opportunity to comment on the *Draft Recommendation for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs for Rate Year 2019*, and the *Draft Recommendations for the Potentially Avoidable Utilization Savings Policy for Rate Year 2018*. We support HSCRC staff's recommendation to limit to 3.5 percent of total revenue the maximum penalty that any one hospital may be assessed as a result of the performance-based policies.

We continue to disagree with the staff's use of Prevention Quality Indicators (PQIs) in a way that is not recommended by their developer, the Agency for Healthcare Research and Quality (AHRQ). The metric was created not for hospitalized patients, but to measure prevention opportunities in the broader population. Because HSCRC measures the percentage of people admitted with a PQI as a percent of total discharges, the metric is capturing the hospital's historic service mix rather than the hospital's effectiveness in managing individuals' chronic conditions outside the hospital.

As the state considers moving to a second phase of the all-payer demonstration that could include responsibility for population health metrics, it is vital that hospitals be held accountable for metrics that accurately represent their effectiveness at managing the health of people at risk for progressing to high cost and high utilization. While we understand HSCRC's interest in creating an additional incentive to reduce avoidable utilization beyond global budgets and the readmissions policy, the use of PQIs without the ability to define the individual hospital's at-risk population is a shaky foundation on which to move forward. In addition, we would note that the \$228.4 million in savings provided to payers through this policy substantially exceeds the \$149 million in infrastructure funding that has been provided to hospitals to support care coordination and care management.

We appreciate the commission's consideration of our comments.

Sincerely,

Traci La Valle, Vice President

cc: Nelson J. Sabatini, Chairman
Herbert S. Wong, Ph.D., Vice Chairman
Joseph Antos, Ph.D.
Victoria W. Bayless

George H. Bone, M.D.
John M. Colmers
Jack C. Keane
Donna Kinzer, Executive Director

**Final Recommendation for the Maximum Revenue
Guardrail for Maryland Hospital Quality Programs for Rate
Year 2019**

June 14, 2017

Health Services Cost Review Commission
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Table of Contents

List of Abbreviations	1
Introduction.....	2
Background.....	2
1. Federal Quality Programs	2
2. Maryland’s Quality-Based Programs	3
Assessment	5
Maximum Revenue at-risk Hospital Guardrail.....	5
Recommendation	5
Appendix A. Comparison of Aggregate Revenue At-Risk for Maryland quality-based payment programs compared to Medicare Programs	6

LIST OF ABBREVIATIONS

CMS	Centers for Medicare & Medicaid Services
CY	Calendar year
FFY	Federal fiscal year
FY	State fiscal year
HSCRC	Health Services Cost Review Commission
MHAC	Maryland Hospital-Acquired Conditions Program
PAU	Potentially avoidable utilization
PQI	Prevention quality indicator
QBR	Quality-based reimbursement
RRIP	Readmissions Reduction Incentive Program
RY	State rate year
VBP	Value-based purchasing

INTRODUCTION

The Maryland Health Services Cost Review Commission's (HSCRC's or Commission's) performance-based payment methodologies are important policy tools that provide strong incentives for hospitals to improve their quality performance over time. These performance-based payment programs hold amounts of hospital revenue at-risk directly related to specified performance benchmarks. Because of its long-standing Medicare waiver for its all-payer hospital rate-setting system, special considerations were given to Maryland, including exemption from the federal Medicare quality-based programs. Instead, the HSCRC implements various Maryland-specific quality-based payment programs, which are discussed in further detail in the background section of this report.

Maryland entered into a new All-Payer Model Agreement with the Centers for Medicare & Medicaid Services (CMS) on January 1, 2014. One of the requirements under this new agreement is that the proportion of hospital revenue that is held at-risk under Maryland's quality-based payment programs must be greater than or equal to the proportion that is held at-risk under national Medicare quality programs. The Model Agreement also requires Maryland to achieve specific reduction targets in potentially preventable conditions and readmissions, in addition to the revenue at-risk requirement. In an effort to meet these reduction targets, Maryland restructured its quality programs in such a way that financial incentives are established prior to the performance period in order to motivate quality improvement and the sharing of best practices while holding hospitals accountable for their performance.

The purpose of this report is to make a recommendation for the maximum amount one hospital can be penalized for RY 2019, otherwise known as the maximum revenue guardrail. For Rate Year (RY) 2019, the recommendations for the maximum penalties and rewards for each quality program are set forth in the individual policies rather than in an aggregate at-risk policy. At the time of this final policy, the PAU savings and GBR PAU efficiency adjustments are preliminary estimates.

BACKGROUND

1. Federal Quality Programs

In developing the recommendation for the maximum revenue guardrail, the staff first analyzed the aggregate revenue at-risk for Maryland's quality-based payment programs compared to the amount at-risk for the following national Medicare quality programs:

- The Medicare Hospital Readmissions Reduction Program (HRRP), which reduces payments to inpatient prospective payment system hospitals with excess readmissions.¹
- The Medicare Hospital-Acquired Condition Reduction (HAC) Program, which ranks hospitals according to performance on a list of hospital-acquired condition quality measures and reduces Medicare payments to the hospitals in the lowest performing quartile.²
- The Medicare Value Based Purchasing (VBP) Program, which adjusts hospitals' payments based on their performance on the following four hospital quality domains: clinical care, patient experience of care, safety, and efficiency.³

2. Maryland's Quality-Based Programs

As discussed in the introduction section of this report, Maryland is exempt from the federal Medicare hospital quality programs. Instead, Maryland implements the following quality-based payment programs:

- The Quality Based Reimbursement (QBR) program employs measures in several domains, including clinical care, patient experience, and safety. Originally, financial adjustments were based on revenue neutral scaling of hospitals in allocating rewards and reductions based on performance.⁴ The distribution of rewards/penalties was based on relative points achieved by the hospitals and were not known before the end of performance period. Starting in FY 2017, the QBR program revenue neutrality requirement was removed, and payment adjustments were linked to a preset scale instead of relatively ranking hospitals, which was designed to provide hospitals with more predictable revenue adjustments based. However, due to issues with setting the preset scale the commission approved changing the RY 2017 and RY 2018 program to adjust hospital revenue by relatively ranking hospitals and penalizing and rewarding hospitals below or above the statewide average; these revenue adjustments were not revenue neutral. In RY 2019, a modified full scaling approach was approved by the commission

¹ For more information on the Medicare Hospital Readmissions Reduction Program, see <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>.

² For more information on the Medicare Hospital-Acquired Condition Reduction program, see <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program.html>.

³ For information on the Medicare VBP program, see <https://www.medicare.gov/hospitalcompare/Data/hospital-vbp.html>.

⁴ The term “scaling” refers to the differential allocation of a pre-determined portion of base regulated hospital revenue contingent on the assessment of the relative quality of hospital performance. The rewards (positive scaled amounts) or reductions (negative scaled amounts) are then applied to each hospital’s revenue on a “one-time” basis (and not considered permanent revenue).

so that hospitals can estimate revenue adjustments; this new scale ensures that rewards will only be given out to hospitals that perform well compared to the nation.

- The Maryland Hospital Acquired Conditions (MHAC) program measures hospital performance using 3M’s potentially preventable complications. HSCRC calculates observed-to-expected ratios for each complication and compares them with statewide benchmarks and thresholds. This program was modified substantially in the CY 2014 performance period to align with the All-Payer Model Agreement. Revenue adjustments are determined using a preset payment scale. For RY 2016 through RY 2018 the revenue at-risk and reward structure was based on a tiered approach that requires statewide targets to be met for higher rewards and lower reductions. Starting in RY 2019, the commission approved a single scale approach that is not contingent on statewide improvement.
- The Readmission Reduction Incentive Program (RRIP) establishes a readmissions reduction target, an attainment target, and a scale for rewards/penalties for hospitals. The statewide minimum improvement target is established to eliminate the gap between the national Medicare readmission rate and the Maryland Medicare readmission rate.
- In addition to the three programs described above, two additional performance-based payment adjustments are implemented to hospital revenues prospectively. The Potentially Avoidable Utilization (PAU) Savings Program reduces each hospital's approved revenues prospectively based on revenue associated with avoidable admissions and readmissions. The demographic PAU efficiency adjustment reductions are applied to global budgets to reduce allowed volume growth based on the percentage of revenue associated with PAU for each hospital. These adjustments are considered within the context of the update factor discussions, and measurement periods are based on a previous calendar year.

Figure 1 below provides the maximum penalties or rewards for the three CMS and Maryland quality programs for RY/FFY 2018 and RY/FFY 2019. In general, CMS programs relatively rank hospital performance when determining penalties or rewards, whereas Maryland’s quality programs use preset scales. For RY 2018 and RY 2019 staff estimates that the Maryland quality programs have met or exceeded the National potential and realized risk, respectively. These estimates use the methodology that HSCRC and CMMI agreed upon, but final numbers are pending CMMI review. See Appendix A for additional details on the aggregate at-risk test.

Figure 1. 2018 Maximum Quality Penalties or Rewards for Maryland and The Nation

MD All-Payer	Max Penalty %	Max Reward %	National Medicare	Max Penalty %	Max Reward %
RY/FFY 2018					
MHAC	3%/1%	1.0%	HAC	1.0%	N/A
RRIP	2.0%	1.0%	HRRP	3.0%	N/A
QBR	2.0%	1.0%	VBP	2.0%	2.0%
RY/FFY 2019					
MHAC	2.0%	1.0%	HAC	1.0%	N/A
RRIP	2.0%	1.0%	HRRP	3.0%	N/A
QBR	2.0%	2.0%	VBP	2.0%	2.0%

ASSESSMENT

In order to develop the maximum revenue at-risk guardrail for RY 2019 quality programs, HSCRC staff considered CMS relevant policies, conducted analyses, and solicited input from the Performance Measurement Workgroup.⁵ During its February meeting, the Performance Measurement Workgroup reviewed data comparing the amount of revenue at-risk in Maryland with the national Medicare programs. Again the RY 2019 aggregate at-risk amounts were approved as part of the actual quality program policies, and this report only presents a recommendation for the maximum revenue guardrail.

Maximum Revenue at-risk Hospital Guardrail

As the HSCRC increases the maximum revenue adjustments statewide, the potential for a particular hospital to receive significant revenue reductions has raised concerns that such penalties may generate unmanageable financial risk. As hospitals improve quality in the state, the variation between individual hospitals is expected to decline, increasing the chances of a single hospital receiving the maximum penalty for all quality programs. Similar to the risk corridors in other VBP programs, a maximum penalty guardrail may be necessary to mitigate the detrimental financial impact of unforeseen large adjustments in Maryland programs. Given the increases in risk levels in other programs, a hospital-specific guardrail will provide better protection than a statewide limit. In RY 2017 and RY 2018, the hospital maximum penalty guardrail was set at 3.50 percent of total hospital revenue. Staff used the Medicare aggregate amount at-risk total as the benchmark to calculate the hospital maximum penalty guardrail (e.g. 6 percent * 58 percent of inpatient revenue). This maximum revenue guardrail applies to QBR, MHAC, RRIP, and net PAU Savings. For RY 2018, the estimated maximum penalty for one hospital was 1.06 percent of total hospital revenue (which corresponds to 1.41 percent of inpatient revenue).

RECOMMENDATION

For RY 2019, the maximum penalty guardrail should continue to be set at 3.50 percent of total hospital revenue.

⁵ For more information on the Performance Measurement Workgroup, see <http://hscrc.maryland.gov/hscrc-workgroup-performance-measurement.cfm>.

APPENDIX A. COMPARISON OF AGGREGATE REVENUE AT-RISK FOR MARYLAND QUALITY-BASED PAYMENT PROGRAMS COMPARED TO MEDICARE PROGRAMS

After discussions with CMS, HSCRC staff performed analyses of both “potential” and “realized” revenue at-risk. Potential revenue at-risk refers to the maximum amount of revenue that is at-risk in the measurement year. Realized risk refers to the actual amounts imposed by the programs. The comparison with the national amounts is calculated on a cumulative basis. Figure 1 compares the potential amount of revenue at-risk in Maryland with the amount at-risk in the national programs. The difference between the national Medicare and Maryland all-payer annual amounts are summed after each year’s experience to compare the annual difference.

The top half of Figure 1 displays the percentage of potential inpatient revenue at-risk in Maryland for all payers for each of Maryland’s quality-based payment programs for RYs 2014 through 2019. The bottom half of the figure displays the percentage of potential national Medicare inpatient revenue at-risk for quality-based payment programs for FFYs 2014 through 2019. These potential at-risk numbers are the absolute values of the maximum penalty or reward. Due to efforts to align Maryland’s quality-based payment programs with the national programs and the increasing emphasis on value-based payment adjustments, Maryland has exceeded the national aggregate maximum at-risk amounts since RY 2016. Cumulatively, Maryland’s maximum at-risk total would be 24.3 percent higher than the nation in FFY 2019. The Maryland RY 2019 RRIP and RY 2018 PAU savings numbers are pending final commission approval; the RY 2019 PAU savings and RY 2018/2019 demographic PAU efficiency adjustment numbers are estimated based on previous year.

Figure 1. Potential Revenue at-risk for Quality-Based Payment Programs, Maryland Compared with the National Medicare Programs, 2014-2019

% of MD All-Payer Inpatient Revenue	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018	RY 2019
MHAC	2.0%	3.0%	4.0%	3.0%	3.0%	2.0%
RRIP*			0.5%	2.0%	2.0%	2.0%
QBR	0.5%	0.5%	1.0%	2.0%	2.0%	2.0%
Subtotal	2.5%	3.5%	5.5%	7.0%	7.0%	6.0%
PAU Savings*	0.4%	0.9%	1.4%	4.5%	5.9%	5.9%
Demographic PAU Efficiency Adjustment*	0.5%	0.9%	1.1%	1.3%	1.2%	1.2%
MD Aggregate Maximum At-risk	3.4%	5.2%	8.0%	12.8%	14.1%	13.1%

*Italicized numbers subject to change

% of National Medicare Inpatient Revenue	FFY 2014	FFY 2015	FFY2016	FFY2017	FFY2018	FFY2019
HAC		1.0%	1.0%	1.0%	1.0%	1.0%
Readmits	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%
VBP	1.3%	1.5%	1.8%	2.0%	2.0%	2.0%

Draft Recommendations for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs for Rate Year 2019

Medicare Aggregate Maximum At-risk	3.3%	5.5%	5.8%	6.0%	6.0%	6.0%
Annual MD-US Difference	0.2%	-0.3%	2.2%	6.8%	8.1%	7.1%

As Maryland’s programs moved away from revenue neutral rewards and penalties and toward payment adjustments based on preset payment scales, the actual amounts imposed in quality-based programs differ from the maximum amounts established in the policies and none of the hospitals may be subject to the maximum penalty when the payment adjustments are implemented. On the other hand, the national Medicare programs may make payment adjustments only to the lowest performing hospitals, limiting the reach of the performance-based adjustments. CMMI and HSCRC staff worked on a methodology to compare the total actual payment adjustments by summing the absolute average payment adjustments across all programs, namely aggregate realized at-risk. Maryland is expected to meet or exceed both the potential and realized at-risk amounts of the national Medicare programs but final approval is pending CMMI confirmation. Figure 3 provides a comparison of the average adjustment amount between Maryland and national programs. Maryland’s overall aggregate average adjustments were 4.66 percent of the total inpatient revenue in RY 2016, compared to 1.36 percent in the national Medicare programs in FFY 2018. The PAU savings revenue adjustments account for a large proportion of Maryland’s higher realized risk. Of note, the RY 2017 QBR adjustments currently represent only the revenue amount that went into effect in January 2017, and the RY 2018 adjustment is simply the remainder of the adjustment. The actual RY 2018 QBR adjustments may be put into rates in January 2018, which will increase the QBR amounts.

Figure 2. Realized Revenue at-risk for Quality-Based Payment Programs, Maryland Compared with the National Medicare Programs, 2014-2018

% of MD All-Payer Inpatient Revenue	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018
MHAC	0.22%	0.11%	0.18%	0.40%	0.50%
RRIP			0.15%	0.57%	0.61%
QBR*	0.11%	0.14%	0.30%	0.26%	0.15%
Subtotal	0.34%	0.25%	0.63%	1.23%	1.26%
PAU Savings*	0.29%	0.64%	0.93%	2.6%	3.1%
Demographic PAU Efficiency Adjustment*	0.28%	0.33%	0.39%	0.3%	0.3%
MD Aggregate Maximum At-risk	0.90%	1.22%	1.95%	4.13%	4.66%
*SFY 18 numbers pending final review and approval					
% of National Medicare Inpatient Revenue	FFY 2014	FFY 2015	FFY2016	FFY2017*	FFY2018*
HAC		0.22%	0.23%	0.24%	0.24%

Draft Recommendations for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs for Rate
Year 2019

Readmits	0.28%	0.52%	0.51%	0.61%	0.61%
VBP	0.20%	0.24%	0.40%	0.51%	0.51%
Medicare Aggregate Maximum At-risk	0.47%	0.97%	1.14%	1.36%	1.36%
Annual MD-US Difference					
	0.43%	0.25%	0.81%	2.76%	3.30%
*HSCRC estimated CMS numbers based on publicly available files and this is subject to change. FFY 2018 uses FFY 2017 estimates.					

In summary, staff estimate that Maryland outperformed the national programs in the potential and realized aggregate payment amounts. Maryland hospitals continued to improve their performance in reducing complications and readmissions. However, further reductions in revenue associated with PAU will be important for financial success under the new all-payer model. Finally, as additional performance-based revenue adjustments are implemented, such as the Medicare Performance Adjustment for total cost of care, the potential aggregate at-risk amounts for other programs may be reduced. Staff will continue to discuss the appropriate amounts for performance-based payment programs with the appropriate workgroups and other stakeholders.

See Figure 3 for hospital-level results.

Figure 3. Consolidated Adjustments for All Quality-Based Payment Programs for Rate Year 2018, by Hospital

Hospital Name	FY 17 Total Permanent Revenue	FY 17 Permanent Inpatient Revenue	MHAC % Inpatient	RRIP % Inpatient	QBR % Inpatient	PAU Savings % Inpatient	PAU Net Impact % Inpatient	PAU Demographic % Inpatient	Total Impact % Inpatient	Total Impact % Total Revenue
PRINCE GEORGE	\$286,573,599	\$215,010,869	0.41%	-0.84%	-0.65%	-2.01%	-0.33%	-0.39%	-1.41%	-1.06%
CHESTERTOWN	\$54,289,889	\$18,989,104	0.35%	-1.35%	0.00%	-5.88%	-1.42%	-0.62%	-2.42%	-0.85%
HARFORD	\$99,998,182	\$46,975,749	0.53%	-0.61%	-0.13%	-5.37%	-0.99%	-0.56%	-1.21%	-0.57%
UNION HOSPITAL OF CECIL	\$156,358,285	\$68,179,037	0.41%	-1.06%	0.00%	-3.46%	-0.55%	-0.55%	-1.19%	-0.52%
MCCREADY	\$15,530,984	\$2,930,574	1.00%	-0.80%		-7.11%	-2.96%	0.00%	-2.76%	-0.52%
SOUTHERN MARYLAND	\$269,769,528	\$163,339,853	0.38%	-0.19%	-0.69%	-3.56%	-0.35%	-1.00%	-0.84%	-0.51%
HOLY CROSS	\$479,646,983	\$339,593,506	0.88%	-0.59%	-0.60%	-2.32%	-0.31%	-0.28%	-0.62%	-0.44%
FRANKLIN SQUARE	\$492,402,641	\$287,510,180	0.62%	-0.53%	-0.40%	-2.58%	-0.39%	-0.22%	-0.70%	-0.41%
WASHINGTON ADVENTIST	\$258,319,310	\$150,097,509	0.06%	0.43%	-0.69%	-2.60%	-0.41%	-0.55%	-0.61%	-0.36%
WESTERN MARYLAND	\$316,661,093	\$171,858,929	0.06%	0.02%	-0.20%	-2.74%	-0.51%	0.00%	-0.63%	-0.34%
SUBURBAN	\$296,104,140	\$189,851,798	0.41%	-0.14%	0.00%	-2.36%	-0.62%	-0.39%	-0.35%	-0.22%
HARBOR	\$190,469,979	\$107,761,881	0.47%	-0.28%	0.00%	-2.67%	-0.38%	-0.16%	-0.19%	-0.11%
BALTIMORE WASHINGTON	\$398,733,080	\$227,399,457	0.26%	0.37%	-0.27%	-3.56%	-0.46%	-0.39%	-0.09%	-0.05%
MERITUS	\$314,827,422	\$185,173,878	0.44%	0.23%	-0.07%	-2.98%	-0.63%	-0.15%	-0.03%	-0.02%
JOHNS HOPKINS	\$2,229,450,835	\$1,357,164,899	0.00%	0.30%	-0.07%	-1.97%	-0.24%	-0.14%	-0.01%	-0.01%
ANNE ARUNDEL	\$575,908,245	\$296,168,973	0.50%	0.32%	-0.40%	-2.32%	-0.37%	-0.30%	0.05%	0.02%
DOCTORS COMMUNITY	\$226,126,371	\$132,931,890	0.85%	0.09%	-0.13%	-3.99%	-0.74%	-1.05%	0.07%	0.04%
ST. AGNES	\$416,466,586	\$233,151,492	0.59%	0.37%	-0.33%	-3.46%	-0.54%	-0.32%	0.08%	0.05%
HOPKINS BAYVIEW	\$620,440,469	\$348,529,477	0.74%	-0.23%	0.00%	-2.69%	-0.42%	-0.20%	0.09%	0.05%
PENINSULA REGIONAL	\$419,622,018	\$235,729,906	0.00%	0.60%	0.00%	-2.88%	-0.51%	-0.17%	0.09%	0.05%
HOWARD COUNTY	\$291,104,867	\$176,085,796	0.35%	0.37%	0.00%	-2.86%	-0.58%	-0.42%	0.15%	0.09%
SINAI	\$709,153,890	\$397,073,246	0.24%	0.68%	-0.40%	-2.30%	-0.35%	-0.15%	0.16%	0.09%
HOLY CROSS GERMANTOWN	\$100,218,431	\$62,086,212		0.78%		-2.66%	-0.61%	-0.48%	0.17%	0.11%
UMMC MIDTOWN	\$228,124,869	\$114,950,934	1.00%	0.16%	-0.46%	-2.99%	-0.48%	-0.14%	0.22%	0.11%
EASTON	\$195,481,707	\$100,000,562	0.62%	0.54%	-0.40%	-3.10%	-0.45%	-0.16%	0.30%	0.16%

Draft Recommendations for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs for Rate Year 2019

Hospital Name	FY 17 Total Permanent Revenue	FY 17 Permanent Inpatient Revenue	MHAC % Inpatient	RRIP % Inpatient	QBR % Inpatient	PAU Savings % Inpatient	PAU Net Impact % Inpatient	PAU Demographic % Inpatient	Total Impact % Inpatient	Total Impact % Total Revenue
NORTHWEST	\$248,058,564	\$125,696,184	0.74%	0.92%	-0.56%	-4.45%	-0.78%	-0.41%	0.32%	0.16%
CARROLL COUNTY	\$223,662,684	\$116,510,378	0.38%	0.35%	0.00%	-3.73%	-0.33%	-0.46%	0.40%	0.21%
G.B.M.C.	\$435,420,575	\$216,554,825	0.09%	0.94%	0.00%	-2.45%	-0.58%	-0.18%	0.45%	0.22%
UNIVERSITY OF MARYLAND	\$1,316,372,491	\$874,727,573	0.29%	0.23%	0.00%	-1.54%	-0.18%	-0.12%	0.35%	0.23%
UPPER CHESAPEAKE	\$325,619,300	\$133,152,736	0.47%	0.67%	0.00%	-3.69%	-0.47%	-0.54%	0.67%	0.28%
MONTGOMERY GENERAL	\$169,927,186	\$79,298,762	0.71%	0.50%	0.00%	-3.55%	-0.58%	-0.60%	0.63%	0.29%
UNION MEMORIAL	\$414,710,552	\$231,121,787	0.62%	0.48%	-0.40%	-2.49%	-0.17%	-0.33%	0.53%	0.30%
REHAB & ORTHO	\$117,465,701	\$67,555,816	0.44%	0.16%		-0.01%	0.00%	-0.01%	0.60%	0.34%
CHARLES REGIONAL	\$143,723,289	\$68,387,041	0.44%	0.90%	0.00%	-4.10%	-0.61%	-0.68%	0.73%	0.35%
FT. WASHINGTON	\$47,023,363	\$19,371,986	1.00%	1.00%	0.00%	-5.22%	-1.07%	-1.04%	0.93%	0.38%
ST. MARY	\$172,574,583	\$77,346,008	1.00%	0.66%	0.00%	-3.54%	-0.78%	-0.46%	0.88%	0.40%
ATLANTIC GENERAL	\$102,841,659	\$38,966,012	0.62%	1.00%	0.00%	-3.03%	-0.38%	-0.28%	1.24%	0.47%
GARRETT COUNTY	\$53,507,634	\$21,836,267	0.82%	1.00%	0.00%	-2.77%	-0.55%	-0.06%	1.27%	0.52%
CALVERT	\$141,821,983	\$63,319,998	0.76%	1.00%	0.00%	-3.54%	-0.60%	-0.25%	1.17%	0.52%
FREDERICK MEMORIAL	\$329,156,555	\$178,853,951	0.38%	1.00%	0.00%	-2.83%	-0.41%	-0.40%	0.97%	0.53%
MERCY	\$502,208,027	\$216,281,427	0.50%	0.86%	0.00%	-1.69%	-0.13%	-0.15%	1.23%	0.53%
SHADY GROVE	\$376,694,222	\$219,319,153	0.24%	1.00%	0.00%	-2.35%	-0.32%	-0.34%	0.92%	0.53%
GOOD SAMARITAN	\$284,642,445	\$158,579,215	0.62%	0.81%	0.00%	-3.69%	-0.45%	-0.48%	0.98%	0.54%
LAUREL REGIONAL	\$98,343,286	\$59,724,224	0.85%	0.67%	-0.29%	-2.48%	-0.29%	-0.50%	0.94%	0.57%
BON SECOURS	\$114,232,763	\$62,008,295	0.35%	1.00%	0.00%	-2.78%	-0.22%	-0.05%	1.13%	0.61%
UM ST. JOSEPH	\$388,253,807	\$234,995,507	0.65%	0.88%	0.00%	-1.97%	-0.44%	-0.20%	1.09%	0.66%
LEVINDALE	\$57,520,942	\$54,805,171	0.41%	1.00%		-1.12%	-0.32%	-0.21%	1.09%	1.04%
DORCHESTER	\$48,094,357	\$24,256,573	0.47%	-0.37%	0.00%	-2.99%	1.96%	-0.22%	2.07%	1.04%
Statewide	\$15,753,659,372	\$8,971,214,597	0.39%	0.30%	-0.17%	-2.55%	-0.38%	-0.28%	0.14%	0.08%



Maryland
Hospital Association

May 15, 2017

Alyson Schuster, Ph.D.
Associate Director, Performance Measurement
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Ms. Schuster:

On behalf of the 64 hospital and health system members of the Maryland Hospital Association (MHA), we appreciate the opportunity to comment on the *Draft Recommendation for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs for Rate Year 2019*, and the *Draft Recommendations for the Potentially Avoidable Utilization Savings Policy for Rate Year 2018*. We support HSCRC staff's recommendation to limit to 3.5 percent of total revenue the maximum penalty that any one hospital may be assessed as a result of the performance-based policies.

We continue to disagree with the staff's use of Prevention Quality Indicators (PQIs) in a way that is not recommended by their developer, the Agency for Healthcare Research and Quality (AHRQ). The metric was created not for hospitalized patients, but to measure prevention opportunities in the broader population. Because HSCRC measures the percentage of people admitted with a PQI as a percent of total discharges, the metric is capturing the hospital's historic service mix rather than the hospital's effectiveness in managing individuals' chronic conditions outside the hospital.

As the state considers moving to a second phase of the all-payer demonstration that could include responsibility for population health metrics, it is vital that hospitals be held accountable for metrics that accurately represent their effectiveness at managing the health of people at risk for progressing to high cost and high utilization. While we understand HSCRC's interest in creating an additional incentive to reduce avoidable utilization beyond global budgets and the readmissions policy, the use of PQIs without the ability to define the individual hospital's at-risk population is a shaky foundation on which to move forward. In addition, we would note that the \$228.4 million in savings provided to payers through this policy substantially exceeds the \$149 million in infrastructure funding that has been provided to hospitals to support care coordination and care management.

We appreciate the commission's consideration of our comments.

Sincerely,

Traci La Valle, Vice President

cc: Nelson J. Sabatini, Chairman
Herbert S. Wong, Ph.D., Vice Chairman
Joseph Antos, Ph.D.
Victoria W. Bayless

George H. Bone, M.D.
John M. Colmers
Jack C. Keane
Donna Kinzer, Executive Director

**Final Recommendation on the
Nurse Support Program II:
FY 2018 Competitive Institutional Grants**

June 14, 2017

Health Services Cost Review Commission
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Baltimore, Maryland 21215
(410) 764-2605
FAX: (410) 358-6217

This is a final recommendation for Commission consideration at the June 14, 2017 Public Commission Meeting.

Table of Contents

List of Abbreviations	1
Introduction.....	2
Background.....	2
Maryland Nursing Education Progress	2
Academic and Practice Partnership	3
Academic Progression in Nursing	4
FY 2018 Competitive Grant Process	5
Reccomendations	6
References.....	7

LIST OF ABBREVIATIONS

ATB	Associate to Bachelor's Degree
AY	Academic Year
APIN	Academic Progression in Nursing
BSN	Bachelor of Science in Nursing
FY	Fiscal year
HSCRC	Health Services Cost Review Commission
MHEC	Maryland Higher Education Commission
MSN	Master of Science in Nursing
NSP II	Nurse Support Program II
RFA	Request for Applications
RN	Registered Nurse
RN-BSN	Baccalaureate Completion Nursing Graduates

INTRODUCTION

This report presents recommendations for the Nurse Support Program II (NSP II) Competitive Institutional Grant Review Panel for fiscal year (FY) 2018. The FY 2018 recommendations align with both NSP II and national nursing goals and objectives. This report and recommendations are submitted by the staff of the Maryland Higher Education Commission (MHEC) and the Maryland Health Services Cost Review Commission (HSCRC or Commission).

BACKGROUND

The HSCRC has funded programs to address the cyclical nursing workforce shortages since 1985. In July 2001, the HSCRC implemented the hospital-based NSP I program to address the nursing shortage impacting Maryland hospitals. The HSCRC implemented the NSP II program in May 2005 to respond to the faculty shortage and other limitations in nursing educational capacity underlying the nursing shortage. The Commission approved an increase of 0.1 percent of regulated gross hospital revenue to increase the number of nurses in the state by increasing the capacity of nursing programs through institutional and nursing faculty interventions. The MHEC, the coordinating board for all Maryland institutions of higher education, was selected by the HSCRC to administer the NSP II programs.

Maryland has made significant progress in alleviating the state's nursing shortage. However, Maryland remains the only state in the geographic region and 1 of only 16 states in the nation projected to have a nursing shortage in 2025 (HRSA, 2014). In 2015, at the conclusion of the program evaluation of the NSP II for FYs 2006 to 2015, the HSCRC renewed funding at 0.1 percent of hospital regulated gross patient revenue for FY 2016 through 2020. In 2016, the Maryland General Assembly revised the NSP II statute to meet Maryland's changing health care delivery models by allowing all registered nurses (RNs) to be eligible to receive grants through the NSP II.¹ The next program evaluation is due in FY 2020.

MARYLAND NURSING EDUCATION PROGRESS

Over the last five years, the number of entry-level (BSN) and baccalaureate completion (RN-BSN) graduates increased by 22 percent, from 1,486 graduates in 2012 to 1,815 graduates in 2016. After graduation in academic year (AY) 2016, 683 of BSN nursing graduates were already working as registered nurses and continuing their education to complete the BSN degree either as part of a hospital employment agreement or personal professional development.

¹ Chapter 159, 2016 Laws of Maryland.

Table 1: Nursing Degree Completions by Year and Degree

Nursing Degree Completions	2012	2016	% change
Associate Degree in Nursing	1738	1537	-12%
Bachelors of Science in Nursing	1486	1815	22%
Masters of Science in Nursing	516	526	2%
Doctoral Degrees (PhD or DNP)	56	55	-2%
Source: Maryland Higher Education Commission			

Maryland nursing programs will need to increase enrollment and graduate additional RNs each year in order to meet the continuing demands of the nursing workforce.

With the focus on a more highly educated workforce, a greater number of nurses with a Master of Science in Nursing (MSN) or a doctoral degree are needed to teach the next generation. The 19 nursing schools represented in the FY 2018 proposals reported that they had 40 full-time and 12 part-time faculty vacancies due to resignations and retirements, a lack of qualified applicants, and budget constraints. Each new faculty member potentially increases institutional capacity to allow admissions for 10 additional applicants. The NSP II provides resources to Maryland’s deans and directors of nursing programs to recruit and retain faculty through scholarships for graduate degrees, new nurse faculty fellowships, and doctoral grant support. The NSP II Review Panel provided the strongest recommendations to proposals that expanded educational capacity and were aligned with the two major goals of the NSP II— increasing the number of nurse graduates and nurse faculty.

ACADEMIC AND PRACTICE PARTNERSHIP

An academic-hospital partnership funded by NSP II assisted 130 staff nurses over the past decade to earn an MSN degree. Hospital-based nurses serve as clinical instructors, faculty, preceptors, or mentors. The university-based program continues to recruit, support, and prepare nurses through partnerships with 18 Maryland acute care hospitals. The Leadership Consortium and the Maryland Clinical Simulation Resource Consortium were developed to provide opportunities across settings for academic nurse faculty and clinical practice nurses to work closer together. Over a two year period, nurses from academia and practice were nominated by health systems at 15 hospitals and 24 nursing programs.

During the 2014 NSP II evaluation, Chief Nursing Officers at Maryland hospitals identified the following positions as the most difficult to fill: emergency, critical care, operative/preoperative, nurse manager, director, and nursing professional development practitioner (hospital-based nurse educator). As a result, the guidelines and service commitment for the Hal and Jo Cohen Graduate Nurse Faculty Scholarship were revised to include hospital-based nurse educators, in addition to nursing program faculty. Chief Nursing Officers and deans/directors at both hospitals and

schools of nursing nominate nurses for this scholarship. All programs are described in detail on the Nurse Support Program website.²

The NSP II is supporting an education-focused approach to the nurse residency programs across the State amid nursing programs' efforts to bridge the gap in a rapidly evolving health care delivery model. With this cycle, an implementation grant was recommended to create academic credit options for completion of Nurse Residency Programs, as well as a one-year proposal to better align expectations of practice and academia with graduate competencies and nurse residency outcomes.

All grant recipient project directors are required to report on their grant-supported work annually through publications in peer-reviewed journals or presentations to fellow nurses in Maryland. Presentations may be through organizations such as the Maryland Nurse's Association, the Maryland Organization for Nurse Leaders, the Maryland Action Coalition or other professional nursing conferences or NSP II project director meetings. Each year, program updates from grant recipients and publication citations are added to the Nurse Support Program website.

ACADEMIC PROGRESSION IN NURSING

The *Maryland Nursing Articulation Education Agreement (1985)* for seamless academic progression for Licensed Practical Nursing to Associate Degree Nursing to BSNs is being updated through MHEC after reaching full consensus through the Maryland Council of Deans and Directors of Nursing Programs (MCDDNP) to better align with the latest academic progression in nursing (APIN) initiatives. One of the major recommendations from the Institute of Medicine's *Future of Nursing Report* was to increase the percentage of RNs with BSN degrees up to 80 percent by 2020 (2010). About half of Maryland's new RNs continue to graduate from Associate Degree in nursing programs at community colleges across the State.

An example of an APIN initiative is the Associate to Bachelor's Degree (ATB) model, which provides a pathway to the BSN. In the ATB model, the student nurse at the community college can dually enroll in a university to take specific courses, allowing the student nurse to finish both an Associate and BSN degree within a three-year period. This minimizes educational costs and reduces the time needed to complete the BSN. Integrating nursing curriculum for the community college and university programs without redundancy is the major challenge. Many of the NSP II grant programs funded over the last few years have supported efforts to implement this ATB partnership model or alternate routes to the BSN with good results. Nursing leaders agree, it's not where you start, it's where you finish. Across Maryland, universities and community colleges are working together through funded projects to reach APIN goals.

² Available at www.nursesupport.org.

FY 2018 COMPETITIVE GRANT PROCESS

In response to the FY 2018 request for applications (RFA), the NSP II Competitive Institutional Grant Review Panel received a total of 40 requests for funding, including 30 new competitive grants proposals, 9 resource grant requests, and 1 continuation grant recommendation. The nine-member review panel —comprised of former NSP II grant project directors, retired nurse educators, licensure and policy leaders, MHEC staff, and HSCRC staff—reviewed the proposals. All new proposals received by the deadline were scored by the panel according to the rubric outlined in the FY 2018 RFA. The review panel convened and developed consensus around the most highly recommended proposals. As a result, the review panel recommends funding for 28 of the 40 total proposals. There were many deserving proposals, and the Panel encouraged those not funded this year to resubmit next year.

The recommended proposals include one-year planning grants, three- to five-year full implementation grants, continuation grants, and nursing program resource grants for a total of \$17.6 million. The proposals that received the highest ratings for funding focused on nursing graduate outcomes with partnerships across community colleges, universities, and hospital health systems. Table 1 lists the recommended proposals for FY 2018 funding.

Table 2. Final Recommendations for Funding for FY 2018

Grant #	Institution	Grant Title	Proposed Funding
18-101	Anne Arundel Community College	Academic Progression RN to BSN/MSN	\$726,895
18-102	Baltimore City Community College	Planning with Coppin State University	\$63,890
18-104	College of Southern Maryland	Associate to Bachelor's Pathway	\$1,115,231
18-107	Frostburg State University	Nurse Practitioner Program	\$3,840,422
18-109	Frostburg State University	Pathway to a DNP	\$212,257
18-111	Johns Hopkins University	DNP/PhD Dual Degree	\$1,530,263
18-113	Johns Hopkins University	Palliative Care Competencies	\$1,264,039
18-114	Johns Hopkins University	Post NP- Pediatric Care	\$810,488
18-115	Montgomery College	Academic to Practice Transition	\$100,316
18-119	Notre Dame of Maryland	Preparing Leaders for Nursing	\$493,593
18-120	Salisbury University	Communication for Nurse Leaders	\$1,981,929
18-121	Salisbury University	Maryland Nurse Educator Career Portal	\$1,793,292
18-122	Towson University	TU Collaborative Partnership Program	\$1,266,250
18-123	University of Maryland	Preparing Nurses to Lead Primary Care	\$147,922
18-125	University of Maryland	MDAC 2018 Summit on Academic Progression	\$91,305
18-126	University of Maryland	Academic Credit for Nurse Residency II	\$105,474
18-127	University of Maryland	Development of Clinical Faculty	\$182,808
18-130	Wor-Wic Community College	Planning Associate to Bachelors	\$55,991
18-201	Carroll Community College	Faculty Development 2018	\$81,000
18-202	Cecil Community College	Expand Clinical Simulation	\$98,693

Nurse Support Program II: FY 2018 Competitive Institutional Grants

Grant #	Institution	Grant Title	Proposed Funding
18-203	College of Southern Maryland	Enhanced Simulation Project	\$99,991
18-204	C. College of Baltimore County	Enhancing Capacity in Simulation	\$100,000
18-205	Hagerstown Community College	Enhanced Simulation Lab Capacity	\$99,958
18-206	Montgomery College	Accreditation and MCSRC Resources	\$85,645
18-207	Morgan State University	Accreditation and Simulation Resources	\$99,999
18-208	Towson University	Simulation Resources	\$97,727
18-209	University of Maryland	Student Tracking and Evaluation System	\$99,300
18-301	Allegany College of Maryland	Nurse Managed Wellness	\$946,000
TOTAL			\$17,590,678

RECOMENDATIONS

The recommended proposals represent the NSP II's commitment to increasing nursing degree completions and academic practice partnerships across Maryland. The most highly recommended proposals include:

- Supporting nursing undergraduate degree completions at Towson University with collaborative hospital partnerships with Howard County Hospital, Johns Hopkins Hospital, Sinai Hospital Center, St. Joseph's Medical Center and University of Maryland Medical Center
- Awarding a planning grant for Baltimore City Community College for ATB degrees at Coppin State University
- Implementing a new Nurse Practitioner degree program in Western Maryland at Frostburg State University
- Implementing a post-doctorate Adult and Gerontological Primary Care Nurse Practitioner Certificate at the University of Maryland
- Continuing the Allegany College of Maryland's Nurse Managed Wellness program
- Developing web-based Leadership and Communication toolkits on the Eastern Shore of Maryland at Salisbury University with hospital partners Atlantic General Hospital, Peninsula Regional Medical Center and University of Maryland Shore Regional Health

HSCRC and MHEC staff members recommend the 28 proposals presented in Table 2 for FY 2018 Competitive Institutional Grant funding.

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Maryland Nurse Support Program I:

Outcomes Evaluation for FY 2013 to 2016 & Recommendations for Future Funding

Claudine T. Williams, HSCRC

Joan Warren, PhD, RN-BC, NEA-BC, FAAN, Consultant





Background



Goals: Nurse Support Program I

- ▶ **Recruitment and Retention of bedside hospital RNs**
 - More than 70,000 RNs in the state of Maryland*
 - More than half employed by hospitals
- ▶ **Advancement of the Nursing Workforce**
- ▶ **Improved Hospital Quality and Safety**

*Budden, JS, Moulton, P, Harper, KJ, Brunell, ML, & Smiley, R. The 2015 national nursing workforce survey. Journal of Nursing Regulation. 2016, 4S, S4-S90.



2012 NSP I Aligned with IOM Recommendations

- ▶ Education and career advancement
 - ▶ Nurse residency programs
 - ▶ Advanced nursing degrees
- ▶ Improved Quality and Safety of Our Hospitals
 - ▶ Certification
 - ▶ Continuing education
- ▶ Advancement of the Nursing Workforce
 - ▶ Achievement of Nursing Excellence- ANCC Magnet® or Pathway to Excellence® designation)
 - ▶ Evidence-based practice, quality improvement, and/or research projects

HSCRC has invested in Nursing in MD

Since the start of the NSP I program
FY 2001 through FY 2016

\$131 million
funded in hospital
rates



Landscape of Nursing Workforce

- ▶ **Increase Healthcare Demand**
 - ▶ Growing number of health care consumers
 - ▶ Aging Population
- ▶ **Declining Supply of Nurses**
 - ▶ Retiring workforce due to better economy
 - ▶ MD one of 16 states to experience shortage, while rest of nation will have mild surplus
- ▶ **Shift in focus**
 - ▶ From inpatient care to outpatient
 - ▶ Care transitions and reducing admissions

Summary of Outcome Data FY 2013 to 2016

Nurse Residency & Orientation Programs

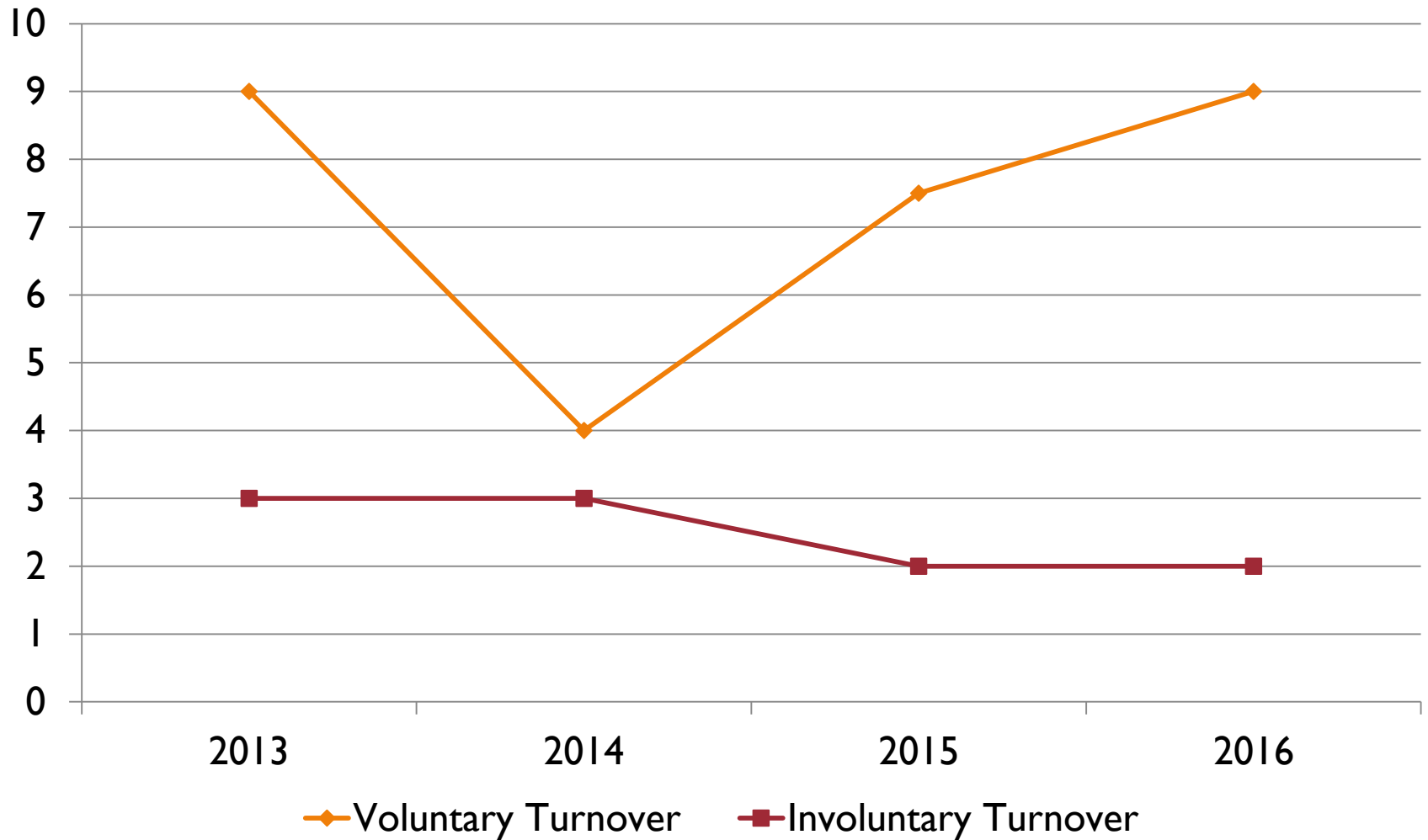
▶ 2013 & 2014

- ▶ 2,000+ newly licensed RNs in hospital-based nurse residency programs
- ▶ Reduced turnover by 5% (2013 – 11.5% & 2014 - 7%) among nurses in NRP

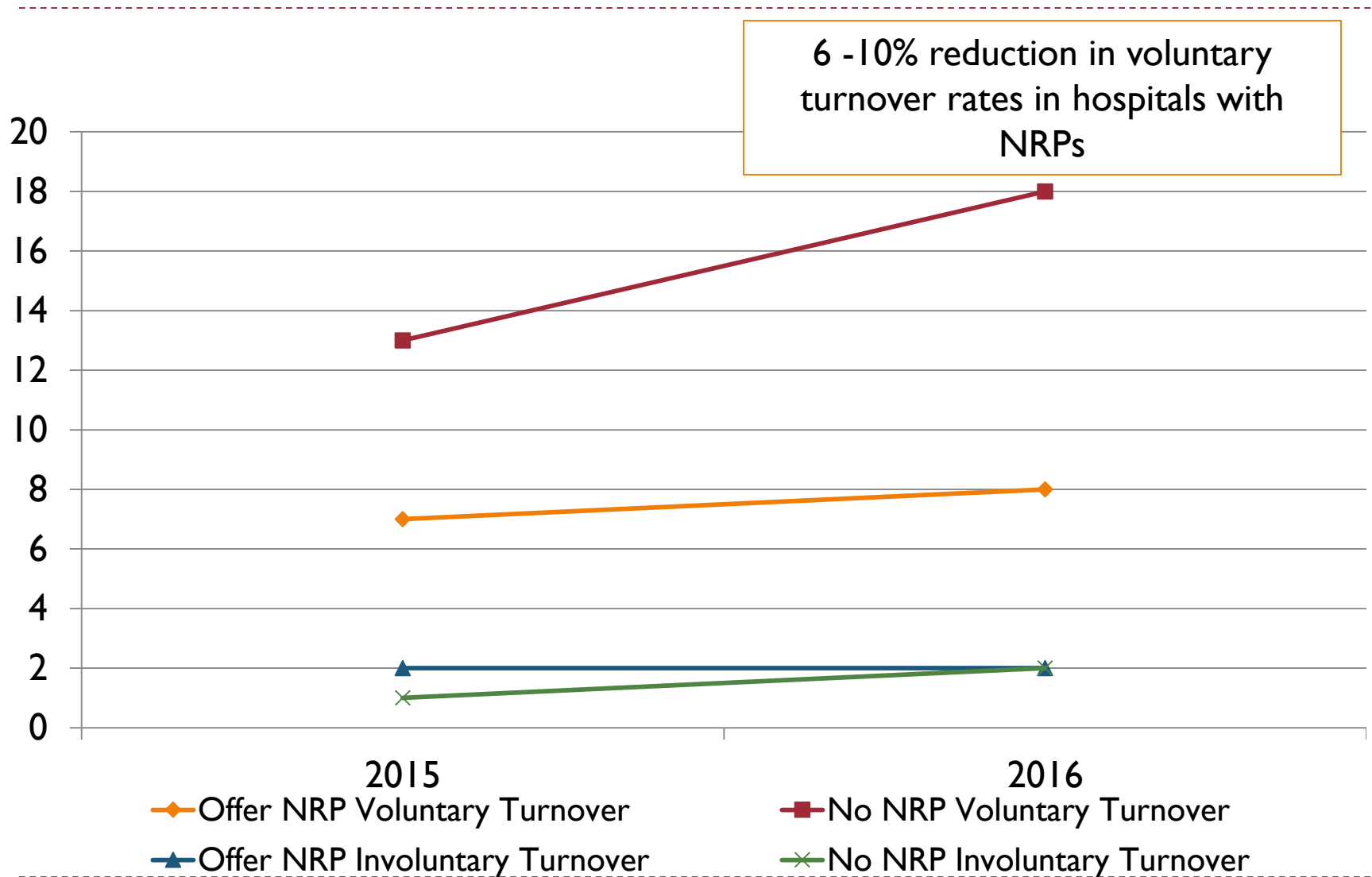
▶ 2015 & 2016

- ▶ 3,800+ newly licensed RNs
- ▶ Reduced voluntary turnover upwards of 10 percentage points among nurses in NRP

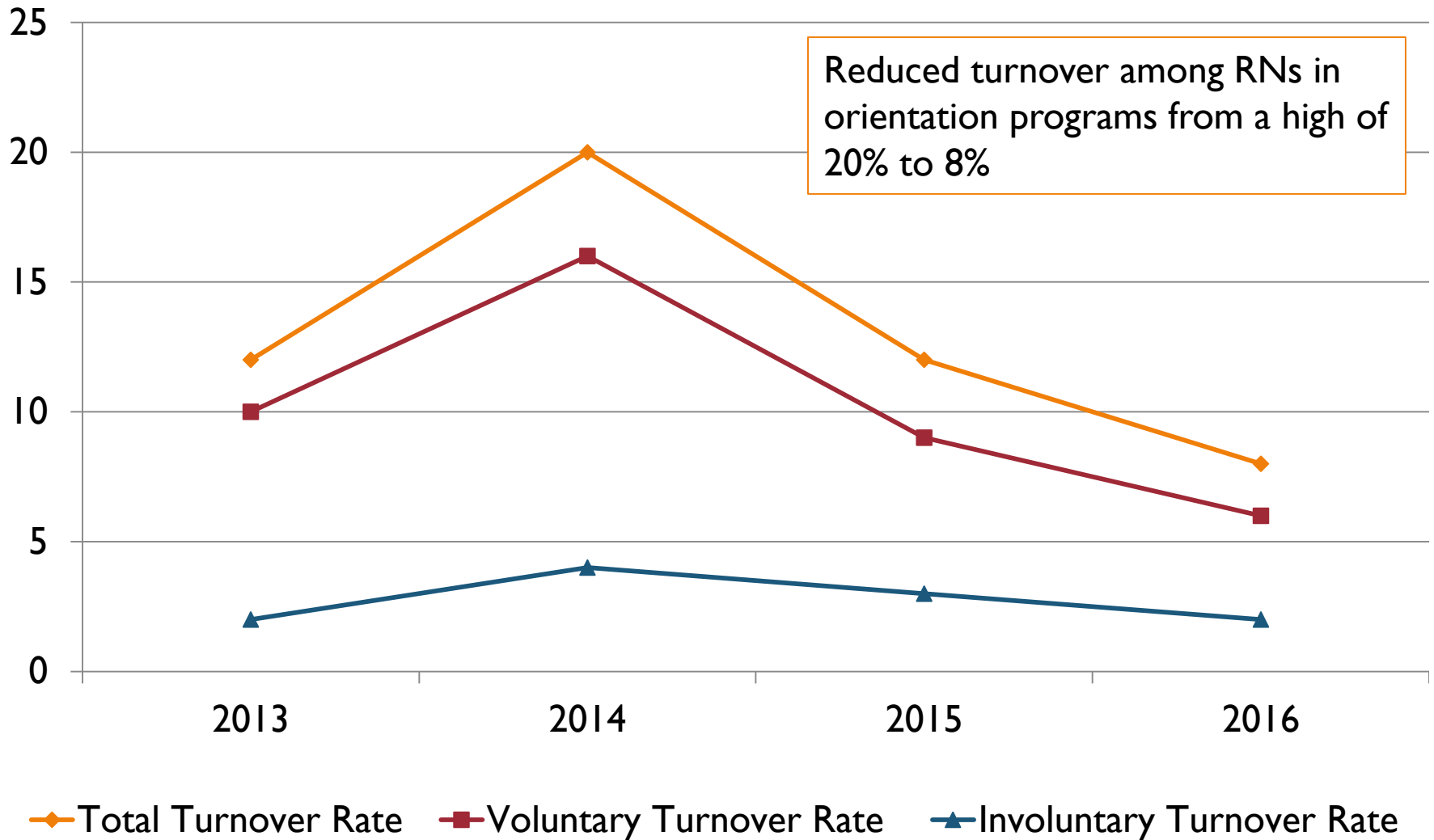
Newly Licensed RN Hospital Turnover, FY 2013 - 2016



Nurse Residency Programs Reduce Turnover, Saves more than \$17 M between FY 2015-16



Reduced Turnover Rates for Hard-to-Fill Positions by 12% between FY 2013 - 2016



Identified Critical Need Areas

- ▶ Emergency Department
- ▶ Adult Critical Care/Intermediate Care
- ▶ Women/Infants (NICU, L & D)
- ▶ Perioperative
- ▶ Medical-Surgical Specialties

RN Tuition Assistance

- ▶ Between FY 2013-2016, more than 2,300 RNs received tuition assistance
- ▶ 522 Graduates
 - ▶ 388 BSN (74%)
 - ▶ 116 MS/MSN (22%)
 - ▶ 2 DNP
- ▶ Attrition rate: 2 to 4.3%
- ▶ Number of RNs receiving tuition assistance for DNP/PhD doubled in 2016
 - ▶ 6 to 14 DNP
 - ▶ 1 to 2 PhD

Nursing Student Tuition Assistance

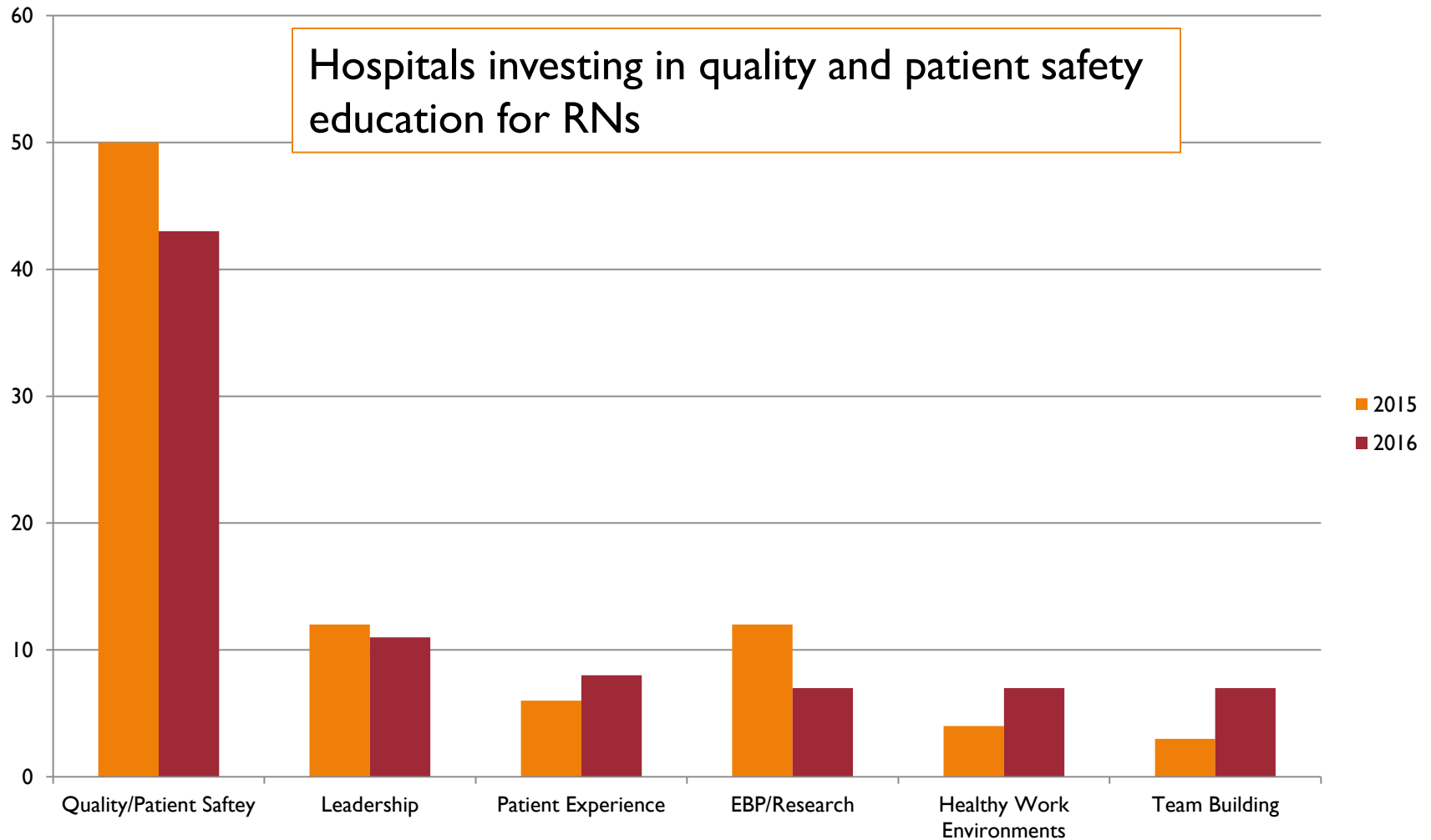
Between FY 2013 - 2016

- ▶ 524 Nursing Students Funded
- ▶ 282 Graduates*
 - ▶ 59 AD
 - ▶ 221 BSN/Generic Master's Degree
- ▶ Decline in student attrition by 6 percentage points
- ▶ 10 percentage point increase in Hospital Hiring (85 to 95%)

Increased Professional & Technical RN Certifications

- ▶ 19 and 11 percentage increases in professional and technical certification in 2013 & 2014
- ▶ 17.5 and 8.4 percentage increases in 2015 & 2016
- ▶ Almost 4,000 RNs obtained initial technical certification or recertification in 2015 & 2016

Invested in Quadruple Aim Continuing Education for RNs



*does not include succession planning, nursing excellence and Other classes



Continued Nursing Excellence Designation

▶ Magnet

- ▶ Anne Arundel Medical Center (2014)
- ▶ Mercy Medical Center (2011, 2016)
- ▶ Sinai Hospital of Baltimore (2008; 2013)
- ▶ MedStar Franklin Square Medical Center (2008; 2013)
- ▶ Johns Hopkins Hospital (2003; 2008; 2013)
- ▶ University of Maryland Medical Center (2009; 2014)
- ▶ UM Shore Medical Center at Easton (2009; 2014)
- ▶ UM Shore Medical Center at Dorchester (2009; 2014)

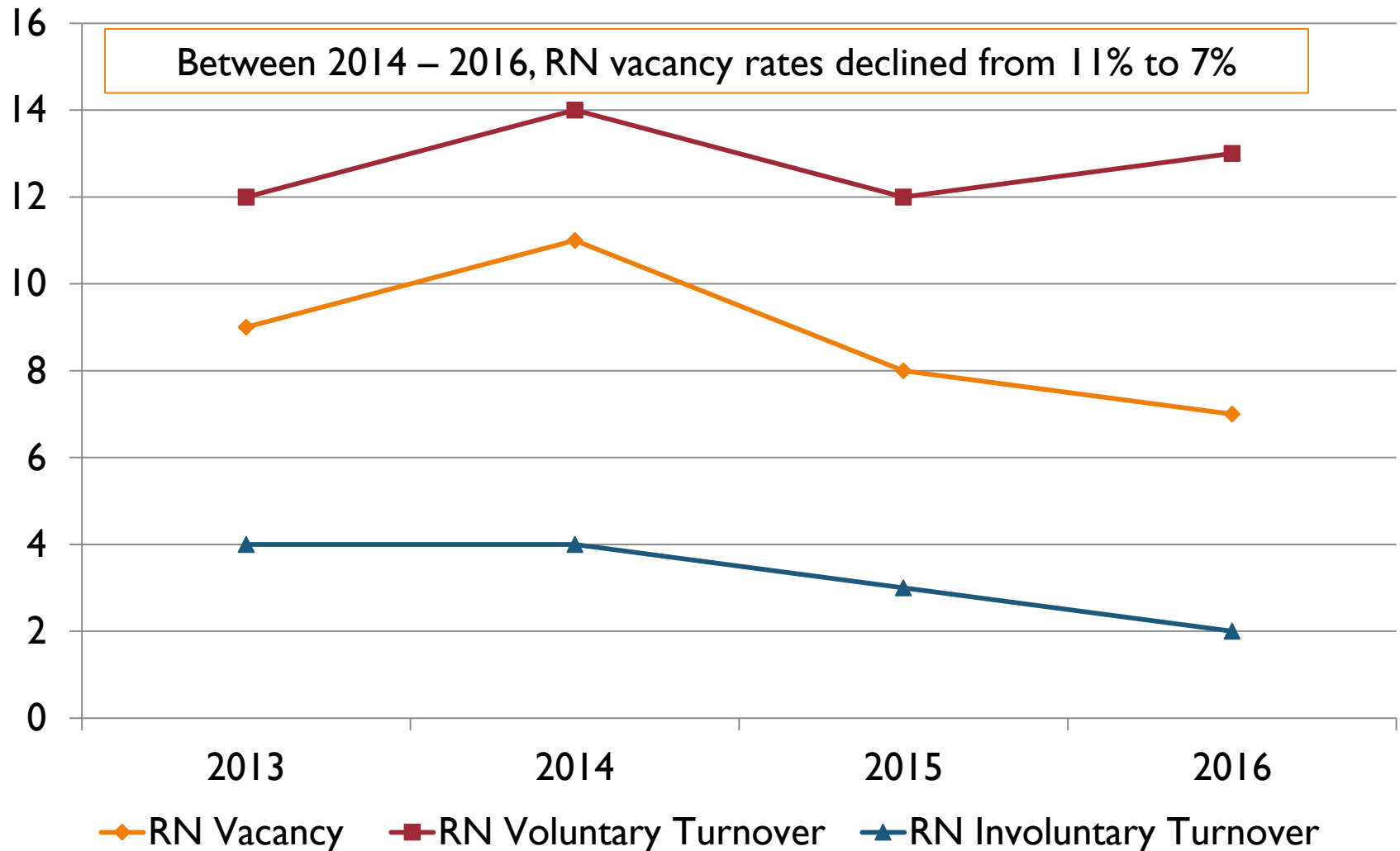
▶ Pathway to Excellence

- ▶ Union Hospital of Cecil County (2016)

Increased Investment in EBP/QI/Research

- ▶ 5 hospitals participated in 2013
- ▶ More than 12 Hospitals in 2015-2016
- ▶ Greater than 2.3 Million invested
- ▶ Investments in
 - ▶ Nurse residents to complete EBP projects
 - ▶ Research studies
 - ▶ Quality & patient safety initiatives

Overall Hospital Vacancy Reduced by 4%



Reduced Agency Costs by 8.2%

- ▶ Reduced agency RN FTEs by 150 (1,004 to 854 between 2015 and 2016)
- ▶ Hospitals savings < 23 Million (\$129 M to \$106 M) between 2015 & 2016

Continued Monitoring/Improvement

- ▶ Improve reporting of NSP I program expenditures and increase accuracy of hospital outcome data
- ▶ Monitor turnover data for RN critical need orientation programs
- ▶ Determine the demand for nursing transition (refresher) programs that enables RNs to re-enter the profession
- ▶ Monitor trends in nurse recruitment and retention rates, as well as, agency nurse usage

Staff Recommendations for Funding: FY 2018-2022

Recommendations for Future Funding

- ▶ Continue funding NSP I for next 5-year cycle (FY 2018-2022)
- ▶ Broaden the NSP goal to include all hospital-based RNs.
- ▶ Redefine categories/programs for eligible funding and add category specifically for growing nurse leaders
- ▶ Establish categories of initiatives not eligible for funding.
- ▶ Establish NSP I Advisory Board
- ▶ Revise forms to align with the data collection tool.
- ▶ Develop and implement new data reporting and analytic tool

**Nurse Support Program I (NSP I)
Outcomes Evaluation FY 2013 – FY 2016 and
Draft Recommendations for Future Funding**

June 14, 2017

Health Services Cost Review Commission

4160 Patterson Avenue
Baltimore, Maryland 21215
(410) 764-2605
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This is a draft recommendation for Commission consideration at the June 14, 2017, Public Commission meeting. Please submit comments on this draft to the Commission by Thursday, July 5, 2017, via hard copy mail or email to Oscar.Ibarra@maryland.gov.

TABLE OF CONTENTS

Figures.....	1
List of Abbreviations	2
Executive Summary	3
NSP I Achievements in FYS 2013 to 2016	4
Areas for Continued Monitoring and Improvement	4
Future Recommendations	5
Executive Brief	6
Introduction.....	6
Background.....	6
Data Collection Process	8
Hospital Reporting.....	9
Programs Supported Through the NSP I	9
Impact of the GBR on Hospital Nursing Workforce	11
Summary of NSP I Achievements	11
Increasing Bedside Nurses through RN Transition into Practice Programs	12
Decreasing Turnover Rates for Hard-to-Fill Critical Need Positions.....	13
Preparing a Highly Educated RN Workforce	14
Increasing the Nursing Pipeline	15
Advancing Lifelong Learning through RN Certification and Continuing Education.....	16
Advancing the Practice of Nursing	17
Advancing Nursing Science.....	17
Improving Hospital Vacancy & Turnover Rates While Reducing RN Agency Costs	17
Recommendations for the NSP I For FY 2018 - 2022.....	18
Recommendation 1: Broaden the NSP goal to include all hospital-based RNs.	19
Recommendation 2: Redefine categories for eligible funding.	19
Recommendation 3: Establish NSP I Advisory Board.	19
Recommendation 4: Establish categories of initiatives not eligible for funding.	20
Recommendation 5: Revise forms to align with the data collection tool.	20
Recommendation 6: Develop and implement a new data reporting and analytic tool.	20

FIGURES

Figure 1: Percent of NSP I Funds Invested in Future of Nursing Program Aims	10
Figure 2: NSP I Top Funding Categories	10
Figure 3: Comparison of 1-Year Nurse Residency and No Nurse Residency Program Voluntary Turnover Rates.....	13
Figure 4: Orientation Program Turnover Rates	14
Figure 5: NSP I Top Internal & External Continuing Education Categories	Error! Bookmark not defined.
Figure 6: Hospital Vacancy & Turnover FY 2013-2016.....	18

LIST OF ABBREVIATIONS

AD	Associates Degree in Nursing
BSN	Baccalaureate Degree in Nursing
EBP	Evidence-Based Practice
FTE	Fulltime Equivalent Employee
FY	Fiscal Year
GBR	Global Budget Revenue
HSCRC	Health Services Cost Review Commission
HRSA	Health Resources and Services Administration
IOM	Institute of Medicine
LPN	Licensed Practical Nurse
MS/MSN	Master's Degree/Master's in Nursing Degree
NESP	Nurse Education Support Program
NRP	Nurse Residency Program
NSP I	Nurse Support Program I
QI	Quality Improvement
RN	Registered Nurse

EXECUTIVE SUMMARY

Nurse Support Program I (NSP I) Outcomes Evaluation FY 2013 to FY 2016 and Recommendations for Future Funding

Transforming nursing, the single largest sector of the health care professions (more than 3 million registered nurses nationally and 70,000 in the state of Maryland¹), will dramatically impact the health care system in Maryland and nationally. Early on, the Maryland Health Services Cost Review Commission (HSCRC) recognized the importance of nursing to the health of the State. To that end, the HSCRC implemented the first phase of the Nurse Support Program I (NSP I) in June 2001 to address the short- and long-term issues of recruiting and retaining nurses in Maryland hospitals. Since program implementation, approximately \$131 million (fiscal year [FY] 2001 through FY 2016) has been funded in rates to support the NSP I.

In 2012, the NSP I program aims were aligned with the Institute of Medicine's (IOM's)² recommendations in its Future of Nursing report and included the following:

1. *Education and career advancement.* This area includes initiatives that increase the number of advance degree nurses preparing them as future leaders; recruitment and retention of newly licensed nurses through nursing residency programs; and supporting nursing students and experienced RNs re-entering the workforce after an extended leave.
2. *Patient quality and satisfaction.* This area includes lifelong learning initiatives such as certification and continuing education which are linked to improved nursing competency and better patient outcomes.
3. *Advancing the practice of nursing.* This area includes activities that advance the practice of nursing, such as nurse-driven evidenced-based research; innovative organizational structures for clinical nurses to have a voice in determining nursing practice, standards, and quality of care; and American Nurses Credentialing Center's Magnet® and Pathway to Excellence programs demonstrating nursing excellence.

With these recommendations, came the development of nursing and organizational metrics to assess hospitals progress in achieving these program aims. This report contains analysis of outcome data for FYs 2013 to 2016 using the revised organizational metrics and a new secure, web-based data collection tool. Program achievements and areas for continued monitoring and improvement are highlighted below.

¹ The Henry J. Kaiser Family Foundation. *Total Number Of Professionally Active Nurse*. Published April 2017. <http://kff.org/other/state-indicator/total-registered-nurses/?currentTimeframe> Accessed May 7, 2017.

² IOM (Institute of Medicine). *The Future Of Nursing: Leading Change, Advancing Health*. Washington, DC: The National Academies Press; 2010.

NSP I Achievements in FYS 2013 to 2016

- More than 5,800 newly licensed RNs participated in nurse residency programs supported by NSP I. Voluntary turnover rates were reduced upwards of 10 percentage points, resulting in cost savings of \$17.6 million.
- Reduced turnover rates by 12 percentage points among RNs participating in orientation programs for hard-to-fill positions such as the emergency department.
- More than 500 RNs graduated with advanced nursing degrees, increasing the pool of BSN, masters and doctoral prepared RNs.
- Financial support for nursing students increased by almost fourfold. Almost 300 new RNs were added to the workforce and student nurse attrition was reduced by six (6) percentage points over the four years.
- Increased professional and technical certification by more than eight (8) to upwards of 19 percentage points over the four years. Additionally, almost 4,000 RNs obtained initial technical or recertification in FYs 2015 & 2016.
- Nine hospitals attained or maintained Magnet® or Pathway to Excellence designation. Another 17 hospitals reported pursuing nursing excellence designation.
- Reduced vacancy rates by four (4) percentage points over the four years.
- Increased new hire RN retention rates by 10 percentage points from 76 percent in FYs 2013 & 2014 to more than 86 percent in FYs 2015 & 2016.
- Cost savings of more than \$23 million in agency RN usage, reduced full-time equivalents (FTEs) from 1,004 to 854 RN agency between FY 2015 and 2016.

Areas for Continued Monitoring and Improvement

- Improve hospital reporting of individual NSP I program expenditures, and increase reliability and accuracy of hospital outcome data.
- Monitor orientation programs turnover data of newly licensed and experienced registered nurses working in areas of critical need (such as emergency departments, critical care, women and infants, and perioperative care).
- Determine the demand in Maryland for nursing transition (refresher) programs that enables registered nurses to re-enter the profession.
- Monitor trends in nurse recruitment and retention rates, as well as, agency nurse usage.

Future Recommendations

- Align NSP with future hospital-based RN workforce requirements by broadening the NSP goal from recruiting and retaining hospital bedside RNs to recruiting and retaining hospital-based RNs.
- Redefine categories eligible for funding, such as transition into practice for new licensed RNs and into specialty practice for experienced RNs, nursing student programs, and the addition of a new program aim focused on developing nursing leaders.
- Explicitly define categories of initiatives that are not eligible for funding.
- Establish NSP I Advisory Board to make recommendations, monitor hospital programs, and their associated outcomes.
- Revise budget forms to align with the outcomes data collection tool.
- Develop and implement a data reporting and analytic system that will allow quarterly or semi-annual submission of data to improve accuracy and ease of analysis.

EXECUTIVE BRIEF

Nurse Support Program I (NSP I) Outcomes Evaluation FY 2013 to FY 2016 and Recommendations for Future Funding

Introduction

This report summarizes the Nurse Support Program I (NSP I) hospital activities and outcomes for fiscal years (FYs) 2013 to 2016 and presents recommendations for the next phase of the NSP I for FYs 2018 through 2022.

Background

The Maryland Health Services Cost Review Commission (HSCRC) instituted a nursing education support program in response to forecasts of significant short and long-term shortages of registered nurses (RNs) in the state of Maryland and nationally. To abate these severe and cyclical nursing shortages in 1986, the HSCRC implemented the Nurse Education Support Program (NESP), which focused on supporting college and hospital-based training of RNs and licensed practical nurses (LPNs).

After consecutive years of economic growth in the national economy in the late 1990s and early 2000s, new forecasts of nursing shortages again spurred the HSCRC into action, and NSP I was implemented. The intent of this five-year, non-competitive grant program was to increase the number of bedside hospital nurses through retention and recruitment activities. Annually, hospitals have been eligible to receive the lesser of their budget request or up to 0.1 percent of the hospital's gross patient revenue. The grant funds were provided through hospital rate adjustments and were used for approved projects that meet the goals of the NSP I. Since its inception in 2001, hospitals have taken significant action to successfully grow and sustain the state's hospital RN workforce.

To that end, NSP I has been renewed twice since 2001, at approximately five-year intervals, to ensure the continuation of hospital initiatives to grow the nursing workforce and advance the profession. As the NSP I approached its second renewal in 2013, HSCRC staff conducted an in-depth program evaluation with its stakeholders. Findings demonstrated that the Maryland hospital RN workforce grew significantly between FY 2007 and 2011, between 15 percent to more than 25 percent (as reported by 11 hospitals). Although difficult to measure the direct impact of NSP I funds, nurse leaders attributed much of the growth and retention of bedside hospital RNs to the NSP I.

As the economy improved following the economic downturn in 2008, impending shortages were projected despite the increases in supply that strengthened and stabilized the RN workforce. The growing number of health care consumers—many with chronic diseases—coupled with the aging of the population, has contributed to an ever-increasing demand for health care services. The Health Resources and Services Administration (HRSA) predicted that Maryland would be one of 16 states to experience a nursing shortage, while the nation as a whole would have a mild

surplus³. Based on the successes the program achieved in increasing the nurse workforce, coupled with the impending trends, the HSCRC supported the renewal of the NSP I for an additional five years from FY 2013 to FY 2018. Similar to its previous renewal, significant changes were made to the program based on an environmental scan of the healthcare landscape.

Unprecedented changes like the Affordable Care Act, the Quadruple Aim⁴, and the Institute of Medicine's (IOM's) Future of Nursing Report⁵ reshaped the health care landscape. With the changes in payment models, health care access, along with emphasis on better quality, safety, and patient experience came the recognition that the role of professional nurses also must change.

Accordingly, the NSP I aims were aligned with the IOM Future of Nursing report, which included recommendations to better prepare the future hospital RN workforce in Maryland. Below are the recommended NSP I categories and hospital initiatives to achieve the eight (8) IOM key recommendations for transforming the nursing workforce.

Education and career advancement. This area includes initiatives that support newly licensed or experienced RNs as they transition into practice or to new practice environments (i.e., nursing residency programs) and increase the number of new and advanced degree nurses (tuition assistance). Examples of initiatives include:

- Nurse residency program
- Orientation for critical need areas (i.e., emergency department)
- Transitional (nurse refresher) program
- RN tuition assistance
- Nursing student tuition assistance

Patient quality and satisfaction. This area includes efforts that can demonstrate the link between improved nursing competency and better patient outcomes (certification). It also includes activities that develop nurses as lifelong learners and prepares them as leaders (continuing education). Examples include:

³ U.S. Department of Health and Human Services, Health Resources and Services Administration, *National Center for Health Workforce Analysis. The Future of the Nursing Workforce: National- and State-Level Projections, 2012-2025.* Rockville, Maryland, 2014.

<http://bhwh.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingprojections.pdf> May 26, 2017

⁴ The Quadruple Aim includes the original Triple Aim components (enhancing patient experience, improving population health and reducing costs) and adding the goal of improving the work life of health providers, including clinicians and staff.

Bodenheimer, T. & Sinsky, C. From Triple To Quadruple Aim: Care Of The Patient Requires Care Of The Provider. *Annals of Family Medicine.* 2014; 12(6): 573-576.

⁵ IOM (Institute of Medicine). *The Future Of Nursing: Leading Change, Advancing Health.* Washington, DC: The National Academies Press; 2010.

- RN professional certification
- RN technical certification
- RN continuing education

Advancing the practice of nursing. This area includes activities that advance the practice of nursing; provide clinical nurses with a voice in determining nursing practice, standards, and quality of care; and participation in national programs demonstrating nursing excellence. Examples of these activities include:

- Nursing excellence (Magnet® or Pathway to Excellence® designation)
- Shared governance model
- Evidence-based practice, quality improvement, and/or research projects

The HSCRC, with stakeholder input, developed nursing and organizational metrics to assess hospitals' progress in achieving the program aims. This report shares the most recent outcome data collected from hospitals participating in the NSP I from FY 2013 through FY 2016. This report discusses the continued growth of nurses as health care professionals and their impact on the health care delivery system in Maryland, as well as areas of continued improvement needed in optimizing the use of NSP I funds.

Data Collection Process

In 2013, nurse and hospital leaders with HSCRC staff revised the annual report to include standardized outcome metrics that addressed the varied programs for each of the three newly proposed program aims. For consistency, outcome metrics were operationalized using nationally accepted definitions. Unlike previous reports, the newly revised report also contained a financial section requesting hospitals to report actual expenditures (administrative and project costs) for each of the programs supported by the NSP I. A secure, web-based data collection tool was used for ease of data entry and accuracy.

The revised annual report consists of three sections: an end-of-year financial report, hospital program outcome metrics, and overall hospital metrics, such as vacancy and turnover data. In Section I, NSP I coordinators report their hospital's actual expenditures, including administrative and project costs. Additionally, respondents report individual program expenditures for each of the program supported by the NSP I. In Section II, hospitals report outcome metrics for each program. For example, if the hospital invests NSP I funds in a nurse residency program, professional RN certification, tuition assistance, and Magnet® activities, the hospital must report outcome metrics associated with each of those programs. Section III collects standardized metrics about RN recruitment, retention, and vacancy rates, as well as hospital use of agency RNs. HSCRC require hospitals to complete the online annual report and submit actual expenditures for each fiscal year.

In 2015, the data collection tool was revised due to numerous reporting errors in the two previous fiscal years. Changes included streamlining questions, clarifying written instructions, and

providing an operational definition reference guide. Further, an educational webinar for NSP coordinators was provided to improve data entry and reporting accuracy.

Hospital Reporting

In 2013, 47 of the 50 (94 percent), eligible Maryland hospitals submitted the required data collection tool and end-of-year expense report. Many of the submitted reports contained large amounts of missing data. Of the 47 hospitals that submitted reports, only 45 were included in the final analysis due to incomplete data entry. In 2014, 46 hospitals (96 percent) out of the 50 eligible hospitals submitted reports. Again, one survey was excluded from the final analysis due to incomplete data entry. For FYs 2015 and 2016 all of the eligible hospitals (48 due to hospital mergers) submitted completed reports.

Programs Supported Through the NSP I

More than \$67 million of NSP I funds were invested in RNs at participating hospitals between FYs 2013 and 2016. A comparison of actual project, administrative, and total expenditures for the four years revealed that administrative expenses increased from 50 percent of total expenses in FYs 2013 and 2014 to 57 percent in FYs 2015 and 2016. During the four years, hospitals most frequently spent funds on programs supporting Education and Career Advancement (Figure 1). An analysis of spending by individual programs found more than 40 percent of NSP I funds were invested in nurse residency and orientation programs (Figure 2). With the advent of the Global Budget Revenue (GBR) payment methodology, funding by hospitals for quality improvement, evidence-based practice, and research programs substantially increased from four (4) percent of total expended dollars in the previous years to more than 13 percent in FYs 2015 and 2016. Correspondingly, the amounts allocated to nursing excellence programs decreased. Although the percentage of total funds for tuition assistance declined in the last two years, amount of tuition assistance supporting nursing students doubled from less than \$500,000 in FY 2015 to almost one million in FY 2016. The increased interest by hospitals for nursing students may suggest concerns to older RNs leaving the workforce for a potential RN nursing workforce shortage in Maryland.

When comparing reported program expenditures (i.e., the sum of individual program expenses) with the reported total expenditures in FYs 2013 and 2014, staff found an unexplained variance of 30 percent. NSP I coordinators attributed the variance to misunderstanding the question, lack of knowledge of NSP I expenditures, inadequate assistance from financial officers, and not reporting funds for programs that appeared not to fit into one of the listed categories.

To improve reporting of program expenses in FY 2015, an explanation of funding for the “Other” category was required. Additionally, extensive education was provided to NSP I coordinators to improve the reporting of end-of-the-year expenses. Although expense reporting substantially improved and no unexplained variances were found, the amount of expenses reported in the “Other” category was still concerning. More than 20 hospitals cited the use of funds for programs outside the recommended categories, accounting for more than 13 percent of NSP I expenditures.

Figure 1: Percent of NSP I Funds Invested in Future of Nursing Program Aims, FYs 2013 - 2016

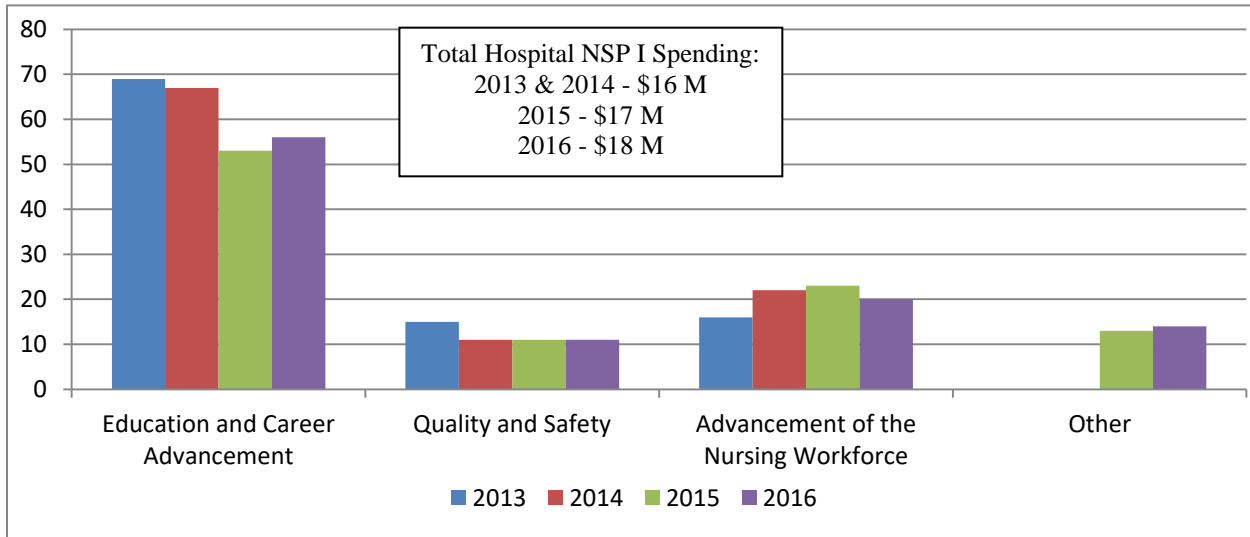
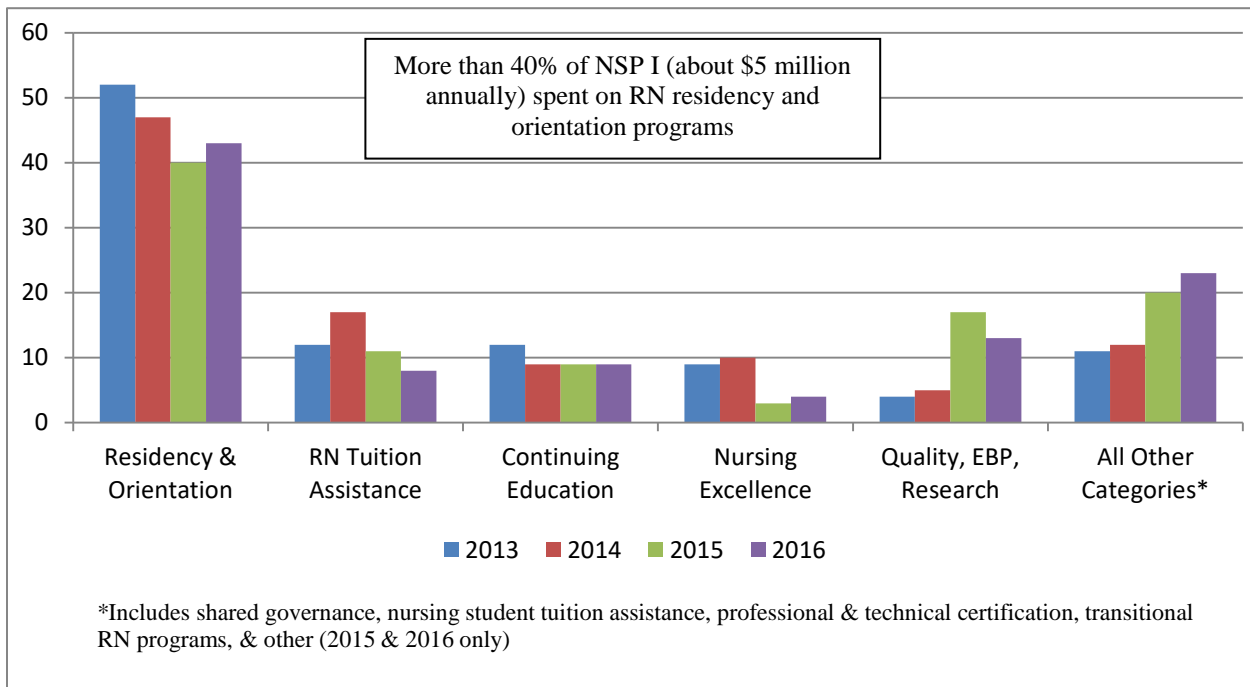


Figure 2: NSP I Top Funding Categories, FYs 2013 - 2016



Impact of the GBR on Hospital Nursing Workforce

In the FY 2015 and 2016 reports, NSP I Coordinators were asked about the impact of the GBR that was instituted with most Maryland hospitals by June 2014 and the responses varied widely. Several hospitals indicated that the impact had been positive, for instance, providing opportunities for investments in training for nurses in care management and transition strategies; and incorporating patient educators and quality advisors as resources to the nursing staff. One hospital has used the shared governance model to engage the nursing staff in budget stewardship, utilization of supplies, and development of creative quality improvements at the bedside; thereby decreasing costs and improving population health demands. Another hospital had implemented innovative staffing models to address declines in inpatient admissions, such as crossing training for nurses in ICU, step-down and Telemedicine units and staggering shifts.

However, not all the feedback was positive. Many coordinators cited the GBR as the reason for turnover among experienced nurses due to stagnant wages that are not competitive with non-hospital facilities and the increased workload of monitoring quality measures. The increase in the acuity of the patients, coupled with the shrinking inpatient nursing staff, has put a significant burden on the remaining nurses, decreasing overall job satisfaction. Several responses indicated challenges in recruitment and retention of nursing staff. There is an increased focus on efficient spending, and nursing leaders have to be fiscally responsible with resources, at the expense of investing in their nursing workforce. Several coordinators reported declines in opportunities for nurses to engage in non-patient care activities such as research, safety and evidence-based practice (EBP) because of budgetary constraints.

These responses highlight the need for continued funding of the NSP I, which provides an additional resource for investing in the nurse workforce. One coordinator responded, “If it <wasn't> for the NSP grant, many of our programs would have been discontinued.” As described in the following section, NSP I funds has allowed hospitals to invest in residency and other programs that has attracted highly motivated, and educated nurses to Maryland hospitals.

Summary of NSP I Achievements

The goal of NSP I is to increase the number of bedside nurses in Maryland through retention and recruitment activities. As described in previous renewal reports, Maryland hospitals continue to meet and exceed the goals of NSP. Hospitals attribute NSP I to its successes in retaining newly licensed RNs, advancing nursing education and certification, improving use of evidence-based practices, attaining recognition for nursing excellence, and improving RN retention. As written by one hospital, “The NSP program allows our hospital to provide the nurse residency program, continuing education for our nurses and assistance in preparing for the pediatric certification exam. Without funding, our small education department would be overwhelmed trying to meet the needs of the nursing department.”

Increasing Bedside Nurses through RN Transition into Practice Programs

The concept of nurse residency programs emerged to prevent newly licensed RNs from leaving their employer or the profession entirely. Nurse residency programs improve the organization, management, communication, and clinical skills, as well as retention of newly licensed RNs, and reduce hospital costs associated with attrition⁶. Unlike other professions in medicine, transition programs (referred to as residencies) have not been mandated by the nursing profession to integrate new graduates into the workplace. Maryland is recognized nationally as a leader in the nurse residency program; having one of the only statewide collaborative models with more than 20 participating hospitals and financial support through the NSP I.

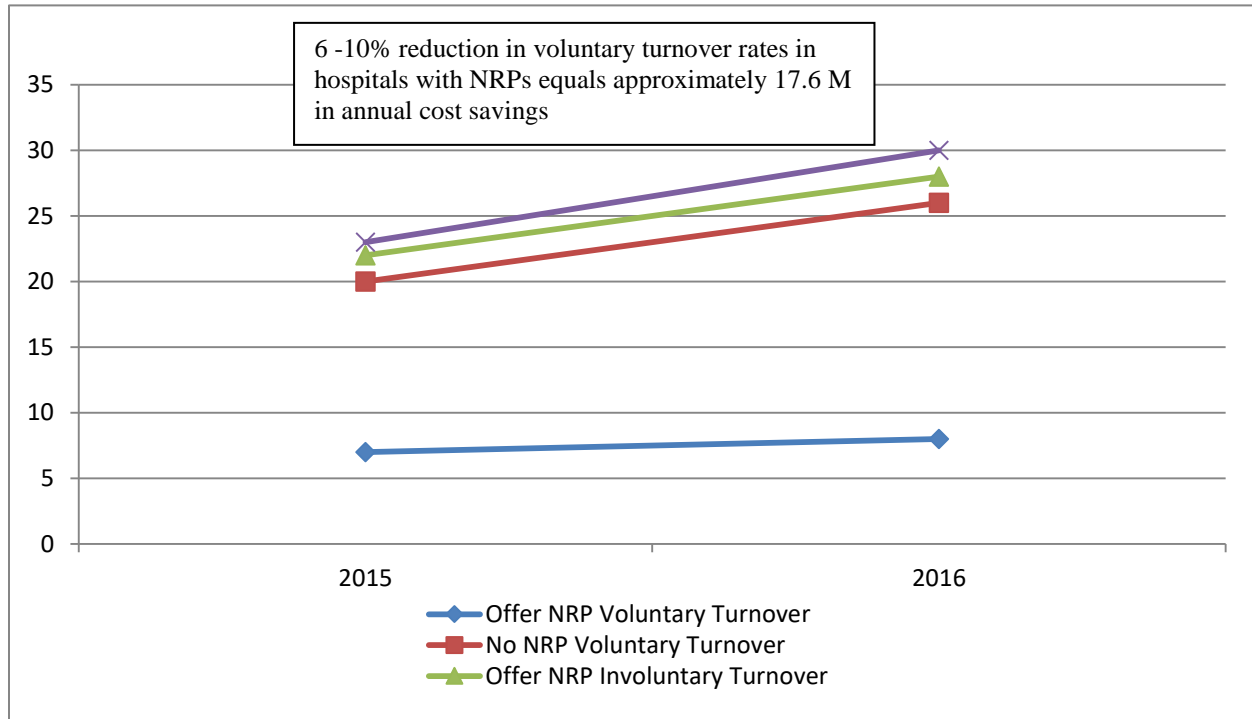
Approximately half of the responding hospitals invested NSP I funds into nurse residency programs (NRP) over the four years. Hospitals were able to fund program coordinators and instructors; nurse residents' or other staff salaries that facilitate resident attendance; and program expenses such as educational materials. More than 3,800 newly licensed RNs participated in nurse residency programs supported by NSP I. Voluntary turnover rates were reduced upwards of 10 percentage points in hospitals offering an NRP, compared to hospitals not offering NRPs (Figure 3). Cost savings due to decreased attrition (cost to recruit and retain a replacement RN) is estimated at \$88,000 per RN⁷. A 10 percent (200 RNs) reduction in turnover rates equates to an annual statewide cost saving of \$17.6 million by hospitals investing in residency programs. This program alone demonstrates the far-reaching impact NSP I has had on bedside hospital nurse retention.

Comparing hospital hiring practices for baccalaureate-prepared (BSN) and associates degree (AD) RNs, hospitals offering one-year nurse residency programs preferred hiring BSN nurses. In fact, BSNs were almost twice as likely to be hired compared to their AD counterparts, whereas, hospitals with no residency program are more likely to hire AD RNs. The hospitals offering no residency program are also more likely to be smaller and more rural.

⁶ National Academies of Sciences, Engineering and Medicine. *Assessing Progress on the Institute of Medicine Report The Future of Nursing*. Washington, DC: The National Academies Press; 2015. <http://www.nationalacademies.org/hmd/Reports/2015/Assessing-Progress-on-the-IOM-Report-The-Future-of-Nursing.aspx>. Accessed May 26, 2017.

⁷ Trepanier. S., Early, S., Ulrich, B., & Cherry, B. New Graduate Nurse Residency Program: A Cost Benefit Analysis Based on Turnover and Contract Labor Usage. *Nurs Econ*. 2012; 30(4), 207-14.

Figure 3: Comparison of 1-Year Nurse Residency and No Nurse Residency Program Voluntary Turnover Rates, FY 2015 vs 2016



Decreasing Turnover Rates for Hard-to-Fill Critical Need Positions

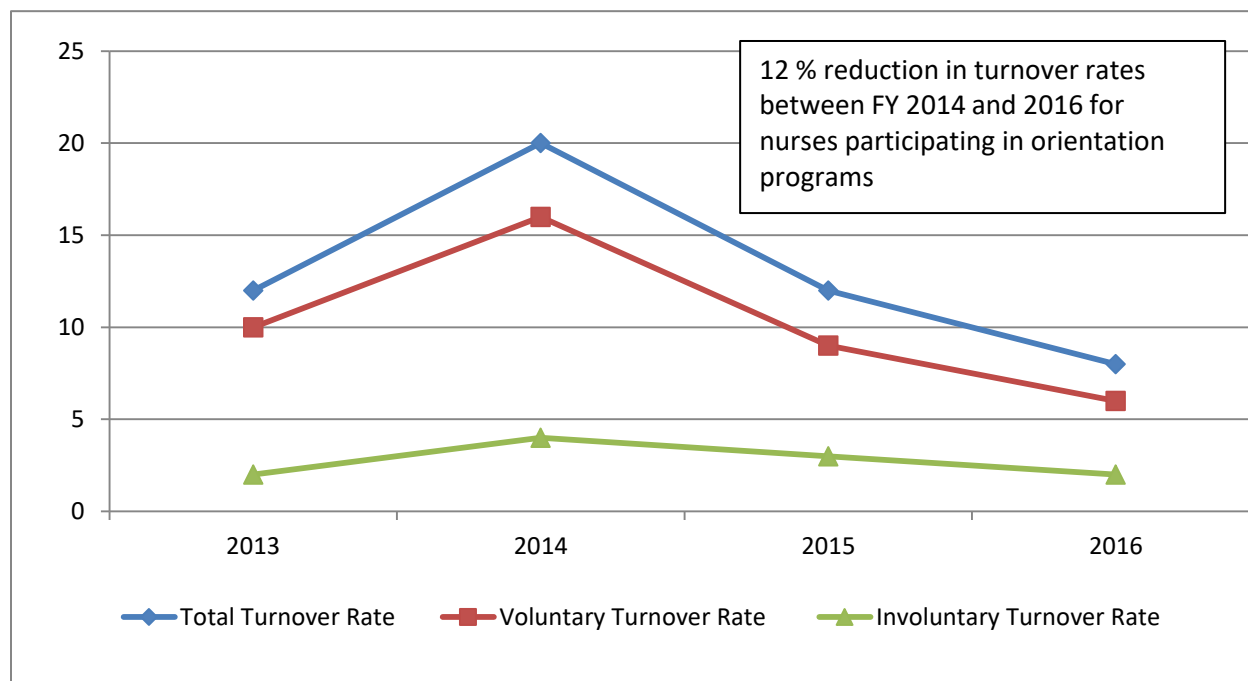
Nationally, nurse leaders are struggling with transitioning newly licensed RNs and experienced RNs to hard-to-fill specialty clinical roles and critical leadership roles. Areas of greatest need for RNs in Maryland are the Emergency Department, adult critical care/intermediate care, perioperative, women and infant health, and medical-surgical specialties. Maryland hospital workforce data, collected from hospital Chief Nursing Officers, also identified nurse manager, director, and nursing professional development practitioner (hospital-based nurse educator) as difficult roles to fill⁸. Furthermore, respondents cited a need for experienced clinical bedside nurses.

Over the four years, about half of the hospitals reported using NSP I funds to support the implementation of orientation programs for hard-to-fill positions. But unlike nurse residency programs, poorly reported outcome metrics associated with the orientation programs make it difficult to examine the impact of these funds. As discussed in the HSCRC NSP I interim

⁸ Daw, P. & Warren, J. I. *Transforming the Future Nursing Workforce: Innovative Statewide Opportunities*. Podium presentation at the Maryland Nurses Association 113th Annual Convention “Every Nurse A Leader” Conference Center At The Maritime Institute Linthicum Heights, MD October 13-14, 2016

outcome evaluation report⁹ that was presented to the Commission in February, a 25 percentage points increase in turnover rates were reported for nurses participating in orientation programs between FYs 2013 and 2014. Further analysis and discussions with NSP I coordinators indicate the turnover data may have been overstated. For the final analysis, inaccurate data were removed and the turnover rates declined from a high of 20 percent in 2014 to 8 percent in 2016 (Figure 4). Despite the issues with the data, this downward trend suggests orientation programs are positively impacting hard-to-fill RN turnover rates.

Figure 4: Orientation Program Turnover Rates



Preparing a Highly Educated RN Workforce

Demands for new and expanded RN roles to provide care across the health care continuum, as well as, shortages of RNs as primary care providers, faculty, and researchers has made it imperative for RNs to achieve higher levels of education. Strong research evidence has linked lower mortality rates, fewer medication errors, and positive outcomes to nurses prepared at the baccalaureate and graduate degree levels¹⁰. Quality patient care hinges on a well-educated,

⁹ Health Services Cost Review Commission. *Nurse Support Program I Outcomes Evaluation FY 2013-2014 and Recommendations for the Future, February 8 2017*; <http://www.Hsrc.State.Md.Us/Documents/Commission-Meeting/2017/02/HSCRC-Public-CM-Pre-Meeting-Packet-2017-02-02.Pdf>. 2017. Web. Apr. 30 2017.

¹⁰ American Association of Colleges of Nurses. *Creating a More Highly Qualified Nursing Workforce*. <http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-workforce>. 26 May 2017.

highly functioning, motivated nursing workforce. The IOM Future of Nursing report called for 80 percent of RNs to hold a BSN degree by 2020 and a doubling of doctoral-prepared RNs.¹¹

Through NSP I, the pool of BSN, master's degree and doctoral RNs in Maryland hospitals has substantially increased over the past 10 years of reporting. Between FYs 2007 and 2012, about 25 hospitals invested \$8.5 million in tuition assistance supporting approximately 800 RNs. Similarly, between FY 2013 and 2016 18 to 22 hospitals invested more than \$6.7 million in tuition assistance, allowing 2,300 RNs to obtain financial assistance towards advanced nursing degrees. Of those nurses receiving assistance in the last four years, approximately 522 graduated from nursing programs (74 percent with BSNs and 22 percent with MS/MSNs). Additionally, two RNs graduated with doctoral degrees in nursing. Furthermore, the student attrition rate held steady between 2 and 4 percent during this period.

These successes may be partially attributed to the synergistic effects of the NSP I and II programs. NSP II grants have funded programs for RNs to easily transition into BSN, MS/MSN, and doctoral programs. One NSP II program that is helping to facilitate this movement is newly-funded Associate-to-Bachelor's nursing programs that facilitate dual enrollment in an AD nursing program at a community college and the BSN degree at a partner nursing school. Another NSP II program uses shared resources among hospital and schools of nursing to increase the pool of nurse clinical instructors, while advancing the numbers of masters-prepared RNs in the hospitals. The program, initially funded in FY 2006, has grown from the 2 hospitals to 18 hospitals participating in FY 2016.

Increasing the Nursing Pipeline

Between FYs 2013 and 2016, financial support for nursing students by hospitals increased almost fourfold and added 282 new RNs to the workforce. Anecdotally, hospitals reported using NSP I funds beyond the traditional tuition assistance. Hospitals paid wages for student time while attending classes, stipends for incidentals such as textbooks and fees, and supported hospital-based externship and internship programs. More than half (282) of the approximately 524 nursing students funded through NSP I graduated from their basic licensure programs. Of those graduating, approximately 59 completed associate degree programs, 185 completed baccalaureate degree programs and 36 completed generic master's degree programs¹² Student attrition rates fell by 6 percentage points, from 7 percent to less than 1 percent over the four years. Hiring practices remained constant or slightly increased suggesting hospitals are hiring more new graduates to fill positions being vacated by older counterparts as they start to exit the workforce with the improving economy.

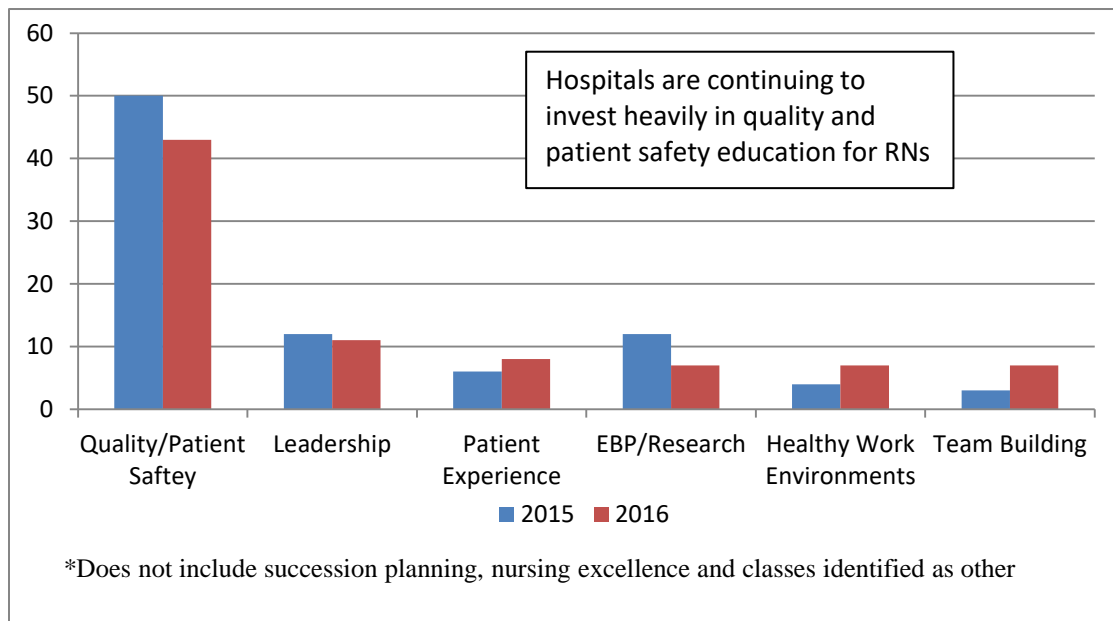
¹¹ IOM (Institute of Medicine). Future directions of credentialing research in nursing: Workshop summary. Washington, DC: The National Academies Press, 2015.

¹² Data by degree type was not reported for all new nursing graduates by hospitals,

Advancing Lifelong Learning through RN Certification and Continuing Education

As described in the previous 5-year renewal report, Maryland hospitals continue to encourage RNs to obtain specialty and technical certification and participate in continuing education classes. Certified nurses can positively impact their workplace, peers, and patients¹³. Hospitals employing certified wound care nurses were found to have better RN pressure ulcer assessment and prevention practices and lower rates of pressure ulcers¹⁴. Approximately 2,800 RNs completed certifications between FYs 2007 and 2012. Hospitals reported increases upwards of 19 percentage points for the most recent four years. In addition, almost 4,000 RNs obtained initial technical or recertification in FY 2015 & 2016. RNs obtained certification in multiple specialty nursing areas; ranging from medical-surgical to women’s health, wound care, and nurse executive certifications.

Figure 5: NSP I Top Internal & External Continuing Education Categories



Provision of ongoing continuing education is another method to foster lifelong learning. Almost half of the hospitals over the course of the four years reported the use of NSP I to support continuing education programs for RNs. More than 9,000 RNs attended educational programs focused on topics associated with goals of the quadruple aim (better quality, better health, lower

¹³ IOM (Institute of Medicine). *Future Directions Of Credentialing Research In Nursing: Workshop Summary*. Washington, DC: The National Academies Press, 2015.

¹⁴ Boyle, D. K., Bergquist-Berenger, S. & Cramer, E. Relationship of Wound, Ostomy, and Continence Certified Nurses and Healthcare-Acquired Conditions in Acute Care Hospitals. *J Wound Ostomy Continence Nurs.* 2017; 44(3):283-292. DOI: 10.1097/WON.0000000000000327

cost, and healthier workforce). Quality and patient safety classes comprised more than 50 percent of the educational offerings (Figure 5).

Advancing the Practice of Nursing

Eight (8) hospitals in Maryland have successfully achieved Magnet® and one has achieved Pathway to Excellence® designation with funding from the NSP I. Of those hospitals, six were re-designated as Magnet® hospitals in FY 2013 and 2014 and one in 2016. Seventeen hospitals are pursuing either Magnet® or Pathway to Excellence® designation, up from 13 in 2014. Magnet designated hospitals with the initial and re-designation dates are listed below.

- Anne Arundel Medical Center (2014)
- Mercy Medical Center (2011, 2016)
- Sinai Hospital of Baltimore (2008; 2013)
- MedStar Franklin Square Medical Center (2008; 2013)
- Johns Hopkins Hospital (2003; 2008; 2013)
- University of Maryland Medical Center (2009; 2014)
- UM Shore Medical Center at Easton (2009; 2014)
- UM Shore Medical Center at Dorchester (2009; 2014)

Pathway to Excellence

- Union Hospital of Cecil County (2016)

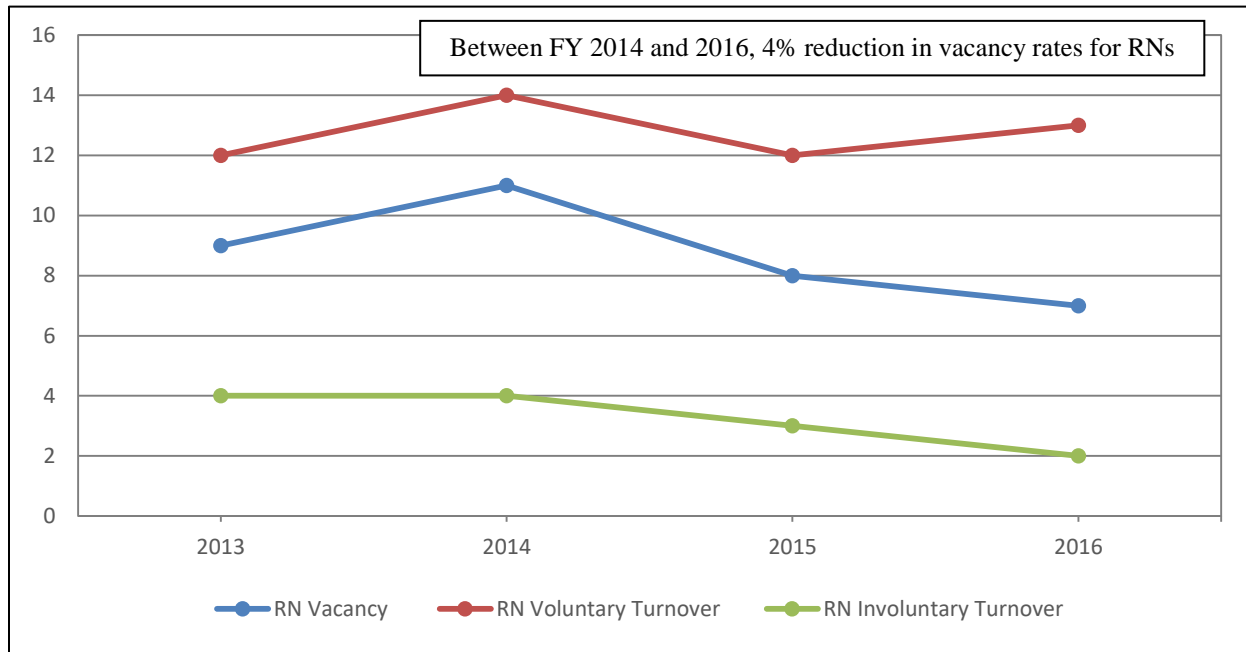
Advancing Nursing Science

The NSP I supports research studies, evidence-based practice (EBP), or quality improvement (QI) projects to build the science of nursing and improve patient care outcomes. The numbers of hospitals involved in QI, EBP, or research studies grew from five in 2013 to 12 in 2016 and expended funds increased almost seven-fold. Funding supported nurse residents and RN teams in conducting QI/EBP projects, such as early mobilization programs, pressure ulcer reduction, and early warning systems for sepsis. A project conducted by one hospital to improve identification of multiple birth babies was implemented throughout its healthcare system as a best practice.

Improving Hospital Vacancy & Turnover Rates While Reducing RN Agency Costs

Vacancy rates decreased by four percentage points and new hire RN retention rates increased by 10 percentage points between FYs 2013 and 2016 (Figure 6). Correspondingly, hospital use of agency RNs declined by 150 FTEs (FYs 2015 to 2016) equating to a cost savings of more than \$23 million.

Figure 6: Hospital Vacancy & Turnover FY 2013-2016



Recommendations for the NSP I for FY 2018 - 2022

The future growth of the national nursing workforce (RNs per capita) is projected to vary significantly; ranging from zero growth in New England to 40 percent growth in the West South and Central Region. Growth forecasts for the Mid-Atlantic Region suggest less than 10 percent growth in RN FTEs and only eight (8) percent growth in RN FTEs per capita. Unlike other fast growing regions in the nation with a projected surplus of nurses, Maryland is projected to be one of the slowest growth regions and projected to have workforce shortfall by 2030¹⁵. A 5-year continuation of NSP I is recommended to prevent the projected workforce shortage of nurses. The HSCRC’s investment in nursing practice and education is as timely and relevant today as it was decades ago. Transforming nursing in Maryland will, by virtue of the sheer numbers in hospitals, have far-reaching statewide effects on the quality and safety of the state’s hospitals.

To ensure continuous program improvement, the following programmatic changes are recommended.

¹⁵ Aurbach, D. I., Buerhaus, P. I., & Staiger, D. O. How Fast will the Registered Nurse Workforce Grow Through 2030? Projections in Nine Regions of the Country. *Nursing Outlook*, 2017, 65 (1), 116-122. DOI: <http://dx.doi.org/10.1016/j.outlook.2016.07.004>

Recommendation 1: Broaden the NSP goal to include all hospital-based RNs.

As health care transitions from a focus on episodic, acute care to population health, new health care models and delivery systems are being introduced to provide high-quality, patient-centered care across the care continuum. Global and national trends are calling for nurse leaders to prepare staff for new and expanding roles that come with new competencies for nurses. Initiatives that expand and encourage partnerships between academic and hospital nurse leaders to prepare nurses for present and future roles and produce the nurse with the right skill sets to meet new care delivery models/workforce requirements in Maryland should continue to be promulgated by NSP I and II.

Recommendation 2: Redefine categories for eligible funding.

A well-educated nursing workforce is fundamental to transforming the nursing profession and will address the increasing demand for safe, high-quality, and effective health care services. Bedside RNs are being asked to rapidly transition from a focus on discharge planning to another setting, to providing continuity of care across the health care continuum. With the new health care demands, nurses will have new innovative roles and acquire new skill sets, including the need for strong leadership skills. Future RNs will need to fill a variety of leadership roles from the bedside to the C-suite. It is recommended that a new leadership category is added to the NSP I initiatives and many of the current programs are redefined to keep up with projected health care trends.

Further, the current quality and retention rates of transition to specialty practice programs, such as to the emergency department, are problematic. Continued investment in practice transition programs and recording of outcome metrics are required to determine their effectiveness in retaining RNs.

Finally, new options for hospital-based nursing student programs, such as externships and internships, need to be made available to increase the nursing pipeline. As the economy improves and older RNs exit the workforce, significant geographical shortages of health care providers and nurses are projected. It is also recommended that innovative academic-practice models that maximize the capacity for the preparation of new RNs continue to be funded through NSP I and NSP II.

Recommendation 3: Establish NSP I Advisory Board.

HSCRC staff have continuously improved processes for NSP I. However, greater ownership and oversight is required by hospital leaders to strengthen and improve NSP I. An Advisory Board, consisting of key stakeholders, is recommended to advise HSCRC staff about programmatic improvements, monitor hospital programs for alignment with the NSP I goal, and evaluate outcome metrics and make recommendations.

Recommendation 4: Establish categories of initiatives not eligible for funding.

From this analysis, it is evident many hospitals are not using NSP I funds as intended. Program guidelines to include a comprehensive list of approved programs are recommended, as well as, mandatory hospital education about the NSP program. A formal review process of hospital program applications by an Advisory Board should lessen this issue.

Recommendation 5: Revise forms to align with the data collection tool.

Hospital respondents expressed confusion about the reporting forms which they believed contributed to problems with reporting data accurately. It is recommended that forms be reviewed and revised as needed, guidelines developed, and education provided to hospitals prior to the next funding cycle.

Recommendation 6: Develop and implement a new data reporting and analytic tool.

This analysis identified the need for hospitals to improve the reporting of organizational metrics. HSCRC staff met with NSP I coordinators to discuss issues with reporting and methods to improve their ability to provide reliable and accurate data. Although staff developed a complete instructional guide, added and revised operational definitions, and offered a live educational webinar (which was recorded for later viewing) to NSP I coordinators, issues persisted. New online systems allowing for real-time data entry are recommended to improve accuracy of data.

Draft Recommendations for the Uncompensated Care Policy for Rate Year 2018

June 14, 2017

Health Services Cost Review Commission

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What is Uncompensated Care (UCC) in Maryland?

- The HSCRC's provision for uncompensated care in hospital rates is one of the unique features of rate regulation in Maryland.
- Uncompensated care (UCC) includes bad debt and charity care.
- By recognizing reasonable levels of bad debt and charity care in hospital rates, the system enhances access to hospital care for those who cannot pay for care.
- HSCRC provides for UCC statewide based on the prior year's actual statewide experience.

The UCC Methodology

- The HSCRC uses a logistic regression model as a vehicle to predict actual hospital uncompensated care costs in a given year.
- The uncompensated care logistic regression model predicts a patient's chances of having UCC based on payer type, location of service (inpatient, ED, and other outpatient) and the Area Deprivation Index.
 - An expected UCC dollar amount is calculated for every patient encounter.
 - UCC dollars are summed at the hospital level.
 - Summed UCC dollars are divided by hospital total charges to establish the hospital's estimated UCC level.
- A 50/50 blend of the most recent actual hospital fiscal year's financial audited UCC levels (FY 2016) and the hospitals estimated UCC levels per the methodology is used to determine hospital-specific UCC adjustments.
- The RY 2018 Statewide UCC amount is recommended to be 4.51 percent.

Departure from the methodology used in RY 2017

- The current methodology was approved by the Commission at the June 2016 meeting.
- The only departure from the methodology used in RY 2017 is the substitution of the Maryland Area Deprivation Index for the National Area Deprivation Index, that accounts for census block information for all out of state patients who received care at Maryland hospitals.
 - Out of state patients account for 8.53 % of total charges at Maryland hospitals, and 11.29 % of UCC for FY 2016.

Results of the Model

The results of this model is contained in Appendix I of the draft recommendation. This shows hospital-specific UCC adjustments. Hospital-specific UCC adjustments range from 2.77% to 10.49%.

Draft Recommendations

Staff recommends the following for RY 2018:

- Reduce statewide UCC provision in rates from 4.69 %, which was the UCC rate effective for RY 2017 to 4.51 % for RY 2018.
- Continue to use the logistic regression model approved by the Commission at the June 2016 meeting.
- Substitute the Maryland Area Deprivation Index for the National Area Deprivation Index in the model.
- Continue to do 50/50 blend of the most recent actual hospital audited UCC levels and the hospitals estimated UCC levels using the logistic regression model.

Draft Recommendations for the Uncompensated Care Policy for Rate Year 2018

June 7, 2017

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Table of Contents

List of Abbreviations	1
Introduction.....	2
Background and Overview of Maryland’s Uncompensated Care Policy	2
Assessment.....	5
Determining the Appropriate Level of Uncompensated Care Funding in Rates	5
Recommendations.....	6
Appendix I. Hospital Uncompensated Care Provision for RY 2018.....	7
Appendix II. Write-Off Data Summary Statistics.....	11
Appendix III. Logistic Regression Methodology	14

LIST OF ABBREVIATIONS

ACA	Affordable Care Act
CRISP	Chesapeake Regional Information System for Our Patients
CY	Calendar year
ED	Emergency department
FPL	Federal poverty level
FY	Fiscal year
HSCRC	Health Services Cost Review Commission
MHA	Maryland Hospital Association
MHBE	Maryland Health Benefit Exchange
PAC	Primary Adult Care Program
RY	Rate year
UCC	Uncompensated care

INTRODUCTION

Uncompensated care (UCC) refers to care provided for which compensation is not received. This may include a combination of bad debt and charity care.¹ Since it first began setting rates, the Maryland Health Services Cost Review Commission (HSCRC or Commission) has recognized the cost of UCC within Maryland's unique hospital rate-setting system. As a result, patients who cannot pay for care are still able to access hospital services, and hospitals are credited for a reasonable level of UCC provided to those patients. Under the current HSCRC policy, UCC is funded by a statewide pooling system in which regulated Maryland hospitals draw funds from the pool if they experience a greater-than-average level of UCC and pay into the pool if they experience a less-than-average level of UCC. This ensures that the cost of UCC is shared equally across all of the hospitals within the system.

The HSCRC determines the total amount of UCC that will be placed in hospital rates for each year and the amount of funding that will be made available for the UCC pool. Additionally, the Commission approves the methodology for distributing these funds among hospitals. The purpose of this report is to provide background information on the UCC policy and to make recommendations for the UCC pool and methodology for rate year (RY) 2018. The UCC amount to be built into rates for Maryland hospitals is 4.51 percent for RY 2018.

BACKGROUND

Overview of Maryland's Uncompensated Care Policy

Historical Methodology

Traditionally, the HSCRC prospectively calculated the rate of UCC at each regulated Maryland hospital by combining historical UCC rates with predictions from a regression model.² The HSCRC builds a statewide pool into the rate structure for Maryland hospitals, and hospitals either pay into or withdraw from the pool, depending on each hospital's prospectively calculated UCC rate. Each year, the total amount of funds available in the pool is determined by the total percentage of gross patient revenue that was not compensated in regulated Maryland hospitals during the previous year. For example, if the actual total cost of UCC was 6 percent in 2015, then the 2016 pool would be prospectively set at 6 percent of the 2016 gross patient revenue.

Impact of the Affordable Care Act

A primary goal of the Affordable Care Act (ACA) was to expand coverage to uninsured or underinsured individuals. Under these reforms, Maryland expanded Medicaid coverage to

¹ COMAR 10.37.10.01K

² A regression is a general statistical technique for determining how much of a change in an output amount is likely to result from changes in measures of multiple inputs.

individuals with income up to 138 percent of the federal poverty level (FPL). The Medicaid expansion included the extension of full Medicaid benefits to people previously enrolled in the Primary Adult Care (PAC) program. The PAC program offered limited health care coverage to adults aged 19 to 64 years with incomes up to 116 percent of the FPL who were ineligible for Medicaid. PAC covered such services as primary care, family planning, prescriptions, mental health care and addiction services, and outpatient hospital emergency department (ED) services. However, PAC did not reimburse hospitals for inpatient or outpatient care beyond the ED. PAC enrollees were transitioned into full Medicaid benefits—including hospital inpatient and outpatient care - starting January 1, 2014. The Medicaid expansion also included individuals with incomes up to 138 percent of the FPL who were not previously enrolled in PAC. In addition to the ACA Medicaid expansion, many individuals newly purchased health insurance coverage through the Maryland Health Benefit Exchange (MHBE). Counting both individuals who obtained Medicaid coverage and those who selected a private health plan through the MHBE, more than 475,380 Marylanders enrolled in coverage through February 2017. This included about 299,743 new Medicaid enrollees and 157,637 MHBE enrollees. HSCRC staff has focused efforts on how the new categories of Medicaid enrollees covered through the ACA expansion affected UCC. The following sections summarize the UCC updates for each year after the ACA coverage expansions.

Updates for RY 2015

Because of the ACA coverage expansion described above, the HSCRC prospectively reduced UCC for RY 2015 to incorporate expected declines in UCC due to the implementation of the ACA on January 1, 2014. HSCRC staff estimated total unpaid hospital charges for the PAC population in the pre-ACA period by linking HSCRC discharge abstract data (case-mix data) and Medicaid PAC eligibility files using a patient-id matching algorithm available through the Chesapeake Regional Information System for Our Patients (CRISP). Based on the estimates from the analysis of historical hospital data, the HSCRC reduced the statewide UCC pool assessment from 7.23 percent to 6.14 percent to reflect the impact of ACA in the first year.

Hospital-specific adjustments combined the two-year historic trend and regression model and subtracted their estimated write-off amounts for the PAC population. The annual UCC percentage for each hospital was weighted equally (50/50) between the two-year average and the predicted regression value as shown in the formula below.

$$\frac{\text{Average Uncompensated Care Rate for Past 2 Years} + \text{Regression Value}}{2} \\ - \text{Estimated UCC \% for PAC Population} \\ = \text{Annual Uncompensated Care Percentage}$$

Once the annual UCC percentages were calculated for each hospital, they were adjusted so that the pooling system would remain revenue neutral.

In addition to prospective reductions for the PAC population, the HSCRC updated the regression model used to determine the RY 2015 predicted UCC percentage for each hospital based on

analysis of fiscal year (FY) 2013 and FY 2014 data. As in previous years, the primary payer and type of service (inpatient, outpatient, or ED) variables were strong predictors of UCC rates. A new variable was added to the regression model to reflect trends in UCC for undocumented immigrants who lack insurance coverage. Since reliable information is not available through the Census Bureau or other sources, zip codes where Medicaid provided emergency coverage for undocumented immigrants were used as a proxy to measure the influence of this specific population.³ The final regression model relied upon the following five explanatory variables:

- The proportion of a hospital's total charges from inpatient Medicaid admissions through the ED
- The proportion of a hospital's total charges from inpatient commercial insurance cases
- The proportion of a hospital's total charges from inpatient self-pay and charity cases
- The proportion of a hospital's total charges from outpatient self-pay and charity ED cases
- The proportion of a hospital's total charges from inpatient self-pay and charity admissions through the ED from the 80th percentile of Medicaid undocumented immigrant enrollment zip codes

Three hospitals, Levindale Hospital, the University of Maryland Rehabilitation & Orthopedic Institute (formerly Kernan Hospital), and the Shock Trauma Center were excluded from the regression calculations. The HSCRC set the annual UCC percentages for these hospitals at their actual average UCC percentage for the previous three years.

Updates for RY 2016

Because the ACA coverage expansions occurred during the middle of FY 2014, staff recommended against using FY 2014 data in the RY 2016 update. Only six months of ACA experience were included in FY 2014 data, which was inadequate for assessing the impact of the ACA on UCC. Instead, staff recommended to continue to reduce the UCC rates prospectively by estimated reductions in unpaid hospital charges for the Medicaid expansion population using a similar approach applied for the PAC population in the RY 2015 rates. The prospective adjustment for RY 2015 only included the estimated impact of the PAC program gaining full Medicaid coverage. The adjustment for RY 2016, however, captured the actual calendar year (CY) 2014 impact on UCC from extending Medicaid coverage to the entire expansion population (PAC and non-PAC). The RY 2016 UCC amount was therefore set at 5.35 percent.

Updates for RY 2017

For RY 2017, HSCRC staff re-evaluated the regression model and found that most of the variables were no longer statistically significant, and should not be used to determine the reasonable level of UCC to be built into individual hospital rates. Because there was only one

³ Maryland Medicaid covers emergency services for undocumented immigrants. ...

year of post-ACA data available, there were limitations to using the previous regression models and averaging the historical experience from audited financial reports. The Maryland Hospital Association (MHA) discussed the alternative models and adjustments with the hospitals in various meetings. The MHA recommended a regression model that predicts a patient's chances of having UCC based on their payer type, location of service (inpatient, ED, and other outpatient) and the Area Deprivation Index, and calculated the percentage of UCC based on average UCC amounts by payer and location of service. Based on stakeholder input, the HSCRC decided to continue to do a 50/50 blend of FY 2015 financial audited UCC levels and FY 2016 predicted or estimated UCC levels to determine hospital-specific adjustments. The RY 2017 UCC amount was set at 4.69 percent.

ASSESSMENT

Determining the Appropriate Level of Uncompensated Care Funding in Rates

The HSCRC must determine the percentage of UCC to incorporate in hospitals' rates in order to fund the UCC pool. Based on the most recent audited reports, the statewide UCC rate was 4.51 percent in FY 2016. The rate of Marylanders without health insurance decreased from 10.2 percent in 2013 to 7.9 percent in 2014, according to the statistics published by the U.S. Census Bureau on September 16, 2015.⁴ Maryland's uninsured rate continued to decrease to 6 percent as of March 2015, according to a report issued by the Census Bureau and Kaiser Family Foundation.⁵ While more people are getting insurance coverage, underinsurance and increases in the purchase of high deductible health plans may be creating upward pressures on UCC. Given these two dynamics, HSCRC staff recommends funding a UCC rate of 4.51 percent. This represents the full reported UCC rate for FY 2016.

Updates for RY 2018

The UCC Methodology for RY 2018 is a logistic regression model that predicts a patient's chances of having UCC based on payer type, location of service (inpatient, ED, and other outpatient) and the Area Deprivation Index, and a calculated percentage of UCC based on average UCC amounts by payer and location of service. A 50/50 blend of the most current Fiscal Year's financial audited UCC levels and the current Fiscal Year's predicted or estimated UCC levels is used to determine hospital-specific adjustments.

The only departure from the methodology used in RY 2017 is the substitution of the Maryland Area Deprivation Index for the National Area Deprivation Index, which accounts for census block information for out of state patients who received care at Maryland hospitals.

⁴ <http://www.marylandhbe.com/fewer-marylanders-without-health-coverage-census-bureau-reports/>

⁵ <http://www.marylandhbe.com/how-are-we-doing-on-health-coverage-maryland/>

RECOMMENDATIONS

Based on the preceding analysis, HSCRC staff recommends the following for RY 2018:

1. Reduce statewide UCC provision in rates from 4.69 % to 4.51 % effective July 1, 2017.
2. Continue to use the regression modeling approach approved by the Commission at the June 2016 meeting.
3. Substitute the Maryland Area Deprivation Index for the National Area Deprivation Index in the regression model
4. Continue to do 50/50 blend of FY16 audited UCC and predicted UCC.

Recommendations for the Uncompensated Care Policy for RY 2018

APPENDIX I. HOSPITAL UNCOMPENSATED CARE PROVISION FOR RY 2018

HOSPID	Hospital Name	FY 2018 Projected Regulated Revenue	FY 2016 UCC Based on FY 2018 Projected Regulated Revenue	FY 2016 Percent UCC from the RE Schedule	Percent Predicted UCC (Adjusted)	50/50 Blend Percent	Percent UCC
210001	Meritus Medical Center	334,876,102	15,772,976	4.71%	5.18%	4.95%	4.99%
210002	Univ. of Maryland Medical Center	1,438,951,222	57,937,435	4.03%	3.19%	3.61%	3.64%
210003	Prince Georges Hospital	299,902,921	28,405,399	9.47%	9.21%	9.34%	9.42%
210004	Holy Cross	510,747,952	45,895,492	8.99%	7.70%	8.34%	8.41%
210005	Frederick Memorial Hospital	355,915,557	14,515,105	4.08%	4.74%	4.41%	4.45%
210006	Univ. of Maryland Harford Memorial Hospital	106,578,160	6,578,589	6.17%	4.38%	5.28%	5.32%
210008	Mercy Medical Center, Inc.	538,345,601	28,566,363	5.31%	3.99%	4.65%	4.69%
210009	Johns Hopkins	2,366,190,615	49,570,950	2.09%	3.40%	2.75%	2.77%
210010	Univ. of Maryland Shore Medical Center at Dorchester	51,324,507	2,494,452	4.86%	5.39%	5.12%	5.17%
210011	St. Agnes Hospital	444,698,256	25,608,578	5.76%	4.88%	5.32%	5.37%
210012	Sinai Hospital	788,805,489	30,777,142	3.90%	3.84%	3.87%	3.91%
210013	Bon Secours Hospital	122,064,769	4,534,940	3.72%	4.41%	4.06%	4.10%
210015	MedStar Franklin Square Hospital	523,147,899	23,199,201	4.43%	4.32%	4.38%	4.41%
210016	Washington Adventist Hospital	275,389,883	20,442,671	7.42%	6.86%	7.14%	7.20%
210017	Garrett County Memorial Hospital	57,364,238	3,960,486	6.90%	5.65%	6.28%	6.33%
210018	MedStar Montgomery General Hospital	184,391,069	7,447,435	4.04%	4.13%	4.08%	4.12%
210019	Peninsula Regional Medical Center	450,628,695	18,584,640	4.12%	4.46%	4.29%	4.33%
210022	Suburban Hospital Association, Inc	318,412,820	6,552,937	2.06%	3.77%	2.92%	2.94%
210023	Anne Arundel General Hospital	621,928,839	15,808,583	2.54%	3.22%	2.88%	2.91%
210024	MedStar Union Memorial Hospital	442,830,792	18,770,214	4.24%	4.29%	4.27%	4.30%
210027	Western Maryland Hospital	334,505,088	16,334,563	4.88%	4.59%	4.73%	4.78%
210028	MedStar St. Marys Hospital	186,121,688	9,714,669	5.22%	4.37%	4.79%	4.84%

Recommendations for the Uncompensated Care Policy for RY 2018

210029	Johns Hopkins Bayview Med. Center	666,010,152	33,998,371	5.10%	4.82%	4.96%	5.01%
210030	Univ. of Maryland Shore Medical Center at Chestertown	57,238,507	2,848,810	4.98%	4.35%	4.67%	4.71%
210032	Union Hospital of Cecil County	166,907,564	8,015,248	4.80%	4.84%	4.82%	4.86%
210033	Carroll County General Hospital	236,562,484	6,813,225	2.88%	3.43%	3.16%	3.18%
210034	MedStar Harbor Hospital Center	201,496,286	11,605,956	5.76%	5.45%	5.60%	5.65%
210035	Univ. of Maryland Charles Regional Medical Center	154,976,711	9,035,605	5.83%	4.73%	5.28%	5.32%
210037	Univ. of Maryland Shore Medical Center at Easton	209,808,601	7,329,670	3.49%	3.54%	3.52%	3.55%
210038	Univ. of Maryland Medical Center Midtown Campus	246,916,488	20,169,517	8.17%	4.55%	6.36%	6.41%
210039	Calvert Memorial Hospital	151,755,504	4,419,262	2.91%	3.28%	3.09%	3.12%
210040	Northwest Hospital Center, Inc.	266,087,214	15,035,724	5.65%	5.13%	5.39%	5.44%
210043	Univ. of Maryland Baltimore Washington Medical Center	425,989,496	23,966,211	5.63%	4.92%	5.27%	5.32%
210044	Greater Baltimore Medical Center	466,093,482	12,180,306	2.61%	3.34%	2.98%	3.00%
210045	McCready Foundation, Inc.	16,286,106	465,420	2.86%	6.16%	4.51%	4.55%
210048	Howard County General Hospital	315,577,785	10,389,468	3.29%	4.05%	3.67%	3.70%
210049	Univ. of Maryland Upper Chesapeake Medical Center	351,518,563	12,638,937	3.60%	3.47%	3.53%	3.56%
210051	Doctors Community Hospital	241,014,229	17,714,444	7.35%	5.49%	6.42%	6.48%
210055	Laurel Regional Hospital	104,081,752	12,077,044	11.60%	9.19%	10.40%	10.49%
210056	MedStar Good Samaritan Hospital	303,040,058	15,260,137	5.04%	4.79%	4.91%	4.96%
210057	Shady Grove Adventist Hospital	407,839,291	17,034,632	4.18%	4.76%	4.47%	4.51%
210060	Fort Washington Medical Center	50,414,055	4,783,427	9.49%	9.11%	9.30%	9.38%
210061	Atlantic General Hospital	110,209,823	6,141,921	5.57%	5.39%	5.48%	5.53%
210062	MedStar Southern Maryland Hospital	285,564,731	16,992,245	5.95%	4.60%	5.27%	5.32%
210063	Univ. of Maryland St. Josephs Medical Center	417,895,708	17,103,218	4.09%	3.73%	3.91%	3.95%
210065	Holy Cross German Town	112,196,258	11,182,548	9.97%	9.21%	9.59%	9.67%
Total		16,718,603,010	748,674,163	4.48%	4.38%	4.44%	4.48%

Note: Levindale, UMROI, and UM-Shock Trauma are not included in this analysis.

APPENDIX II. WRITE-OFF DATA SUMMARY STATISTICS

The figure below presents the UCC reduction rate by hospital between FY 2015 and FY 2016. Reduction rates vary by hospital.

Appendix II. Table 1. UCC Reductions by Hospital, FY 2015-2016

HOSPID	Hospital Name	FY 2015 % UCC	FY 2016 % UCC	Variance over/(under)
210001	Meritus Medical Center	4.59%	4.71%	0.12%
210002	UM Medical Center	2.75%	4.03%	1.28%
210003	Prince Georges Hospital	9.24%	9.47%	0.23%
210004	Holy Cross	8.05%	8.99%	0.93%
210005	Frederick Memorial Hospital	3.39%	4.08%	0.69%
210006	UM Harford Memorial Hospital	8.94%	6.17%	-2.77%
210008	Mercy Medical Center, Inc.	6.44%	5.31%	-1.13%
210009	Johns Hopkins	2.25%	2.09%	-0.15%
210010	UM Shore Medical Center at Dorchester	6.57%	4.86%	-1.71%
210011	St. Agnes Hospital	4.99%	5.76%	0.77%
210012	Sinai Hospital	4.20%	3.90%	-0.30%
210013	Bon Secours Hospital	3.96%	3.72%	-0.24%
210015	MedStar Franklin Square Hospital	4.10%	4.43%	0.33%
210016	Washington Adventist Hospital	10.20%	7.42%	-2.78%
210017	Garrett County Memorial Hospital	8.25%	6.90%	-1.35%
210018	MedStar Montgomery General Hospital	4.76%	4.04%	-0.72%
210019	Peninsula Regional Medical Center	3.72%	4.12%	0.40%
210022	Suburban Hospital Association, Inc	3.97%	2.06%	-1.91%
210023	Anne Arundel General Hospital	3.04%	2.54%	-0.50%
210024	MedStar Union Memorial Hospital	3.53%	4.24%	0.71%
210027	Western Maryland Hospital	4.83%	4.88%	0.06%
210028	MedStar St. Marys Hospital	5.35%	5.22%	-0.13%
210029	Johns Hopkins Bayview Med. Center	6.49%	5.10%	-1.38%
210030	UM Shore Medical Center at Chestertown	6.62%	4.98%	-1.64%
210032	Union Hospital of Cecil County	4.74%	4.80%	0.06%
210033	Carroll County General Hospital	2.15%	2.88%	0.73%
210034	MedStar Harbor Hospital Center	5.00%	5.76%	0.76%
210035	UM Charles Regional Medical Center	6.81%	5.83%	-0.98%
210037	UM Shore Medical Center at Easton	5.34%	3.49%	-1.85%
210038	UM Medical Center Midtown Campus	10.51%	8.17%	-2.34%
210039	Calvert Memorial Hospital	3.34%	2.91%	-0.42%
210040	Northwest Hospital Center, Inc.	6.39%	5.65%	-0.74%

Recommendations for the Uncompensated Care Policy for RY 2018

210043	UM BWMC	5.82%	5.63%	-0.19%
210044	Greater Baltimore Medical Center	2.48%	2.61%	0.13%
210045	McCready Foundation, Inc.	7.62%	2.86%	-4.76%
210048	Howard County General Hospital	4.14%	3.29%	-0.85%
210049	UM Upper Chesapeake Medical Center	5.25%	3.60%	-1.65%
210051	Doctors Community Hospital	7.28%	7.35%	0.07%
210055	Laurel Regional Hospital	8.81%	11.60%	2.80%
210056	MedStar Good Samaritan Hospital	4.02%	5.04%	1.02%
210057	Shady Grove Adventist Hospital	4.79%	4.18%	-0.61%
210060	Fort Washington Medical Center	8.73%	9.49%	0.76%
210061	Atlantic General Hospital	4.58%	5.57%	1.00%
210062	MedStar Southern Maryland Hospital	5.72%	5.95%	0.23%
210063	UM St. Josephs Medical Center	4.09%	4.09%	0.00%
210065	Holy Cross Germantown	9.57%	9.97%	0.40%
Total		4.59%	4.48%	-0.12%

Note: Levindale, UMROI, and UM-Shock Trauma are not included in this analysis.

*Source: HSCRC Financial Audited Data

The figure below presents the UCC write off distribution by payer for services provided in RY 2016 based on the account-level information provided to the Commission. Nearly 36 percent of UCC Write Off has a primary payer of charity care/self-pay. Commercial payers and Medicaid (including out-of-state Medicaid) accounted for 29.08 and 12.44 percent of UCC, respectively.

Appendix II. Table 2. UCC Write Off Distribution by Payer, RY 2016

Payer	Total Write Off	% of Total Write Off
Charity/Self Pay	\$259,714,663	35.97%
Commercial	\$209,983,202	29.08%
Medicaid	\$89,803,193	12.44%
Medicare	\$117,800,930	16.31%
Other	\$44,821,568	6.21%
Grand Total	\$722,123,557	100.00%

Appendix III

Logistic Regression Methodology (1 of 5)

$$\text{Expected encounter } \$UCC = \text{Chance of visit resulting in UCC} \times \text{Avg. Charge} \times \% \text{ UCC of Bill}$$

To calculate each hospital's UCC%:

- An expected UCC dollar amount is calculated for every patient encounter
- UCC dollars are summed at the hospital level
- Summed UCC dollars are divided by hospital total charges (from write-off data)
- The expected UCC dollar amount is calculated as the product of three numbers:
 - **Chance of visit resulting in UCC:** From logistic regression formula, based on patient ADI (or ADI with other variables)
 - **Avg. Charge:** Average of total charges by hospital, by payer, by patient type
 - **% UCC of Bill:** Statewide average UCC% by payer, by patient type; only for encounters with UCC

The following 6 pages will illustrate an example of this methodology, using ADI as the only predictor

Logistic Regression Methodology (2 of 5)

$$\text{Expected encounter \$UCC} = \text{Chance of visit resulting in UCC} \times \text{Avg. Charge} \times \% \text{ UCC of Bill}$$

Patient Acct	Hospital	ADI Ventile	Patient Type	Payer (clean)	Net Write-Off	W-O Flag	Total Charges	Avg. Charge	Chance of UCC	% UCC of Bill	Expected \$UCC (Avg. Charge)	Expected \$UCC (Actual Charge)
00000001	A	90	OP	Blue Cross	\$ -	0	\$ 700		23.5%			
00000002	A	20	IP	Medicare	\$ 250	1	\$ 4,000		15.6%			
00000003	A	55	IP	Medicare	\$ 150	1	\$ 2,000		19.2%			
00000004	B	55	IP	Medicare	\$ -	0	\$ 5,000		19.2%			

To determine each encounter's **Chance of Resulting in UCC**:

- Every encounter is assigned a Write-Off Flag
 - 0 = No write-off reported
 - 1 = Any write-off reported
- All 6.3 million encounters (statewide) are run through a logistic regression model to determine the correlation between the predictor variable (ADI) and the dependent variable (UCC flag)
- The regression outputs result in a formula which calculates a likelihood of UCC using ADI Ventile. Each encounter's ADI Ventile is run through the formula to obtain a Chance of UCC

Please find the formula and resulting Chance of UCC table on the following page

Logistic Regression Methodology (3 of 5)

$$\text{Expected encounter \$UCC} = \text{Chance of visit resulting in UCC} \times \text{Avg. Charge} \times \% \text{UCC of Bill}$$

Patient Acct	Hospital	ADI Ventile	Patient Type	Payer (clean)	Net Write-Off	W-O Flag	Total Charges	Avg. Charge	Chance of UCC	% UCC of Bill	Expected \$UCC (Avg. Charge)	Expected \$UCC (Actual Charge)
00000001	A	90	OP	Blue Cross	\$ -	0	\$ 700	\$ 700	23.5%			
00000002	A	20	IP	Medicare	\$ 250	1	\$ 4,000	\$ 3,000	15.6%			
00000003	A	55	IP	Medicare	\$ 150	1	\$ 2,000	\$ 3,000	19.2%			
00000004	B	55	IP	Medicare	\$ -	0	\$ 5,000	\$ 5,000	19.2%			

To determine each encounter's **average charge** (and to account for charge structure differences between hospitals):

- A table is created with the average charge by hospital, by patient type, and by payer
- Each encounter's hospital, patient type, and payer are used to look up the appropriate average charge amount

ALTERNATE METHOD

- It may be more telling to use an encounter's **actual charges** (Total Charges field, above) instead of the estimated Avg. Charge
- Expected encounter UCC dollars were also calculated using this alternate method

Logistic Regression Methodology (4 of 5)

$$\text{Expected encounter } \$UCC = \text{Chance of visit resulting in UCC} \times \text{Avg. Charge} \times \% \text{ UCC of Bill}$$

Patient Acct	Hospital	ADI Ventile	Patient Type	Payer (clean)	Net Write-Off	W-O Flag	Total Charges	Avg. Charge	Chance of UCC	% UCC of Bill	Expected \$UCC (Avg. Charge)	Expected \$UCC (Actual Charge)
00000001	A	90	OP	Blue Cross	\$ -	0	\$ 700	\$ 700	23.5%	15.82%		
00000002	A	20	IP	Medicare	\$ 250	1	\$ 4,000	\$ 3,000	15.6%	6.93%		
00000003	A	55	IP	Medicare	\$ 150	1	\$ 2,000	\$ 3,000	19.2%	6.93%		
00000004	B	55	IP	Medicare	\$ -	0	\$ 5,000	\$ 5,000	19.2%	6.93%		

To determine each encounter's % **UCC of Bill**:

- The dataset is filtered to only look at encounters with write-off amounts
- From this filtered dataset, a table is created with the % UCC of Bill by patient type and by payer
- Each encounter's patient type and payer are used to look up the appropriate % UCC of Bill

EXAMPLE: 15.82% of Patient 1's bill is expected to be UCC, and that bill is expected to be, on average, \$700. Therefore, if Patient 1 were to have UCC costs, those costs would average being 15.82% * \$700 = \$110.74. Additionally, there is a 23.5% chance of Patient 1 having these costs.

Please find table of % UCC of Bill by patient type, by payer on the following page

Logistic Regression Methodology (5 of 5)

$$\text{Expected encounter } \$UCC = \text{Chance of visit resulting in UCC} \times \text{Avg. Charge} \times \% \text{ UCC of Bill}$$

Patient Acct	Hospital	ADI Ventile	Patient Type	Payer (clean)	Net Write-Off	W-O Flag	Total Charges	Avg. Charge	Chance of UCC	% UCC of Bill	A1	A2	B	C	A1*B*C	A2*B*C
											Expected \$UCC (Avg. Charge)	Expected \$UCC (Actual Charge)				
00000001	A	90	OP	Blue Cross	\$ -	0	\$ 700	\$ 700	23.5%	15.82%	\$ 26.02	\$ 26.02			\$ 26.02	\$ 26.02
00000002	A	20	IP	Medicare	\$ 250	1	\$ 4,000	\$ 3,000	15.6%	6.93%	\$ 32.43	\$ 43.24			\$ 32.43	\$ 43.24
00000003	A	55	IP	Medicare	\$ 150	1	\$ 2,000	\$ 3,000	19.2%	6.93%	\$ 39.92	\$ 26.61			\$ 39.92	\$ 26.61
00000004	B	55	IP	Medicare	\$ -	0	\$ 5,000	\$ 5,000	19.2%	6.93%	\$ 66.53	\$ 66.53			\$ 66.53	\$ 66.53

To determine each encounter's **Expected UCC dollar amount**:

- Using Avg. Charge - Multiply each encounter's Chance of UCC, Avg. Charge, and UCC%
- Using Actual Total Charge - Multiply each encounter's Chance of UCC, Total Charges, and UCC%

These UCC dollar amounts are aggregated at the hospital level and then divided by each hospital's Total Charges to formulate the predicted hospital-level UCC%

- Hospital A UCC%:
 - By Avg. Charge = $(\$26.02 + \$32.43 + 39.92) / (\$700 + \$4000 + \$2000) = 1.47\%$
 - By Actual Charge = $(\$26.02 + \$43.24 + 26.61) / (\$700 + \$4000 + \$2000) = 1.43\%$

**Staff Report:
Maryland's Statewide Health Information Exchange,
the Chesapeake Regional Information System for our
Patients: FY 2018 Funding to Support HIE Operations
and CRISP Reporting Services**

June 14, 2017

Health Services Cost Review Commission
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Table of Contents

List of Abbreviations1

Overview.....2

Background.....2

 Past Funding.....2

FY 2017 Funding Through Hospital Rates3

 HIE Operations Funding3

 Standard CRISP Reporting Services.....4

Funding of Integrated Care Network Activity under the BRFA of 20155

Summary6

LIST OF ABBREVIATIONS

BRFA	Budget Reconciliation and Financing Act of 2015
CMS	Centers for Medicare & Medicaid Services
CRISP	Chesapeake Regional Information System for Our Patients
DHMH	Department of Health and Mental Hygiene
EMPI	Enterprise master patient index
FY	Fiscal year
HIE	Health information exchange
HITECH	Health Information Technology for Economic and Clinical Health Act
HSCRC	Health Services Cost Review Commission
IAPD	Implementation Advanced Planning Document
ICN	Integrated care network
MHCC	Maryland Health Care Commission
MHIP	Maryland Health Insurance Plan

OVERVIEW

In accordance with its statutory authority to approve alternative methods of rate determination consistent with the All-Payer Model and the public interest,¹ this report identifies the amount of continued funding support required in fiscal year (FY) 2018 to the Chesapeake Regional Information System for our Patients (CRISP), for the following purposes:

- Health Information Exchange (HIE) operations; and
- Continuing standard CRISP reporting services to hospitals in the State and the Maryland Health Services Cost Review Commission (HSCRC or Commission).

The total amount of approved funding through hospital rates for these activities in FY 2018 is \$2,360,000. As shown in Table 3, \$1,340,000 of this amount is designated for HIE operations, \$650,000 is for standard CRISP reporting services, and \$370,000 is for the State match for Implementation Advanced Planning Document (IAPD) programing and to obtain related federal funding.

As a continuation of past reporting formats, this report separates out the funding request for HIE operations and standard CRISP reporting services from those relating to Integrated Care Network (ICN) initiative. The reason for this demarcation is that the Budget Reconciliation and Financing Act of 2015 (BRFA of 2015) permits the Commission to use the portion of the Maryland Health Insurance Plan (MHIP) balance that was derived from the federal Medicare and Medicaid programs to support ICNs in FYs 2016 through 2019. ICN activities eligible for such funding are required to be designed to reduce health care expenditures and improve outcomes for unmanaged high-needs Medicare patients and patients dually eligible for Medicaid and Medicare, consistent with the goals of Maryland's All-Payer Model.

Therefore, staff has separated those CRISP reporting services that are designed to support ICN activities as provided in the BRFA of 2015 from those that are designed to support the HIE or the general rate setting, methodology and monitoring functions of the Commission. In FY 2018, \$18 million in special funds generated by the MHIP assessment were appropriated to the Maryland Health Care Commission (MHCC) for the support of ICN, alignment, and transformation activities by CRISP. A detailed explanation of those funds is included later in this report.

BACKGROUND

Past Funding

Over the past eight years, the Commission has approved funding to support the general operations of the CRISP HIE and reporting services through hospital rates as shown in Table 1.

¹ MD. CODE ANN., Health-Gen §19-219(c).

Table 1. HSCRC Funding for CRISP HIE and Reporting Services, FYs 2010-2017

CRISP Budget: HSCRC Funds Received	
FY 2010	\$4,650,000
FY 2011	No funds received
FY 2012	\$2,869,967
FY 2013	\$1,313,755
FY 2014	\$1,166,278
FY 2015	\$1,650,000
FY 2016	\$3,250,000
FY 2017	\$2,360,000

In December 2013, the Commission authorized staff to provide continued funding support for CRISP for FYs 2015 through 2019 without further Commission approval as long as the amount does not exceed \$2.5 million in any year. In accordance with that policy, this staff report details funding to support the work of CRISP HIE and reporting services in the amount of \$2,360,000 to be generated through hospital rates.

FY 2018 FUNDING THROUGH HOSPITAL RATES

HIE Operations Funding

The value of an HIE rests in the premise that more efficient and effective access to health information will improve care delivery while reducing administrative health care costs. The General Assembly charged the MHCC and HSCRC with the designation of a statewide HIE.² In the summer of 2009, MHCC awarded state designation to CRISP, and HSCRC approved up to \$10 million in startup funding over a four-year period through Maryland's unique all-payer hospital rate setting system. HSCRC's annual funding for CRISP is illustrated in Table 1 above.

The use of HIEs is a key component of health care reform, enabling clinical data sharing among appropriately authorized and authenticated users. The ability to exchange health information electronically in a standardized format is critical to improving health care quality and safety.

Many states, along with federal policy makers, look to Maryland as a leader in HIE implementation. Further investment in building CRISP's infrastructure is necessary to support existing and future use cases and to assist HSCRC as it moves to per-capita and population-based payment structures. A return on the investment will occur from having implemented a robust technical platform that can support innovative use cases to improve care delivery, increase efficiencies in health care, and reduce health care costs. The HSCRC derives significant benefit from the enterprise master patient index (EMPI) developed by CRISP. The EMPI has the ability

² MD. CODE ANN., Health-Gen §19-143(a).

to uniquely identify patients across treating providers. It is used to provide information about a patient's medical service encounter at the time of hospitalizations to a permitted recipient with an existing relationship with a patient, such as a primary care provider or payer. This index uses highly sophisticated tools from secure electronic submission of hospital registration data to CRISP. The EMPI allows for the accumulation of utilization data across hospitals, which the HSCRC, in turn, uses to track readmissions across hospitals.

Beginning in FY 2015, CRISP-related hospital rate adjustments are paid into an MHCC fund, and MHCC and the HSCRC review the invoices for approval of appropriate payments to CRISP. This process, along with the auditing of the expenditures, has created an extra layer of accountability.

In addition to its role in HIE among providers, CRISP is also involved in health care reform activities related to HSCRC, MHCC, and the Maryland Department of Health and Mental Hygiene (DHMH). In its collaboration with the Medicaid program, uniform and broad-based funding through hospital rates can also be used to leverage federal financial participation under the Health Information Technology for Economic and Clinical Health (HITECH) Act, known as IAPD funding. Under the HITECH Act, the Centers for Medicare & Medicaid Services (CMS) may approve states for Medicaid Electronic Health Record Incentive Program funding, and states receive a 90 percent federal financial participation match for expanding HIE through 2021. This request will enable CRISP (working with DHMH) to obtain federal funding. IAPD funding allows CRISP (working with DHMH) to qualify for funding to implement use cases that compliment ICN activities.

The total amount of funding approved by staff for FY 2018 for the HIE function is \$1.34 million.

Standard CRISP Reporting Services

CRISP collects admission (or encounter), discharge, and transfer information from hospitals on a nearly real-time basis. In the fall of 2013, the HSCRC expanded CRISP's required data collection to include all hospital outpatient encounters. CRISP creates an EMPI using this and other data. The EMPI—a unique identifier number assigned to each person in the database—can be attached to the HSCRC's abstract data, enabling the HSCRC to track readmissions across hospitals, transfers among hospitals, and the movement of patients across local, regional, and statewide areas. The linkage of the EMPI to the abstract data also allows the HSCRC to focus on the care and health improvement needs of the population, including the nature and extent of use by high needs patients. This is a complex task that requires constant reconciliation between individual hospital transactional data and HSCRC abstract data, which are now submitted on a monthly basis. The linking of information using the EMPI reduces privacy and security concerns as HSCRC does not need to collect patient identifiable information in the date it receives. Through this process, HSCRC is able to obtain the information it needs in order to broaden its regulatory approaches for focusing on population-based measures, while eliminating the need for the HSCRC to collect or store highly identifiable data, such as name and address.

Standard reporting services require technology hardware and software licensing, along with a small team to create and process the reports.

For FY 2018, staff has approved \$650,000 in hospital rate increases for standard reporting services only. Funding for ICN-related reporting services and other ICN-related activities are authorized and appropriated under the provisions of the BRFA of 2015.

FUNDING OF INTEGRATED CARE NETWORK ACTIVITY UNDER THE BRFA OF 2015

As discussed above, the BRFA of 2015 permits the Commission to use the portion of the MHIP balance that was derived from the federal Medicare and Medicaid programs to support integrated care networks (ICNs) designed to reduce health care expenditures and improve outcomes for unmanaged high-needs Medicare patients and patients dually eligible for Medicaid and Medicare, consistent with the goals of Maryland's All-Payer Model. Care management for this population is critical to the success of the current All-Payer Model and the enhanced total cost of care All-Payer Model, expected to begin in January 2019. The ICN initiative is designed to encourage collaboration between and among providers, provide a platform for provider and patient engagement, and allow for confidential sharing of information among providers. To succeed under the current and future All-Payer Models, providers will need a variety of tools to manage high-needs and complex patients that CRISP is currently working to develop and deploy.

As the project has progressed, CRISP has reorganized the goals and funding of the ICN initiative around the venues where information is provided and used: (1) at the point of care, (2) by care managers and coordinators, (3) by population health teams, (4) for patients, and (5) by program administrators, provider executives, and policy makers.

At the close of FY 2017 and looking towards FY 2018, CRISP has focused its efforts to improve care coordination for high need/complex patients around efforts such as assembling information for the patient care overview, implementing a "care alerts" intervention, delivering key information automatically at the point-of-care, significantly expanding ENS notifications for care coordination, publishing Medicare reports, and publishing enhanced case mix reports including Patient Total Hospitalization dashboard. Moving forward CRISP plans to operationalize the successful programs launched in the previous year, to expand ambulatory connectivity for encounter data and operationalize panel management at scale, to publish additional Medicare reports, to improve working technology, to support learning collaboratives and ways to improve the use of existing tools by providers, and to offer core services to behavioral health providers.

A draft funding plan for these activities is shown in Table 2 below:

Table 2. ICN Funding (FY 2016-FY 2018)

Funding Source	FY16	FY17	FY18
State ICN MHIP dollars	\$9,303,147	\$19,387,579	\$9,982,500
Federal IAPD funds overlapping ICN	\$343,877	\$3,754,000	\$3,941,000
HSCRC Assessment (10% Match)	\$38,209	\$0	\$0
TOTAL	\$9,685,233	\$23,141,579	\$13,923,500

As Table 2 indicates, the projected CRISP ICN budget is significantly lower than the appropriated total. CRISP is using FY 2018 to focus on improving and operationalizing the existing tools available to providers for care coordination, such as the Care Alerts, information at the point-of-care, and the Patient Total Hospitalization Dashboard. There is also room in the budget for expansion of the Care Redesign programs, should additional hospitals wish to participate in January.

SUMMARY

Under the authority granted by the Commission, HSCRC staff approved a total of \$2.36 million in funding through hospital rates in FY 2018 to support the HIE and standard CRISP reporting services for the Commission. No additional funds are requested through hospital rates in FY 2018 to support ICN-related activities. Funding for FY 2018 ICN activities is through the appropriation and authority provided under the BRFA of 2015.

Table 3 shows the approved rate funding for HIE and standard reporting functions in FY 2018 including the federal match that will be generated from the IAPD funding.

Table 3. FY 2017 Approved Rate Support for CRISP

FY 2018 Project Name	Budgeted Funding (State)	Budgeted Funding (Federal)	Total
HIE Ops Assessment	\$1,340,000	--	\$1,340,000
IAPD Ops Match (10%)	\$70,000	\$630,000	\$700,000
IAPD Project Match (10%)	\$300,000	\$2,700,000	\$3,000,000
CRS Operations	\$650,000	--	\$650,000
Total funded through hospital rates	\$2,360,000	\$3,330,000	\$5,690,000

State of Maryland
Department of Health and Mental Hygiene



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Health Services Cost Review Commission

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TO: Commissioners
FROM: HSCRC Staff
DATE: June 14, 2017
RE: Hearing and Meeting Schedule

July 12, 2017 To be determined - 4160 Patterson Avenue
HSCRC/MHCC Conference Room

August 9, 2017 To be determined - 4160 Patterson Avenue
HSCRC/MHCC Conference Room

Please note that Commissioner's binders will be available in the Commission's office at 11:45 a.m.

The Agenda for the Executive and Public Sessions will be available for your review on the Thursday before the Commission meeting on the Commission's website at <http://hsrc.maryland.gov/commission-meetings-2017.cfm>.

Post-meeting documents will be available on the Commission's website following the Commission meeting.