542nd MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION
July 12, 2017

EXECUTIVE SESSION
12:00pm
(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 June 14, 2017

2. Executive Director's Report

3. New Model Monitoring

4. Docket Status – Cases Closed

    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
    2391A – Johns Hopkins Health Care   2392A – Johns Hopkins Health Care

5. Docket Status – Cases Open

    2371R – MedStar Franklin Square Medical Center   2372A – Doctors Community Hospital
    2390N – McCready Health   2393A – Johns Hopkins Health Care
    2394A – Johns Hopkins Health Care

6. Presentation by Nexus Montgomery

7. Final Recommendation for Nurse Support Program I for FY 2018

8. Final Recommendation on Uncompensated Care Policy for FY 2018

9. CRISP ICN FY18 Budget Overview

10. Hearing and Meeting Schedule

Closed Session Minutes
Of the
Health Services Cost Review Commission

June 14, 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

3. Personnel Matters –Authority General Provisions Article, §3-305(b)(1)

The Closed Session was called to order at 11:03 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, Bone, Colmers, Keane, and Wong. Commissioner Bayless participated by telephone.

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

Also attending were Eric Lindeman Commission Consultant, and Stan Lustman and Leslie Schulman, Commission Counsel.

Item One

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

Item Two

Ms. Kinzer updated the Commission and the Commission discussed the status of the All-Payer Model Progression, including the timeline.

Item Three

Ms. Kinzer updated the Commission and the Commission discussed CMMI's position on hospital undercharges for CY 2016.

Item Four

The Commissioners voted unanimously to commend Executive Director Kinzer for her most impressive accomplishments vis-a-vis the New Model.

Item Five

Ms. Kinzer updated the Commission and the Commission discussed the participation of the State Administration and various stakeholders in support of the New Model.

Item Six

Ms. Kinzer updated the Commissioners on the most recent personnel changes.

The Closed Session was adjourned at 12:52 p.m.

Chairman Nelson Sabatini called the public meeting to order at 11:03 a.m. Commissioners Joseph Antos, Ph.D., George H. Bone, M.D., John Colmers, Jack C. Keane, and Herbert Wong, Ph.D. were also in attendance. Upon motion made by Commissioner Antos and seconded by Commissioner Colmers, the meeting was moved to Executive Session. Chairman Sabatini reconvened the public meeting at 1:00 p.m. Commissioner Victoria Bayless participated by telephone in the public session.

REPORT OF THE JUNE 14, 2017 EXECUTIVE SESSION

Mr. Dennis Phelps, Associate Director, Audit & Compliance, summarized the minutes of the June 14, 2017 Executive Session.

ITEM I
REVIEW OF THE MINUTES FROM THE MAY 10, 2017
EXECUTIVE SESSION AND PUBLIC MEETING

The Commission voted unanimously to approve the minutes of the May 10, 2017 Executive Session and 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 noted that DHMH Secretary Schrader is hosting stakeholder conversations to accelerate Care Redesign implementation and develop strategies for future Care Design initiatives. Ms. Kinzer stated that a total of 16 hospitals have signed their participation agreements in the Hospital Care Improvement Program (HCIP) and Complex and Chronic Care Improvement Program (CCIP). Ten hospitals have submitted implementation protocols for HCIP, and 6 hospitals have submitted implementation protocols for CCIP.

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

- Total Cost of Care Workgroup--This workgroup is continuing to meet and work on attribution models and the Medicare Performance Adjustment.

- Performance Measurement Workgroup – This workgroup has begun to discuss the future direction of value based payments under the progression plan, with focus on population health measures and how the Maryland Hospital Acquired Conditions program might be reconfigured.
- Consumer Standing Advisory Council – This Council represents the joint efforts of DHMH and HSCRC. The Council continues to meet every other month with the next meeting in July.

CHALLENGES NATIONALLY FOR HOSPITALS

Ms. Kinzer presented an update on the national cost pressures in hospitals (See "National Cost Pressures in Hospitals" on the HSCRC website).

Ms. Kinzer noted that healthcare affordability continues to be the centerpiece of national conversations. Increasing federal and state participation in funding is creating budgetary challenges:

- The Affordable Care Act (ACA) created funding cuts for providers
- Providers are experiencing financial challenges

From a national standpoint, Medicare and Medicaid revenues are remaining below cost, which is putting additional pressure on hospital margins. Price pressure from commercial payers is also increasing, and increasing supply and drug costs are outstripping revenue growth.

The Congressional Budget Office (CBO) projects a contraction of Medicare margins due to Medicare's ACA-related reductions:

- ACA rate reductions (-0.75%)
- Disproportionate Share (DSH) reductions

Hospitals around the country are feeling the effects of the declines in operating income.

However, the Maryland Model produces an environment that is more conducive to focusing on these changes. Maryland has supported the new All-Payer Model goals by:

- Eliminating the Maryland Health Insurance Plan (MHIP) assessment
- Expanding access to Medicaid by reducing uncompensated care
- Reducing the Medicaid assessment
- Evolving the HSCRC regulatory process

While Maryland experiences the same cost pressures as the rest of the nation, we have additional tools that the All-Payer Model affords to help us maintain our effectiveness under this new environment.

Ms. Kinzer stated that now that there are about 75 million people on Medicaid. Medicaid spending is overwhelming state budgets. Ms. Kinzer observed that the swift increase in Medicaid

enrollment is partially a reflection of the decline in affordable healthcare.

HERBERT WONG Ph.D.

Ms. Kinzer announced that at the end of the month Vice Chairman Herbert Wong Ph.D. is completing his second consecutive term as Commissioner. Ms. Kinzer thanked Dr. Wong for his service as Commissioner since 2008 and as Vice Chairman since 2011. Ms. Kinzer referred to Dr. Wong as the "Voice of Reason" and the person she turned to for rational discussion about issues and how to solve them. We will miss Dr. Wong.

Chairman Sabatini thanked Dr. Wong for his support, for his contributions to the Commission, and for his service to the citizens of Maryland.

Commissioner Colmers also thanked Dr. Wong for his support during his term as Chairman of the Commission. Commissioner Colmers noted that when the Commission had to sit in judgement, Dr. Wong always weighed all the evidence, and when he spoke people listened.

UPDATE ON MEDICARE PERFORMANCE ADJUSTMENT

Mr. Chris Peterson, Director Clinical and Financial Information, presented an update of the Medicare Performance Adjustment (MPA) methodologies (see "Summary of Medicare Performance Adjustment" on the HSCRC website).

Mr. Peterson reported that:

- Staff is exploring the possibility of assessing rewards / penalties under the MPA as an adjustment to Medicare payments as opposed to charges. Under this approach, rates would remain the same but payments would be adjusted based on performance. This approach would allow for rewards / penalties to be applied to Medicare only.
- The amendment to the All-Payer Model needed to implement the MPA is being negotiated with CMS. The draft amendment will be sent out for stakeholder review as soon as Staff receives comments from CMS.
- Staff is working towards presenting a draft recommendation during the November 2017 Public Meeting and Final Recommendation at the December 2017 meeting.

ITEM III
NEW MODEL MONITORING

Ms. Caitlin Grim, Rate Analyst, reported $42 million of Medicare total spending per beneficiary savings for the 3 months ending March 2017. Ms. Grim noted that hospital spending growth per Maryland Medicare beneficiary was unfavorable for CY March 2017. Medicare Total Cost of Care per capita was unfavorable for CY March 2017. Medicare non-hospital spending per capita continued to be unfavorable for CY March 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 April

focuses on the fiscal year (July 1, 2016 through April 30, 2017) as well as calendar year results.

Ms. Vaughan reported that for the ten month period ended April 30, 2017, All-Payer total gross revenue increased by 1.36% over the same period in FY 2016. All-Payer total gross revenue for Maryland residents increased by 1.53%. All-Payer gross revenue for non-Maryland residents decreased by 0.52%.

Ms. Vaughan reported that for the four months of the calendar year ended April 30, 2017, All-Payer total gross revenue increased by 4.96% over the same period in CY 2016. All-Payer total gross revenue for Maryland residents increased by 4.78%. All-Payer gross revenue for non-Maryland residents increased by 6.96%.

Ms. Vaughan reported that for the ten month period ended April 30, 2017, Medicare Fee-For-Service gross revenue increased by 1.36% over the same period in FY 2016. Medicare Fee-For-Service gross revenue for Maryland residents increased by 1.22 %. Maryland Fee-For-Service gross revenue for non-residents increased by 3.00%.

Ms. Vaughan reported that for the four months of the calendar year ended April 30, 2017, Medicare Fee-For-Service gross revenue increased by 4.13% over the same period in CY 2016. Medicare Fee-For-Service gross revenue for Maryland residents increased by 3.59%. Maryland Fee-For-Service gross revenue for non-residents increased by 10.83%.

Ms. Vaughan reported on hospital revenue per capita growth for the ten months of the fiscal year ended April 30, 2017 over the same period in CY 2016:

- All Payer in State was 1.17%.
- Medicare Fee for Service in State was (0.05%).

Ms. Vaughan reported on hospital revenue per capita growth for the four months of the calendar year ended April 30, 2017 over the same period in CY 2016:

- All Payer in State capita was 4.40%.
- Medicare Fee for Service in State was 2.63%.

Ms. Vaughan reported on hospital revenue per capita growth for the four months of the calendar year ended April 30, 2017 over the same period in CY 2013:

- Net per capita growth was 8.46 %.
- Per capita growth before UCC and MHIP adjustments was 11.54%.
- Net per capita Medicare growth was (0.22%).
- Per capita growth Medicare before UCC and MHIP was 2.67%.

According to Ms. Vaughan, for the 10 months of the fiscal year ended April 30, 2017, unaudited average operating profit for acute hospitals was 2.48%. The median hospital profit was 3.33%, with a distribution of 0.46% in the 25th percentile and 5.42% in the 75th percentile. Rate Regulated profits were 4.29%.

Dr. Alyson Schuster, PhD., Associate Director Performance Management, presented a quality report update on the Maryland Hospital Acquired Conditions program based upon readmission data on discharges (through February 2017).

Readmissions

- The All-Payer risk adjusted readmission rate was 11.50% for February 2017 YTD. This is a decrease of 3.63% from the December 2013 risk adjusted readmission rate.
- The Medicare Fee for Service risk adjusted readmission rate was 12.13% for December 2016 YTD. This is a decrease of 5.42% from the December 2016 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 14.5% during CY 2017 compared to CY 2016. Currently, 15 out of 46 hospitals have reduced their risk adjusted readmission rate by more than 14.5%. An additional 5 hospitals are on track for achieving the attainment goal.

ITEM IV
DOCKET STATUS- CLOSED CASES

2383A - Johns Hopkins Health System

ITEM V
DOCKET STATUS- OPEN CASES

2384R- McCready Health

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.

After reviewing the Hospital's application, the staff recommends that a rebundled MRI rate of $41.22 per RVU be approved June 1, 2017; and that there is no change made to the Hospital's Global Budget Revenue for MRI services.

The Commission voted unanimously to approve staff's recommendation.

2385A- University of Maryland Medical Center

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.

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

The Commission voted unanimously to approve staff's recommendation.

2386A- University of Maryland Medical Center

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 for Heart Transplant and Mechanical Circulatory Support services for one year beginning July 1, 2017.

Staff recommends that the Commission approve the Hospital's request to participate in a global rate arrangement for Heart Transplant and Mechanical Circulatory Support services for a one year period beginning July 1, 2017, and that the approval be contingent upon the execution of the standard Memorandum of Understanding.

The Commission voted unanimously to approve staff's recommendation.

2387A- University of Maryland Medical Center

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 with Maryland Physicians Care for solid organ and blood and bone marrow transplants services for one year beginning August 23, 2017.

Staff recommends that the Commission approve the Hospital's request to continue to participate in a global rate arrangement for solid organ and blood and bone marrow transplant services, for a one year period beginning August 23, 2017, and that the approval be contingent upon the execution of the standard Memorandum of Understanding.

The Commission voted unanimously to approve staff's recommendation.

2388A- MedStar Health

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.

Staff recommends that the Commission approve the Hospitals' request to continue to participate in a global rate arrangement for joint replacement services for a one year period beginning September 1, 2017, and that the approval be contingent upon the execution of the standard Memorandum of Understanding.

The Commission voted unanimously to approve staff's recommendation.

2389A- MedStar Health

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.

Staff recommends that the Commission approve the Hospital's request to continue to participate in a global rate arrangement for cardiovascular services for a one year period beginning August 1, 2017, and that the approval be contingent upon the execution of the standard Memorandum of Understanding.

The Commission voted unanimously to approve staff's recommendation.

2391A- Johns Hopkins Health System

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.

Staff recommends that the Commission approve the Hospitals' request to continue to participate in an amended global rate arrangement for solid organ transplant, bone marrow transplant, and cardiovascular services, for a one year period beginning July 1, 2017, and that the 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.

2392A- Johns Hopkins Health System

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.

Staff recommends that the Commission approve the Hospitals' request to continue to participate in an amended global rate arrangement for solid organ transplant, bone marrow transplant, and cardiovascular services, for a one year period beginning July 1, 2017, and that the 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.

ITEM VI
PRESENTATION BY LIFEBRIDGE HEALTH

Mr. Neil Meltzer, President and Chief Executive Officer, LifeBridge Health, Mr. David Krajewski, Executive Vice President and Chief Financial Officer, LifeBridge Health & President LifeBridge Health Partners and Dr. Jonathan Ringo, MD, President/Chief Operating Officer, Sinai Hospital, presented a population health update to the Commission (See "LifeBridge Health Population Health Update to the Health Services Cost Review Commission" on the HSCRC website).

LifeBridge Health (LBH) presented a summary of their current population health initiatives, along with quality and financial outcomes related to these initiatives. These initiatives were spearheaded to prevent unnecessary admissions and utilization by controlling the entire continuum of care through various partnerships, investments, and subsidiaries. Highlights of the LBH population health initiatives include:

- Over 1 million visits through LBH's extended provider network
- Savings of over $34.3M through these programs
- A decrease in observed readmission rates

In addition, LBH presented an overview of the following seven initiatives, along with their quality outcomes and/or financial impact:

- The Diabetes Medical Home Extender Program
- A Skilled Nursing Facility Collaborative
- The Community Paramedicine Pilot Program
- The LifeLink Clinical Call Center

- Emergency Department Care Navigation Program
- The LifeBridge ACO Network
- LifeBridge Health's collaboration with CRISP

ITEM VII
FINAL RECOMMENDATION FOR UPDATE FACTOR FOR FY 2018

Mr. Jerry Schmith, Director Center for Revenue and Regulation Compliance, and Ms. Kinzer presented the staff's final recommendation concerning the update factors for FY 2018 (See "Final 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 staff's analyses to date, the HSCRC staff is providing the following final recommendations for the FY 2018 update factors.

For Global Revenues:

- Provide an overall increase of 3.34 percent for revenue (net of offsets) and 2.97 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 49.73 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.
- The Commission should continue to closely monitor performance targets for Medicare, including Medicare's growth in Total Cost of Care (TCOC) and Hospital Cost of Care per beneficiary during the performance year. As always, the Commission has the authority to adjust rates as it deems necessary.
- Hospitals should renew the GBR amendment that was put into place for FY 2017 that requires a focus on reducing Potentially Avoidable Utilization (PAU) and a continued focus on total cost of care growth, ensuring that hospital savings are not negated by non-hospital cost growth. Continuing a focus on PAU will be important to meeting performance needs in the current year. Hospitals should continue to focus on care improvements, working with physician partners in Care Redesign Programs and with ACOs.
- Continue to consider on an ongoing basis whether to differentiate hospital updates based

on progress relative to high needs patients and other aligned efforts with physicians and other providers.

Non-Global Revenues including psychiatric hospitals and Mt. Washington Pediatric Hospital:
- Provide an overall update of 2.28 percent by using a productivity adjustment of 0.40 percent from the inflation factor of 2.68 percent.
- Continue to focus on implementation of quality measures and value based programs for psychiatric facilities.

Mr. Jon Blum, Executive Vice President CareFirst and Mr. Bob Murray, CareFirst Consultant, opposed the Staff recommendation, asserting that the revenue increase could jeopardize the All-Payer demonstration due to the significant risk of exceeding the Medicare TCOC guardrail. CareFirst noted that CY2018 Medicare spending growth projections had been previously overstated by CMS, and Maryland's non-hospital spending growth continues to exceed the national average. CareFirst recommended prospectively lowering the update factor by 0.50%-0.75%, with the rationale that the Commission could increase the mid-year update effective January 1st, 2018. This would help ensure that the guardrail is met in CY2017, without having to take corrective action in CY2018 if the revenue increase contributes to a failure to meet the TCOC guardrail.

Ms. Kinzer noted the Staff's ongoing concern over the Medicare TCOC guardrail. She also emphasized that Maryland has met all of its waiver tests to date, and the State will continue to meet its cumulative All-Payer growth limits and savings requirements. In addition, Ms. Kinzer believes that the most important tool in mitigating this risk is to reduce avoidable utilization, which hospitals have immediate control over.

Mr. Mike Robbins, Senior Vice President of the Maryland Hospital Association (MHA), supported the Staff recommendation. Mr. Robbins stated that MHA recognized the responsibility hospitals have to take in reducing avoidable utilization, and working with nonhospital providers to reduce non-hospital spending, and that hospitals are taking action to address these issues now that the necessary data tools are available to them. The proposed update factor is comparatively higher this year, but MHA is confident that the changes hospitals are taking in these two areas will mitigate any potential issues. MHA also noted that a pre-emptively lower update factor could jeopardize the progress made thus far, in terms of financial investment and new initiatives. MHA believes that the Commission's mandate is to ensure that hospitals have the tools they need to accomplish their objectives, and hospitals cannot continue to do so with a lower update factor and funding shortfalls from the HSCRC.

Commissioner Keane shared CareFirst's concern that the proposed update factor presented a significant risk to the Medicare TCOC guardrail, and he recommended lowering the update factor by 1.0%-1.25% as a precautionary measure. He also expressed concern that we were creating a cycle whereby revenues are continuously deferred in order to meet waiver tests.

Commissioner Colmers supported the staff recommendation. Commissioner Colmers stated that it is incumbent upon hospitals to take measures to reduce avoidable utilization in order to continue receiving adjustments for price inflation. Commissioner Colmers also noted that the

HSCRC would be able to take action before CMS demands corrective action to meet the waiver test, should Maryland hospitals exceed the guardrail in CY2017. He believes that hospitals would rather receive a fair update factor, with the understanding that corrective action would be taken if they cannot meet their objectives down the road. Commissioner Colmers moved for acceptance of the Staff's recommendation.

Chairman Sabatini stated he could not support the proposed Staff recommendation without assurances that hospitals would reduce potentially avoidable utilization, and without corrective measures in place in case Maryland hospitals failed to meet the TCOC guardrail.

Vice-Chairman Wong proposed an amendment to the proposed Staff recommendation; a reduction of 0.2% to the population and demographic adjustments. In addition, Vice Chairman Wong proposed that the Commission closely monitor avoidable utilization and readmission trends to determine if corrective action (i.e., lowering hospital rates effective January 1, 2018) is necessary to meet the Medicare TCOC guardrail prior to the end of CY2017. Commissioner Colmers recommended the 0.2% adjustment be assessed on the allowance for unforeseen events instead, and he agreed with Commissioner Wong's recommendation to monitor utilization trends for the remainder of CY2017 and take corrective action if necessary.

Commissioner Colmers accepted Vice Chairman Wong's friendly amendment to his motion to reduce the update factor by removing 0.2% from the allowance for unforeseen adjustments. Staff would continue to monitor hospitals' progress in reducing avoidable utilization on a monthly basis. If sufficient progress is not being made, the Commission will take the necessary corrective action at the December public meeting to be effective January 1, 2018. Therefore, the overall statewide update factor will be set at 3.32%.

The motion was seconded by Commissioner Bayless.

The amended recommendation was approved 4-2 with Commissioners Keane and Antos voting against the amended recommendation.

ITEM VIII
FINAL RECOMMENDATION FOR POTENTIALLY AVOIDABLE UTILIZATION SAVINGS FOR RY 2018

Ms. Laura Mandel, HSCRC Policy Analyst, presented staff's final recommendations for the Potentially Avoidable Utilization Savings Policy for RY 2018 (See "Final 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 final 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.

The Commission voted 5-1 to approve staff's recommendation. Commissioner Keane voted against the recommendation.

ITEM IX
FINAL RECOMMENDATION FOR MAXIMUM REVENUE GUARDRAIL FOR QUALITY PROGRAMS FOR RY 2019

Dr. Schuster presented staff's final recommendations for maximum revenue guardrail for quality programs for RY 2019 (See "Final Recommendation for The Maximum Revenue Guiderail 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.

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.

In this final recommendation Staff is recommending 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.

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 times 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.

The Commission voted unanimously to approve staff's recommendation.

<div align="center">

ITEM X
FINAL RECOMMENDATION FOR NURSING SUPPORT PROGRAM II

</div>

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

This final recommendation presents staff's 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 program.

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 final recommendations on the NSP II funding for FY 2018 are as follows:

- That the NSP II Competitive Grant Review Panel Recommendation funding be approved at $17,590,678.
- 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 at Baltimore City Community College for Associate Degree in nursing to Bachelor of Science degree in nursing at Coppin State University;
- Implementing of 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, 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.

The Commission voted unanimously to approve staff's recommendation.

ITEM XI
DRAFT RECOMMENDATION FOR NURSING SUPPORT PROGRAM I FOR FY 2018

Ms. Williams and Dr. Joan Warren, HSCRC Consultant, presented staff's draft recommendations for the Nurse Support Program I (NSP I) FY 2018 Competitive Institutional Grants (See "Nurse Support Program 1 Outcomes Evaluation YY 2013-FY 2016 and Draft Recommendation for Future Funding" on the HSCRC website).

This draft recommendation summarizes the recommendations to be made for the next phase of the NSP I for FYs 2018 through 2022.

The 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.

Staff provided the following draft recommendations for programmatic changes to ensure continuous improvement in the FYs 2018-2022 NSP I program:

- Broaden the NSP goal to include all hospital-based registered nurses (RNs)
- Redefine categories for eligible funding
- Establish a NSP I Advisory Board
- Establish categories of initiatives not eligible for funding
- Revise forms to align with the data collection tool
- Develop and implement a new data reporting and analytic tool.

As this is a draft recommendation, therefore no Commission action is necessary.

ITEM XII
DRAFT RECOMMENDATION ON UNCOMPENSATED CARE POLICY FOR FY 2018

Mr. Nduka Udom, Associate Director of Research and Methodology, presented Staff draft recommendation on the Uncompensated Care Policy for FY 2018 (See "Draft Recommendation

for the Uncompensated Care Policy for Rate Year 2018" On the HSCRC website).

Uncompensated care (UCC) refers to care provided for which compensation is not received. This may include a combination of bad debt and charity care. Since it first began setting rates, the HSCRC 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.

HSCRC staff recommends the following for RY 2018:

- Reduce statewide UCC provision in rates from 4.69 % to 4.51 % effective July 1, 2017

- Continue to use the regression modeling approach approved by the Commission at the June 2016 meeting

- Substitute the Maryland Area Deprivation Index for the National Area Deprivation Index in the regression model

- Continue to do 50/50 blend of FY16 audited UCC and predicted UCC

As this is a draft recommendation, no Commission action is necessary.

ITEM XIII

REPORT ON ONGOING SUPPORT OF CRISP IN FY 2018 FOR HIE OPERATIONS AND REPORTING SERVICE ACTIVITIES

Ms. Katie Wunderlich, Director of Engagement and Alignment, presented staff's draft recommendations for FY 2018 funding to support Health Information Exchange (HIE) Operations and the Chesapeake Regional Information System for our Patients (CRISP) (See "Maryland's Statewide Health Information Exchange, the Chesapeake Regional Information System for our Patients: FY 2017 Funding to Support HIE Operations and CRISP Reporting Services" on the HSCRC website).

In accordance with its statutory authority to approve alternative methods of rate determination consistent with the All-Payer Model and the public interest (Health- General Article, Section 19-219(c)), this recommendation is to provide continued funding support in FY 2018 in the amount of $2.36 million to CRISP for the following purposes:

- HIE Operation and

- Continuing CRISP reporting services to hospitals in the State and the HSCRC

The total amount of approved funding through hospital rates for these activities in FY 2018 is $2,360,000. As shown in this recommendation, $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.

Under the authority granted by the Commission, HSCRC staff approved an increase in hospital rates of $2.36 million in FY 2018 to continue to support the ongoing costs of CRISP/ HIE operations and reporting services. The FY 2018 budget for these functions is as follows:

- CRISP HIE Operations- $1,340,000
- CRISP Reporting Services - $1,020,000

 No Commission action is required.

ITEM IV
HEARING AND MEETING SCHEDULE

July 12, 2017	Times to be determined, 4160 Patterson Avenue HSCRC Conference Room
August 9, 2017	Times to be determined, 4160 Patterson Avenue HSCRC Conference Room

There being no further business, the meeting was adjourned at 4:05 p.m.

State Personal Healthcare Spending Preliminary Presentation of National Statistics

July 12, 2017

Personal Healthcare Spending Report Overview

- **CMS Office of the Actuary recently release a paper in Health Affairs and accompanying data outlining personal healthcare spending by state of residence, through 2014   (previously released in 2009)**

  - The data is aggregated from multiple data sources

  - Breaks personal healthcare spending ten main components

  - Private health insurance, Medicaid and Medicare specific spending is also available

- **HSCRC staff are continuing to work to understand differences in reporting of data among various data sets and sources**

  - Overall, the data set represents personal health spending versus payer expenditures

    - In particular, this data aggregates SNF, rehab facilities and nursing home facilities

  - We are continuing work with this data to identify trends and evaluate rankings

Maryland Ranking in Personal Healthcare and Hospital Spending

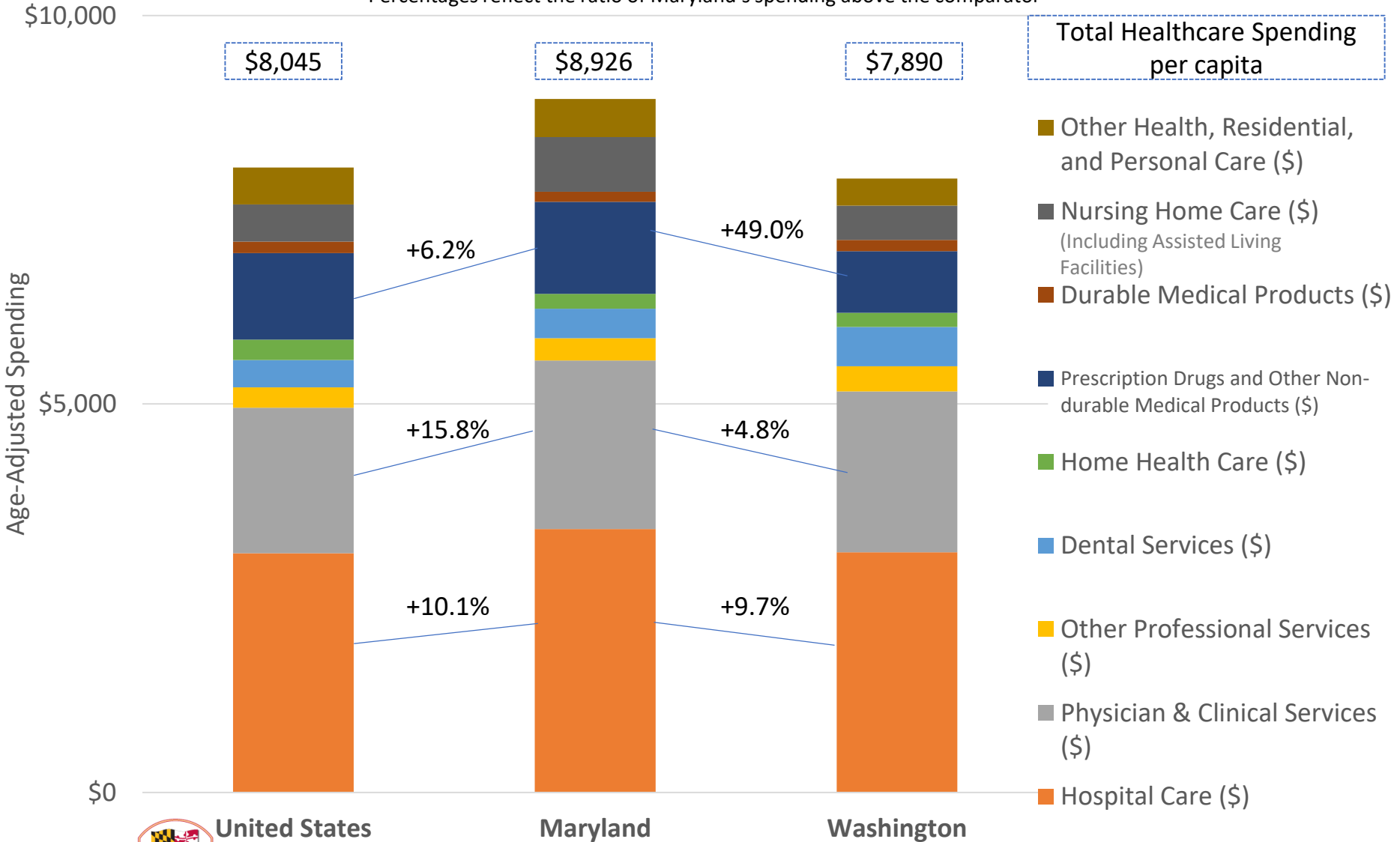| Comparison	Personal Healthcare	Hospital
% Above National Average Spending, Unadjusted	7%	7%
% Above National Average Spending, Age-Adjusted[1]	11%	10%
State Ranking Overall, Unadjusted	19th	25th
State Ranking Overall, Age-Adjusted[1]	13th	20th

[1] Kaiser Family Foundation Data, age bracketed to 0-18, 18-64, 65+
Source: Centers for Medicare & Medicaid Services (2017). *Health Expenditures by State of Residence.* Retrieved (date accessed) at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/resident-state-estimates.zip, with HSCRC adjustment for age differences

Maryland Healthcare Spending per Capita by Component, Age-Adjusted

Percentages reflect the ratio of Maryland's spending above the comparator

Total Healthcare Spending per capita

$8,045 $8,926 $7,890

Age-Adjusted Spending

+6.2%   +49.0%

+15.8%   +4.8%

+10.1%   +9.7%

United States   Maryland   Washington

- Other Health, Residential, and Personal Care ($)
- Nursing Home Care ($) (Including Assisted Living Facilities)
- Durable Medical Products ($)
- Prescription Drugs and Other Non-durable Medical Products ($)
- Home Health Care ($)
- Dental Services ($)
- Other Professional Services ($)
- Physician & Clinical Services ($)
- Hospital Care ($)

Source: Centers for Medicare & Medicaid Services (2017). *Health Expenditures by State of Residence.* Retrieved (date accessed) at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/resident-state-estimates.zip

Appendix

Analysis Methodology

Age-Adjusting Methodology

1. **Age weighted distributions for each healthcare spending component obtained from CMS from: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Age-and-Gender.html**

2. **Weight (wt.) per age group calculated** [age group spend/total component spend]

3. **Determined normalizing factor (NF) to adjust for dataset variations (KFF age distributions, CMS OACT healthcare spending)** [(wt.*KFF0-18%) +(wt.*KFF18-64)+(wt.*KFF65+)]

4. Normalized weights determined [NW=wt./NF]

	Healthcare Spending Component	PHC Cost per Capita (in Dollars)	Hospital Care Cost per Capita (in dollars)	Physician and Clinical Services Cost per Capita (in Dollars)	Other Professional Services Cost per Capita (in Dollars)	Dental Services Cost per Capita (in Dollars)	Other Health Residential and Personal Care Cost per Capita (in Dollars)	Home Health Care Cost per Capita (in Dollars)	Nursing Care Facilities Cost per Capita (in Dollars)	Prescription Drugs Cost per Capita (in Dollars)	Durable Medical Equipment Cost per Capita (in Dollars)	Other Non-durable Medical Products Cost per Capita (in Dollars)
Normalized Weight	0-18	0.46	0.50	0.47	0.45	1.08	0.59	0.38	0.03	0.31	0.40	0.14
	19-64	0.85	0.89	0.95	0.90	0.86	1.02	0.43	0.24	0.94	0.82	0.76
	65+	2.44	2.23	2.03	2.25	1.39	1.55	4.29	5.63	2.32	2.65	3.36

6. Per component normalized age weights multiplied by State-specific age distribution, aggregated to determine age adjustment

7. Age-adjustment multiplied by per capita spending each year → Age-adjusted spending, by component

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

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

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.

HSCRC
Health Services Cost
Review Commission

The per capita growth data pertaining to the Medicare FFS beneficiary counts beginning January 1, 2017 may be overstated for Maryland and the nation. CMS has changed the enrollment source for the Chronic Condition Data Warehouse (CCW) from the Enrollment Database (EDB) to the Common Medicare Environment (CME) database. Only the Part B enrollment data from January 1, 2017 forward has been changed, the Part A enrollment numbers have remained consistent.   This has caused an "artificially" low beneficiary growth for CY 2017. As a result the per capita growth may be overstated. Staff is working to determine the actual impact of the change.

HSCRC
Health Services Cost
Review Commission

Medicare Hospital Spending per Capita

Actual Growth Trend (CY month vs. prior CY month)
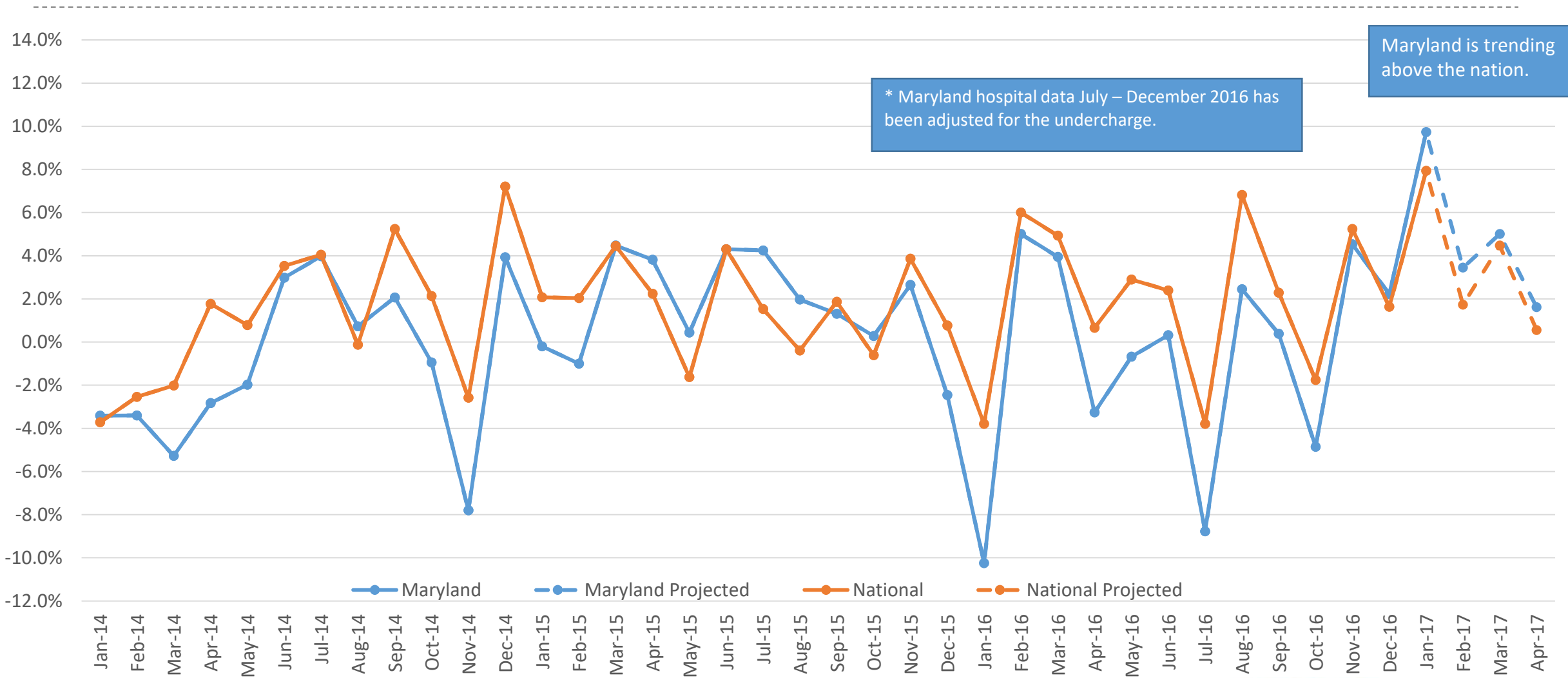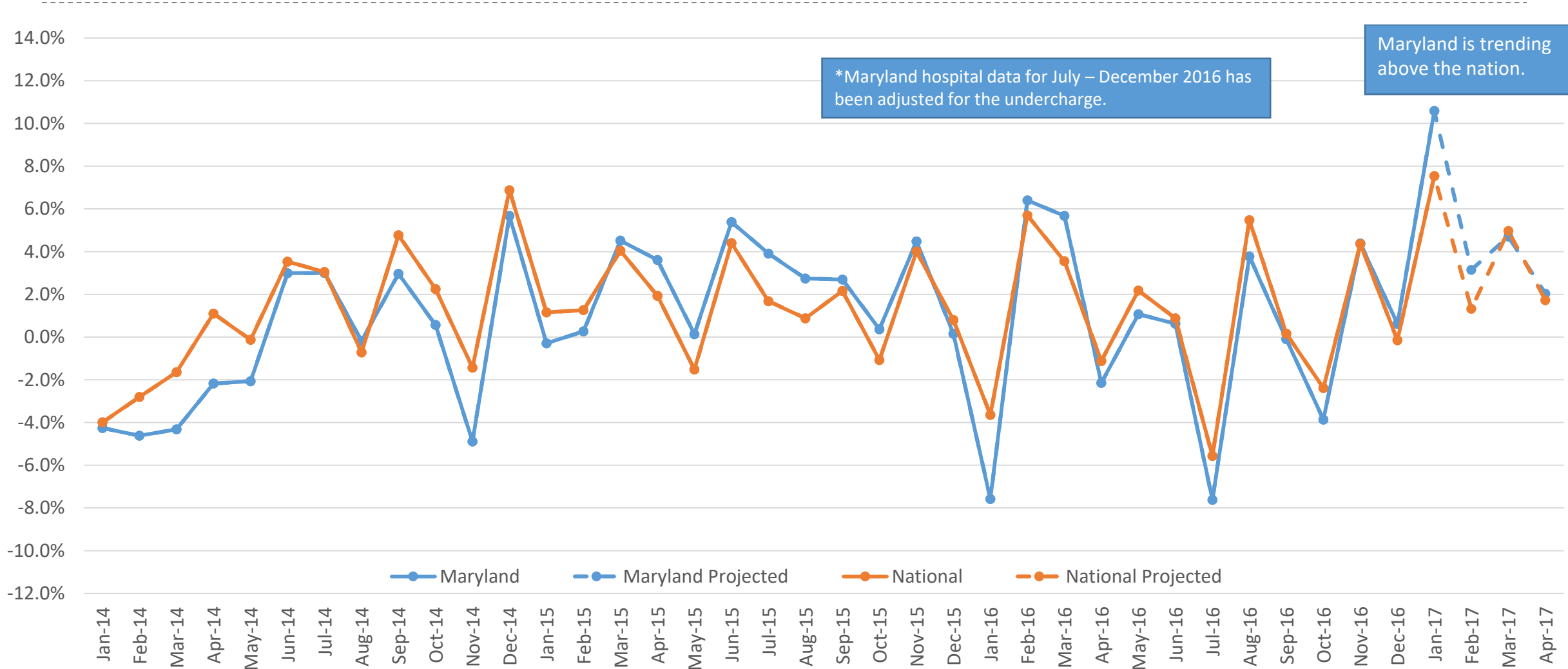
* Maryland hospital data July – December 2016 has been adjusted for the undercharge.

Maryland is trending above the nation.

Maryland — Maryland Projected — National — National Projected

HSCRC
Health Services Cost
Review Commission

Medicare Total Cost of Care per Capita
Actual Growth Trend (CY month vs. prior CY month)

*Maryland hospital data for July – December 2016 has been adjusted for the undercharge.
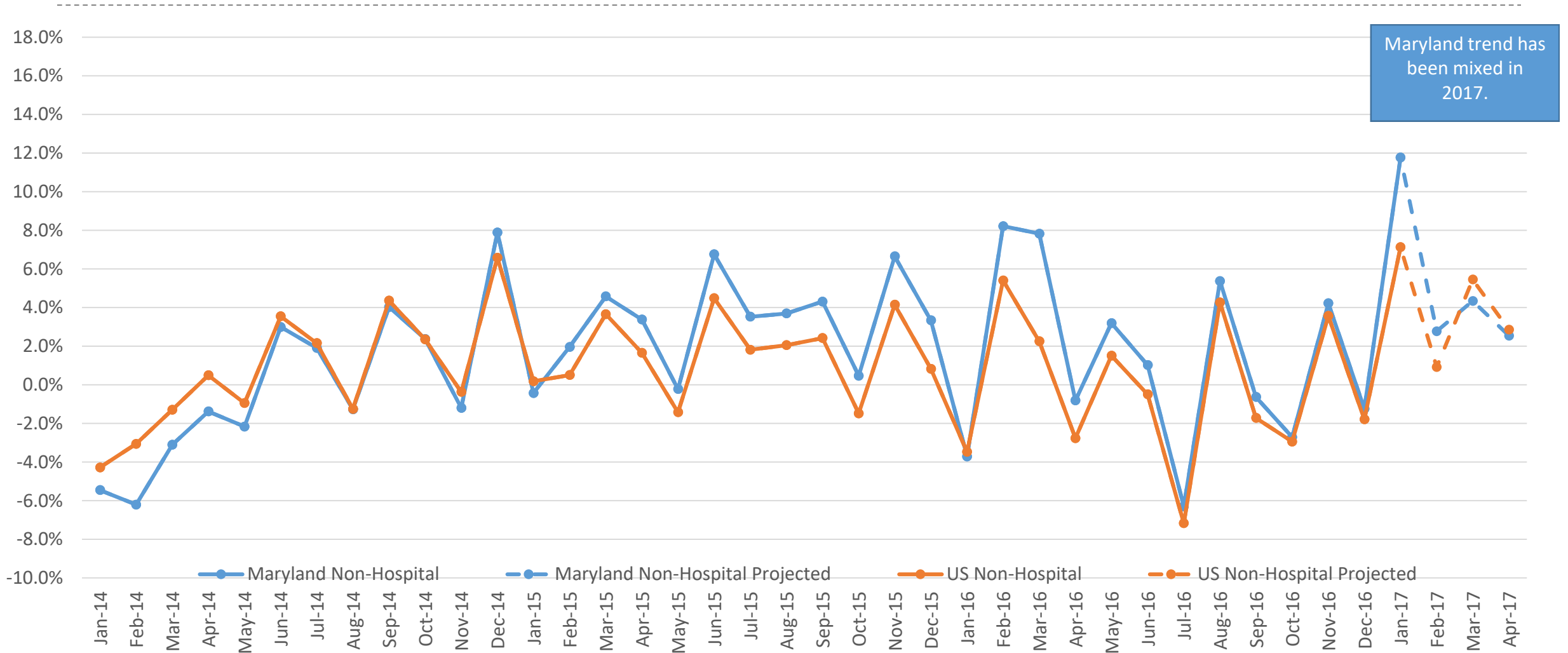
Maryland is trending above the nation.

Medicare Non-Hospital Spending per Capita
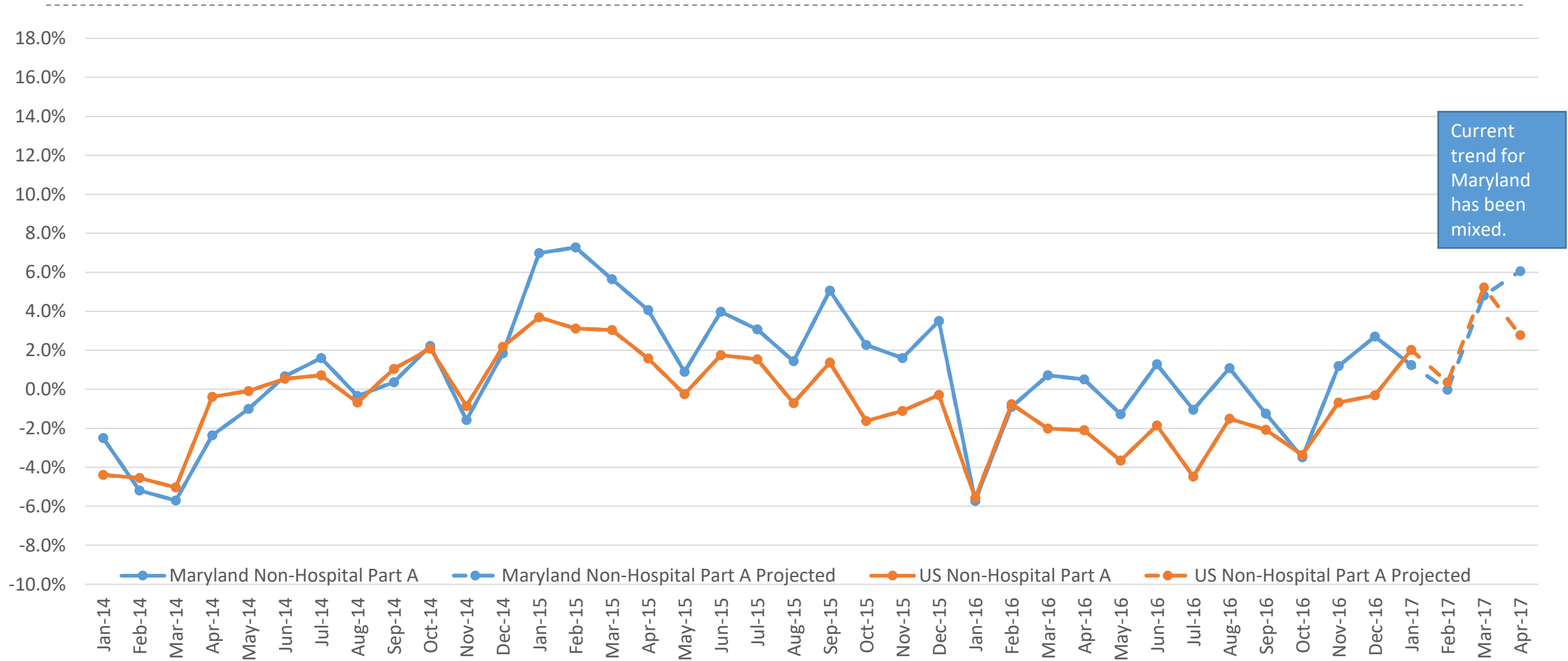Actual Growth Trend (CY month vs. prior CY month)

Maryland trend has been mixed in 2017.

Maryland Non-Hospital — Maryland Non-Hospital Projected — US Non-Hospital — US Non-Hospital Projected

HSCRC
Health Services Cost
Review Commission

Medicare Non-Hospital Part A Spending per Capita
Actual Growth Trend (CY month vs. prior CY month)

Current trend for Maryland has been mixed.
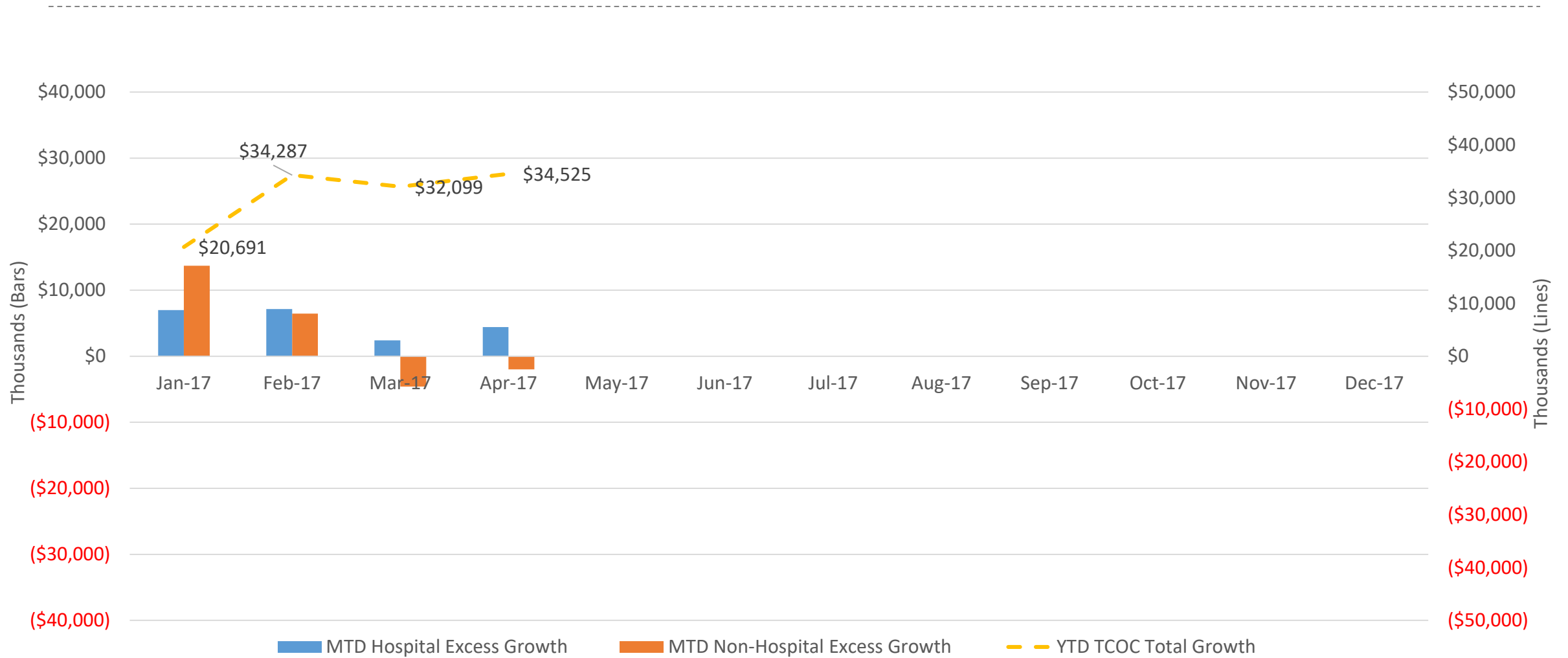
HSCRC
Health Services Cost
Review Commission

Medicare Non-Hospital Part B Spending per Capita

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

Current trend has been mixed.

Legend: Maryland Non-Hospital Part B — Maryland Non-Hospital Part B Projected — US Non-Hospital Part B — US Non-Hospital Part B Projected

HSCRC
Health Services Cost
Review Commission
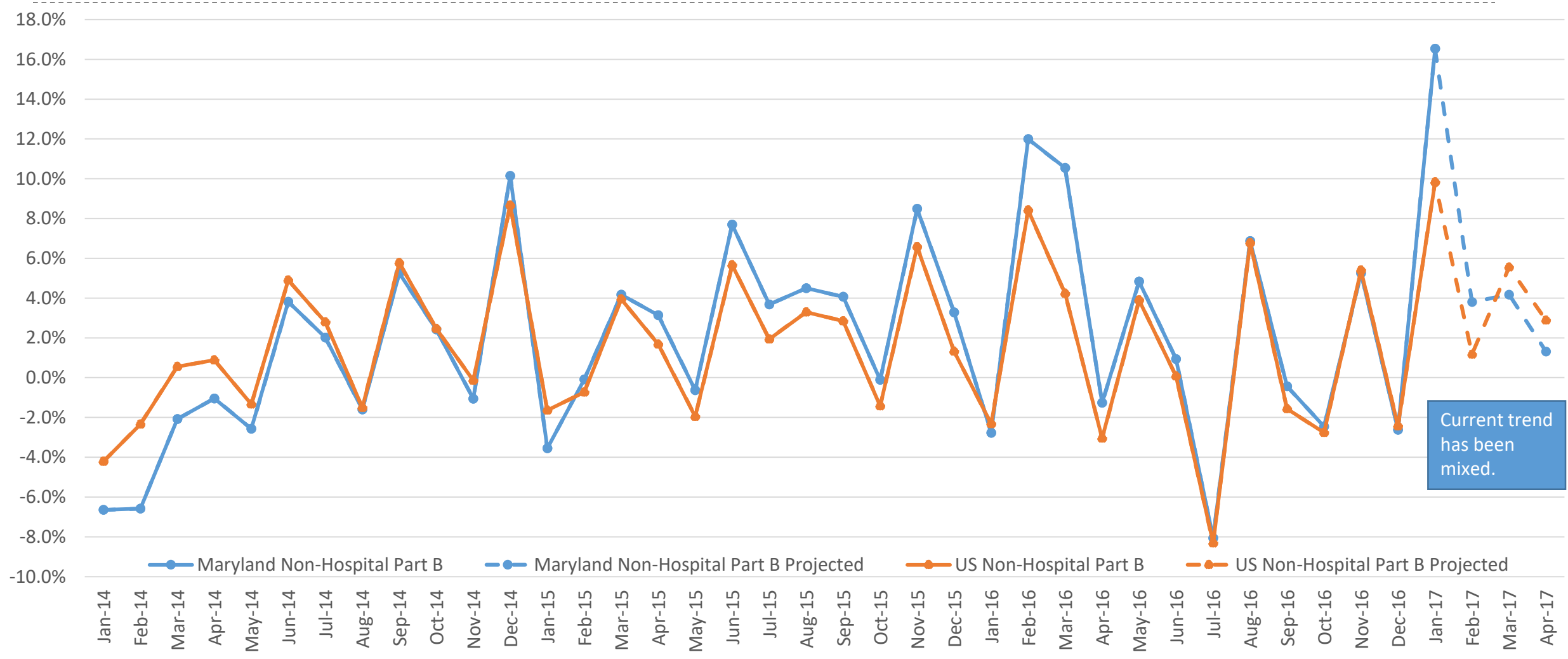
Medicare Hospital & Non-Hospital Growth

(with completion) CYTD through April 2017

HSCRC
Health Services Cost
Review Commission

Monitoring Maryland Performance Financial Data

Year to Date through May 2017

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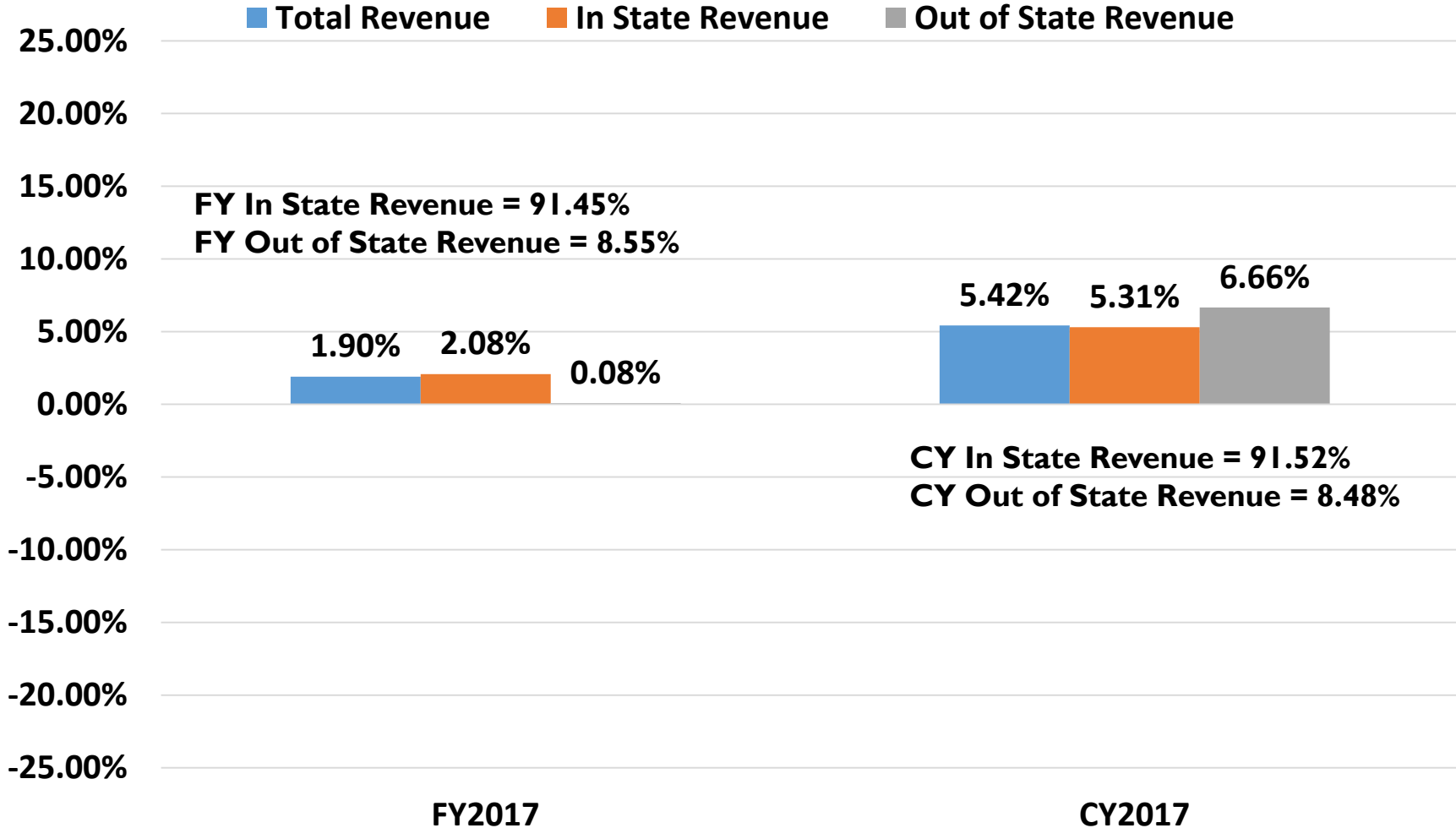Run: July 2017

HSCRC
Health Services Cost
Review Commission

The per capita growth data pertaining to the Medicare FFS beneficiary counts beginning January 1, 2017 may be overstated. CMS has changed the enrollment source for the Chronic Condition Data Warehouse (CCW) from the Enrollment Database (EDB) to the Common Medicare Environment (CME) database. Only the Part B enrollment data from January 1, 2017 forward has been changed, the Part A enrollment numbers have remained consistent. This has caused an "artificially" low beneficiary growth for both FY and CY 2017. As a result the per capita growth may be overstated. Staff is working to determine the actual impact of the change. Staff has indicated with an asterisk (*) which slides are impacted by this change.
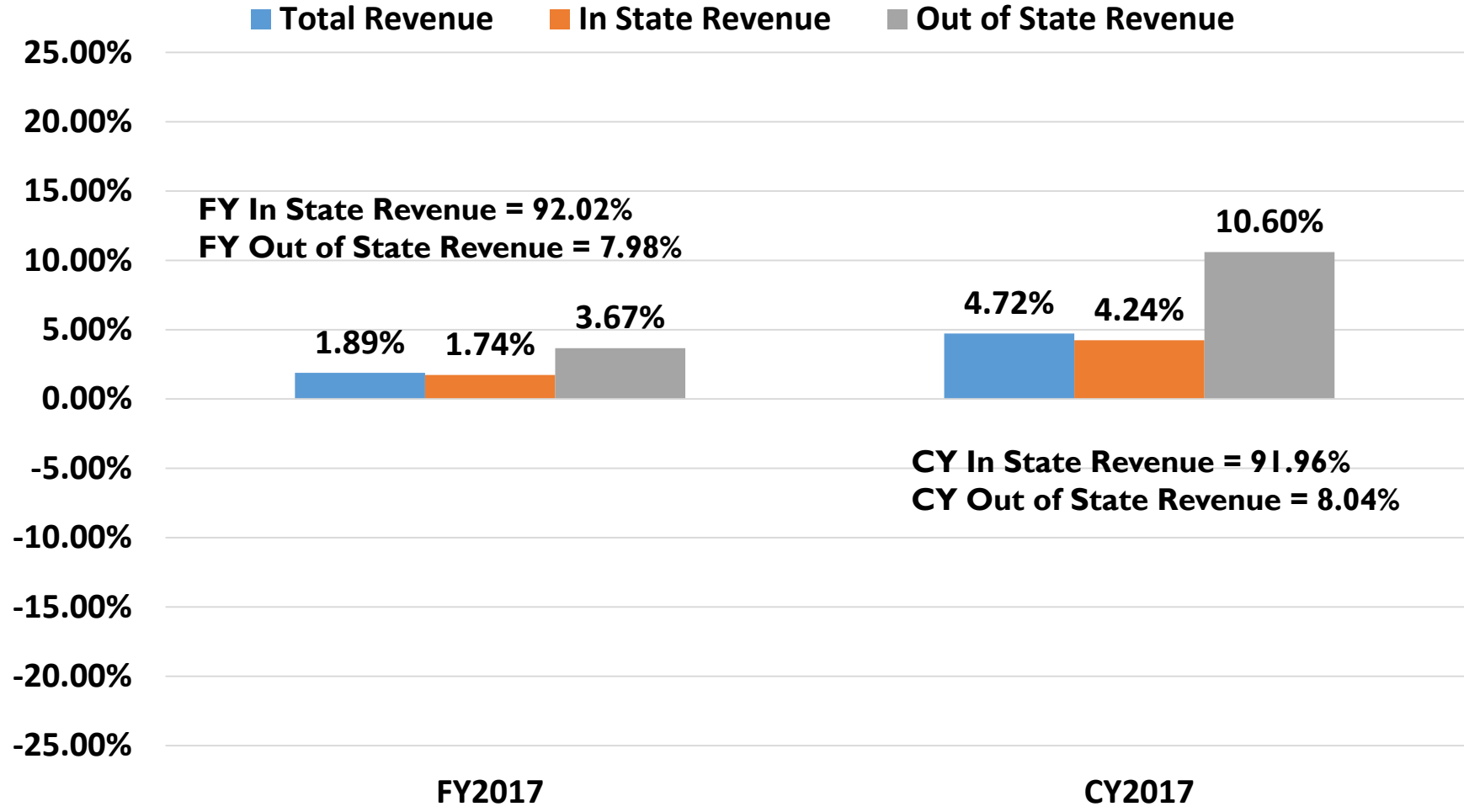
HSCRC

Health Services Cost
Review Commission

Gross All Payer Revenue Growth

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

FY In State Revenue = 91.45%
FY Out of State Revenue = 8.55%

CY In State Revenue = 91.52%
CY Out of State Revenue = 8.48%

Legend: ■ Total Revenue ■ In State Revenue ■ Out of State Revenue

FY2017: 1.90%, 2.08%, 0.08%
CY2017: 5.42%, 5.31%, 6.66%

The State's Fiscal Year begins July 1

HSCRC
Health Services Cost
Review Commission

Gross Medicare Fee for Service Revenue Growth

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

Legend: ■ Total Revenue ■ In State Revenue ■ Out of State Revenue

FY In State Revenue = 92.02%
FY Out of State Revenue = 7.98%

CY In State Revenue = 91.96%
CY Out of State Revenue = 8.04%

FY2017: Total Revenue 1.89%, In State Revenue 1.74%, Out of State Revenue 3.67%

CY2017: Total Revenue 4.72%, In State Revenue 4.24%, Out of State Revenue 10.60%

The State's Fiscal Year begins July 1

HSCRC
Health Services Cost
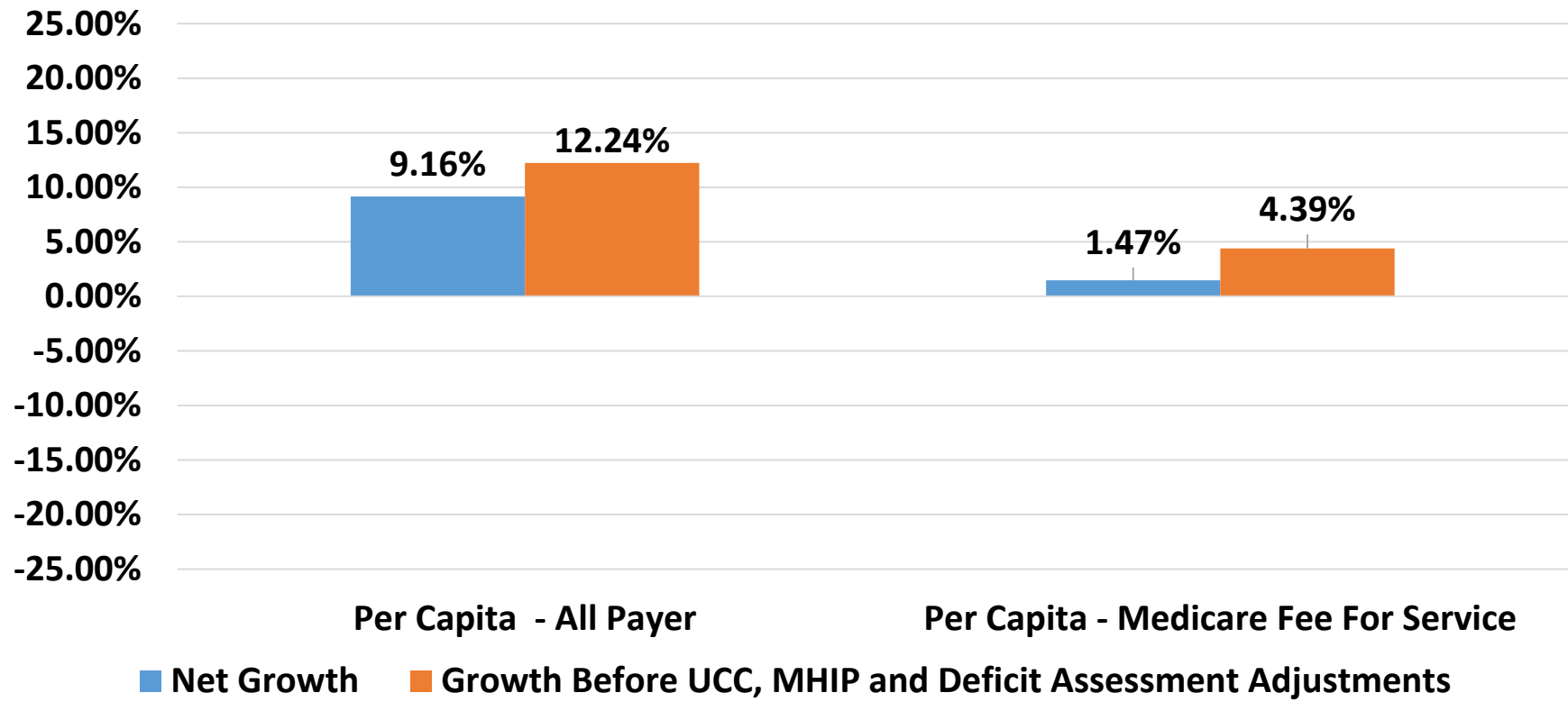Review Commission

4

Hospital Revenue Per Capita Growth Rates *

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

The State's Fiscal Year begins July 1

HSCRC
Health Services Cost
Review Commission
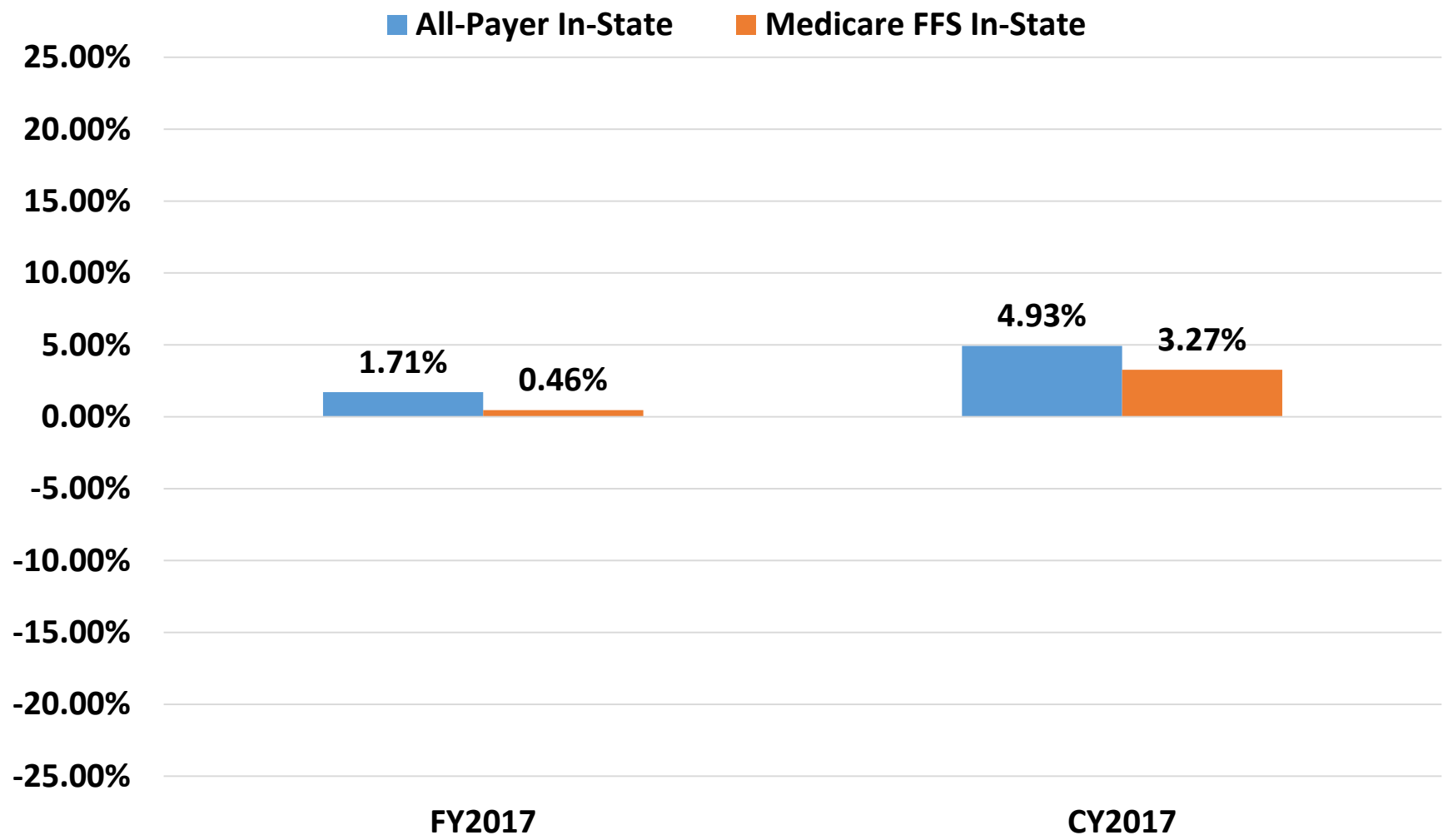
# Hospital Revenue Per Capita: Actual and Underlying Growth* CY 2017 (Jan-May) over Base Year CY 2013 (Jan-May)

- 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.

HSCRC
Health Services Cost
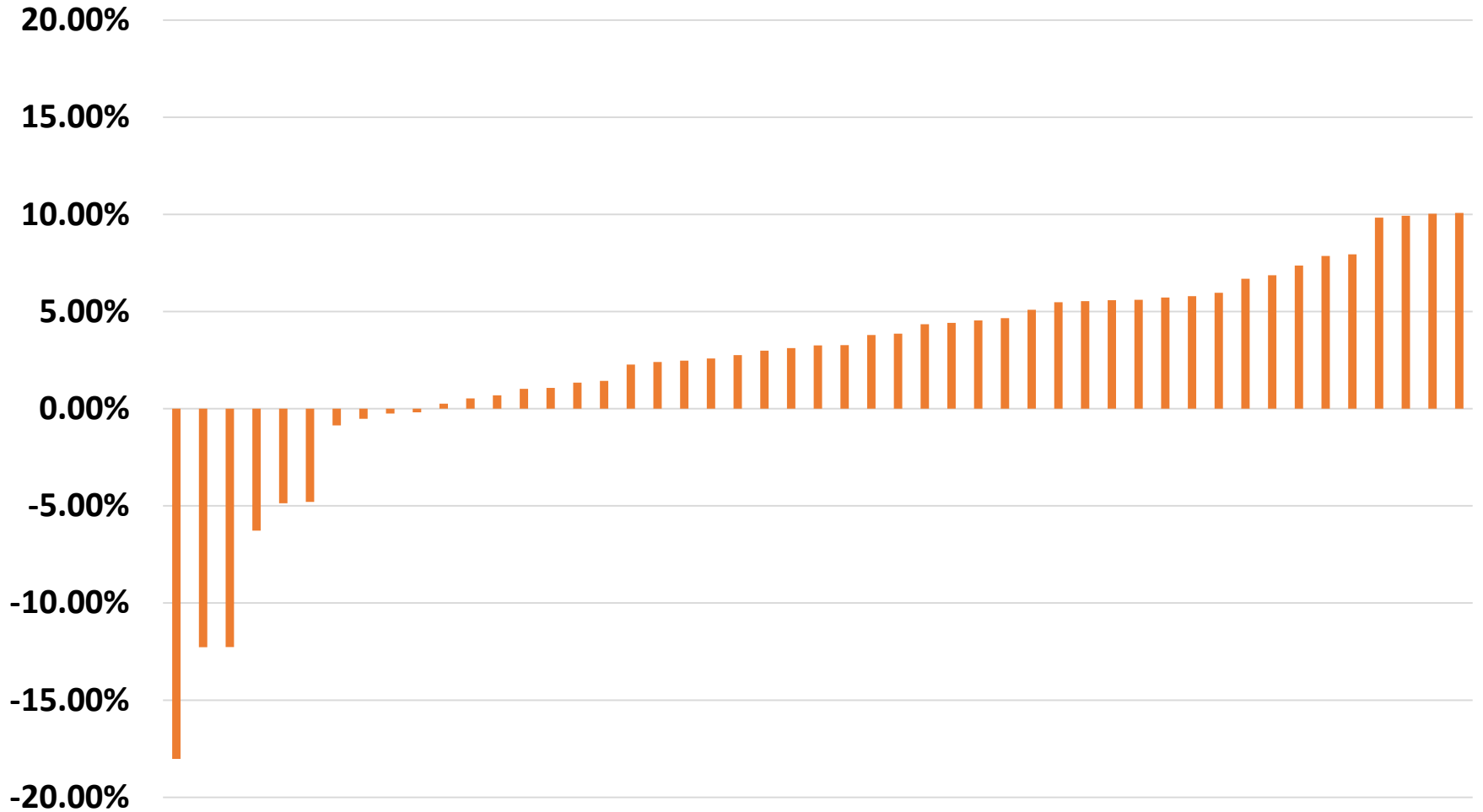Review Commission

Operating Profits

Fiscal Year 2017 (Jul 2016-May 2017) Compared to Same Period in Fiscal Year 2016 (Jul 2015 - May 2016)
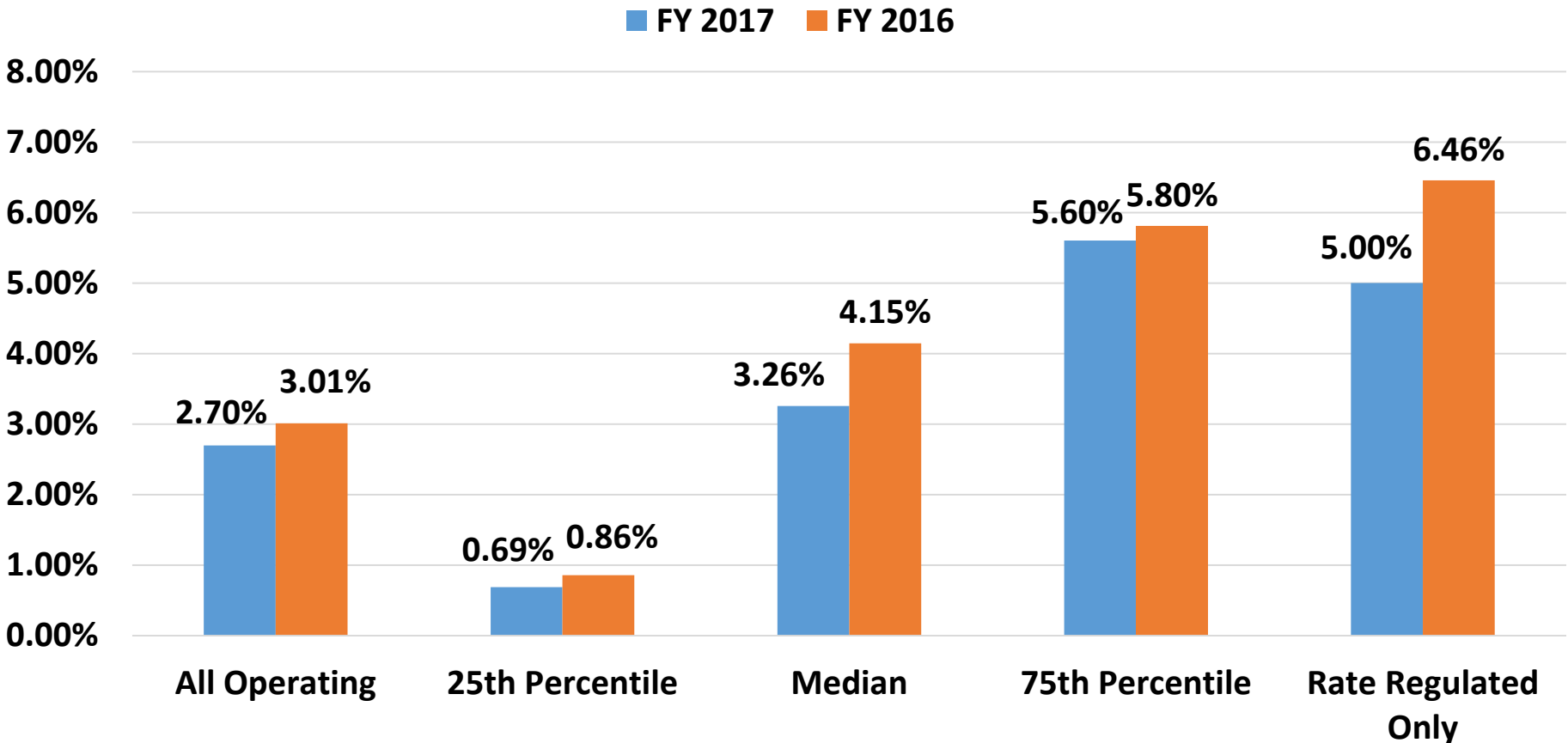
FY 2017 unaudited hospital operating profits to date show a decrease of .31 percentage point in total profits compared to the same period in FY 2016. Rate regulated profits have decreased by 1.46 percentage points compared to the same period in FY 2016.
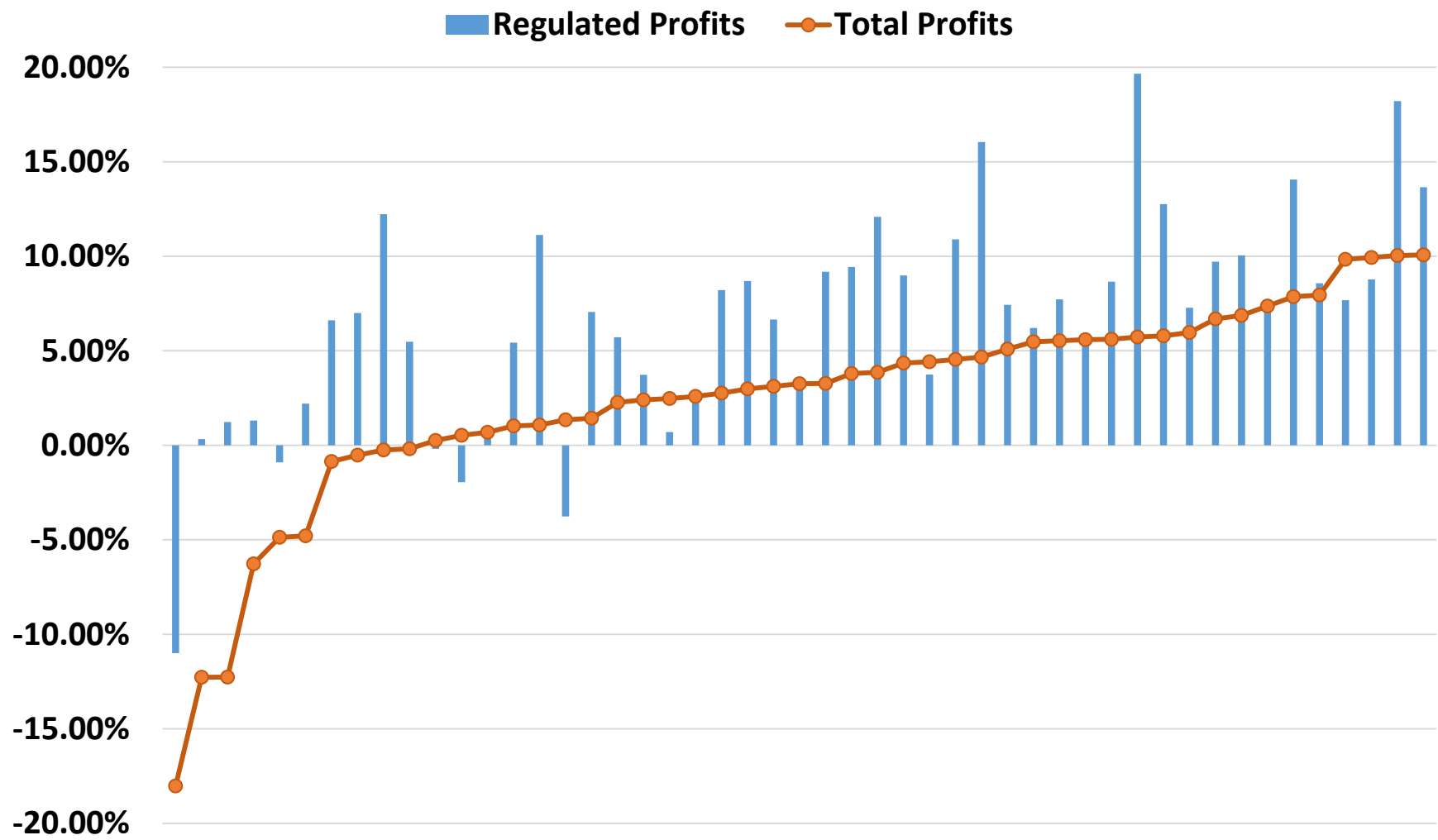
HSCRC
Health Services Cost
Review Commission

Total Operating Profits by Hospital

Fiscal Year 2017 (Jul 2016-May 2017)

HSCRC
Health Services Cost
Review Commission

8

Regulated and Total Operating Profits

Fiscal Year 2017 (Jul 2016 – May 2017)
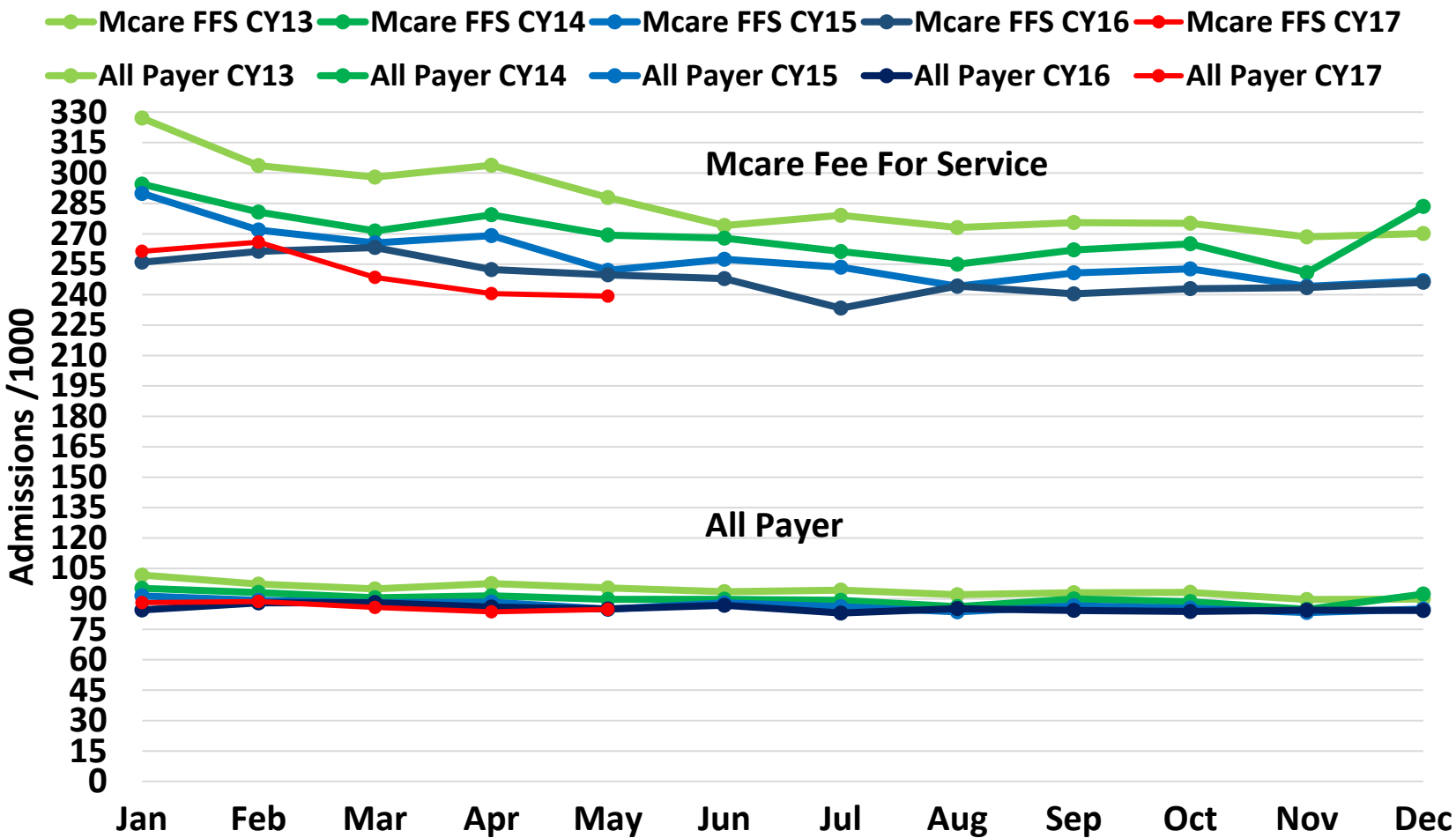
HSCRC

Health Services Cost
Review Commission

Monitoring Maryland Performance Financial/Utilization Data

Year to Date through May 2017

Source: Hospital Monthly Volume and Revenue Data

HSCRC
Health Services Cost
Review Commission

Annual Trends for ADK Annualized

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

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

HSCRC
Health Services Cost
Review Commission

Actual Admissions by Calendar YTD May
(CY 2013 through CY 2017)
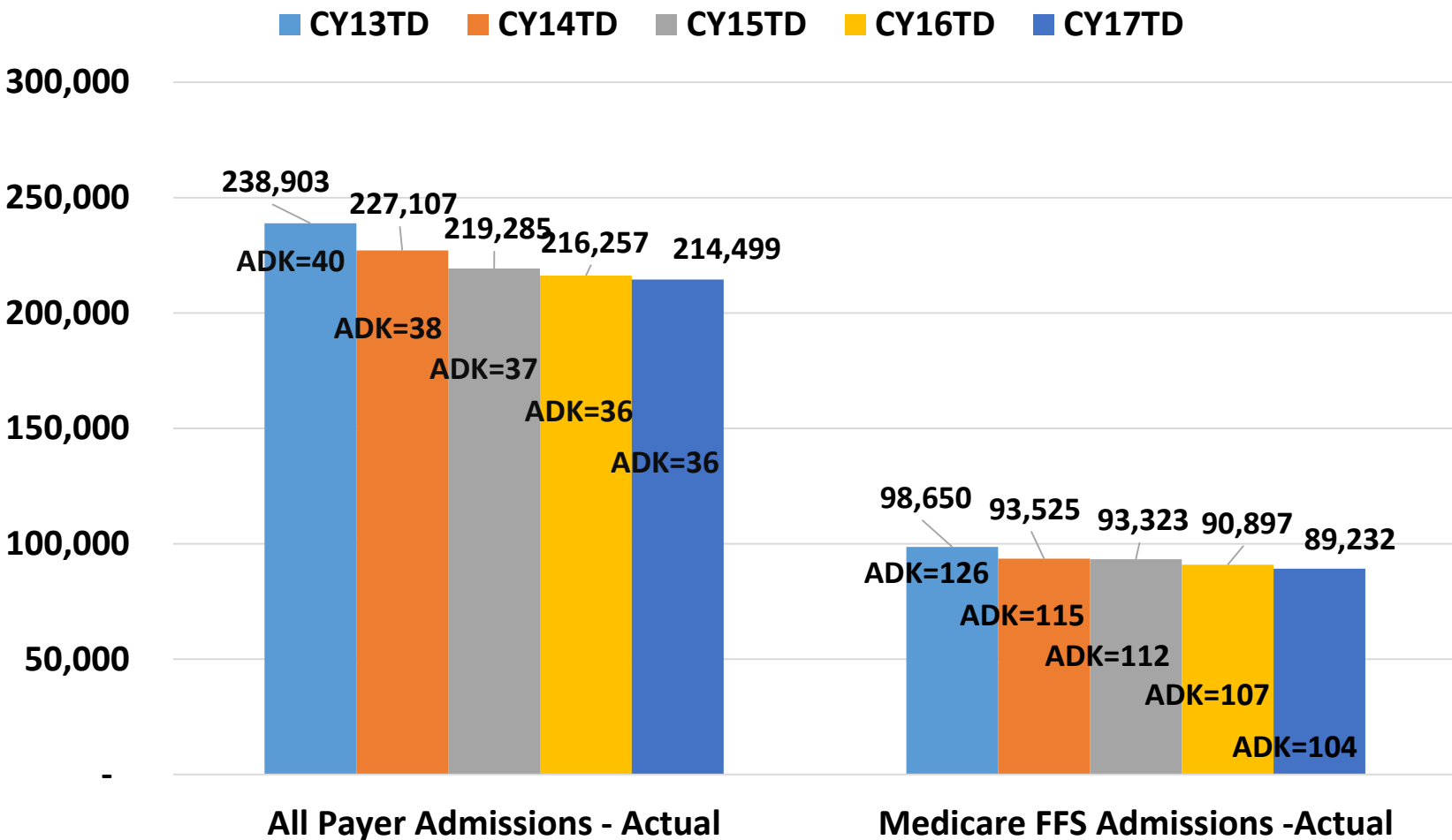
Legend: ■ CY13TD ■ CY14TD ■ CY15TD ■ CY16TD ■ CY17TD

All Payer Admissions - Actual
- 238,903 ADK=40
- 227,107 ADK=38
- 219,285 ADK=37
- 216,257 ADK=36
- 214,499 ADK=36

Medicare FFS Admissions -Actual
- 98,650 ADK=126
- 93,525 ADK=115
- 93,323 ADK=112
- 90,897 ADK=107
- 89,232 ADK=104

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

▶ 12

HSCRC
Health Services Cost
Review Commission

Change in Admissions by Calendar YTD May
(CY 2013 through CY 2017)

Change in All Payer Admissions CYTD13 vs. CYTD14 = -4.94%
Change in All Payer Admissions CYTD14 vs. CYTD15 = -3.44%
Change in All Payer Admissions CYTD15 vs. CYTD16 = -1.38%
Change in All Payer Admissions CYTD16 vs. CYTD17 = -0.81%

Change in ADK CYTD 13 vs. CYTD 14 = -5.51%
Change in ADK CYTD 14 vs. CYTD 15 = -3.89%
Change in ADK CYTD 15 vs. CYTD 16 = -1.73%
Change in ADK CYTD 16 vs. CYTD 17 = -0.81%

Change in Medicare FFS Admissions CYTD13 vs. CYTD14 = -5.20%
Change in Medicare FFS Admissions CYTD14 vs. CYTD15 = -0.22%
Change in Medicare FFS Admissions CYTD15 vs. CYTD16 = -2.60%
Change in Medicare FFS Admissions CYTD16 vs. CYTD17 = -1.83%

Change in Medicare FFS ADK CYTD 13 vs. CYTD 14 = -8.24%
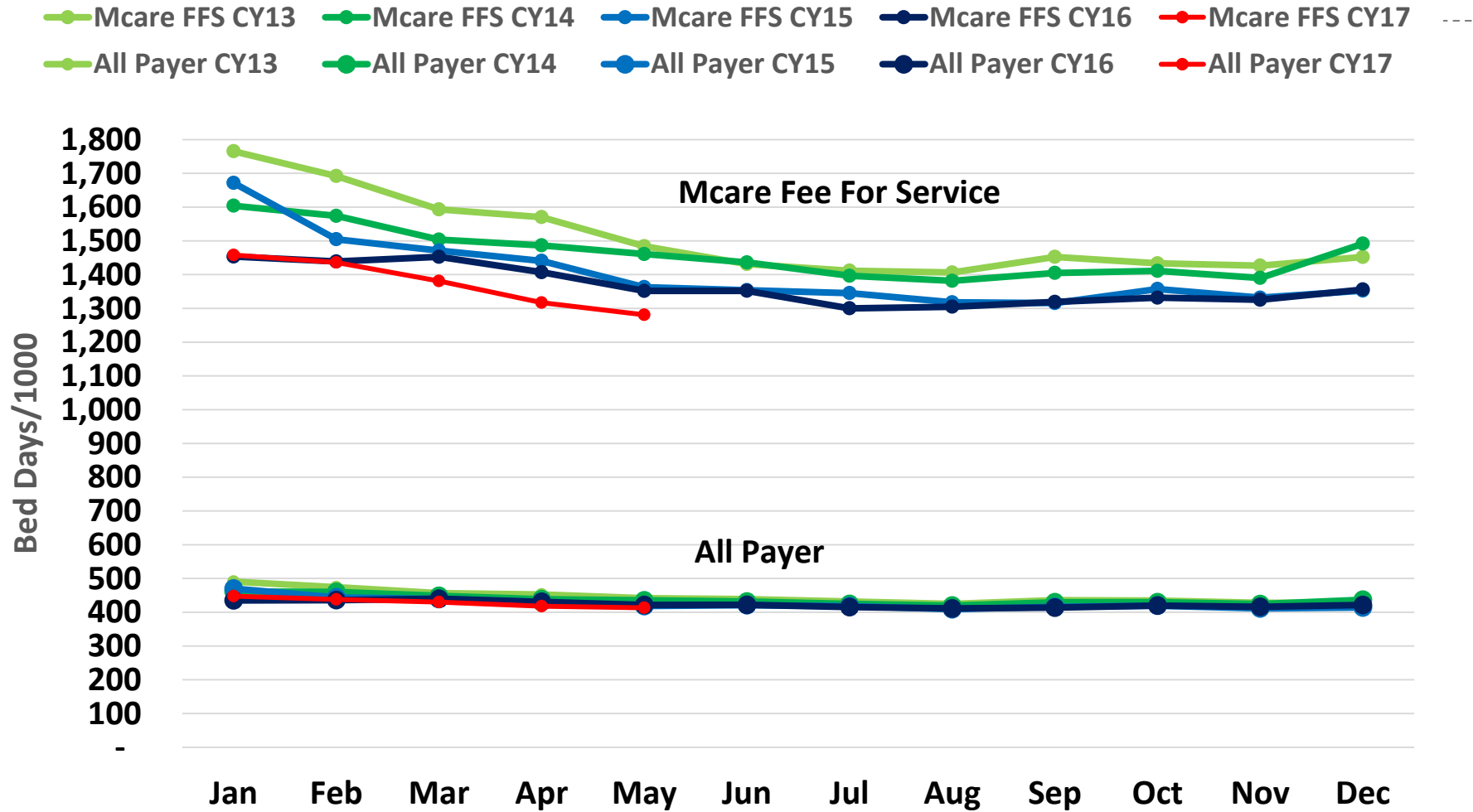**Change in Medicare FFS ADK CYTD 14 vs. CYTD 15 = -3.36%**
Change in Medicare FFS ADK CYTD 15 vs. CYTD 16 = -4.24%
Change in Medicare FFS ADK CYTD 16 vs. CYTD 17 = -2.82%

HSCRC
Health Services Cost Review Commission
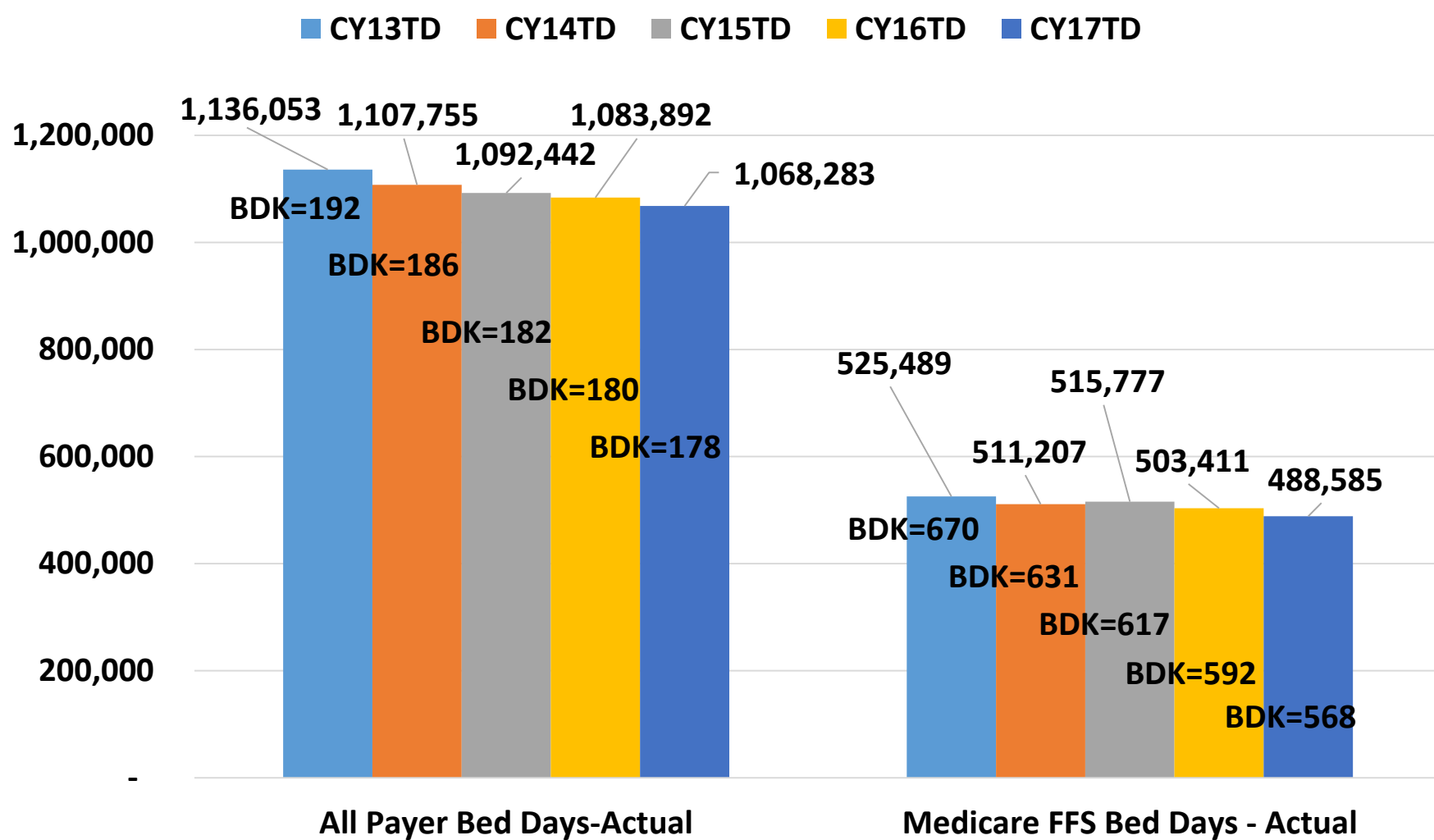
Annual Trends for BDK Annualized

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

*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 May

(CY 2013 through CY 2017)

■ CY13TD ■ CY14TD ■ CY15TD ■ CY16TD ■ CY17TD

All Payer Bed Days-Actual:
- 1,136,053 — BDK=192
- 1,107,755 — BDK=186
- 1,092,442 — BDK=182
- 1,083,892 — BDK=180
- 1,068,283 — BDK=178

Medicare FFS Bed Days - Actual:
- 525,489 — BDK=670
- 511,207 — BDK=631
- 515,777 — BDK=617
- 503,411 — BDK=592
- 488,585 — BDK=568

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

HSCRC
Health Services Cost
Review Commission

Change in Bed Days by Calendar YTD May

(CY 2013 through CY 2017)

Change in All Payer Bed Days CYTD13 vs. CYTD14 = -2.49%
Change in All Payer Bed Days CYTD14 vs. CYTD15 = -1.38%
Change in All Payer Bed Days CYTD15 vs. CYTD16 = -0.78%
Change in All Payer Bed Days CYTD16 vs. CYTD17 = -1.44%

    Change in BDK CYTD 13 vs. CYTD 14 = -3.08%
    Change in BDK CYTD 14 vs. CYTD 15 = -1.84%
    Change in BDK CYTD 15 vs. CYTD 16 = -1.14%
    Change in BDK CYTD 16 vs. CYTD 17 = -1.44%

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 = -5.85%
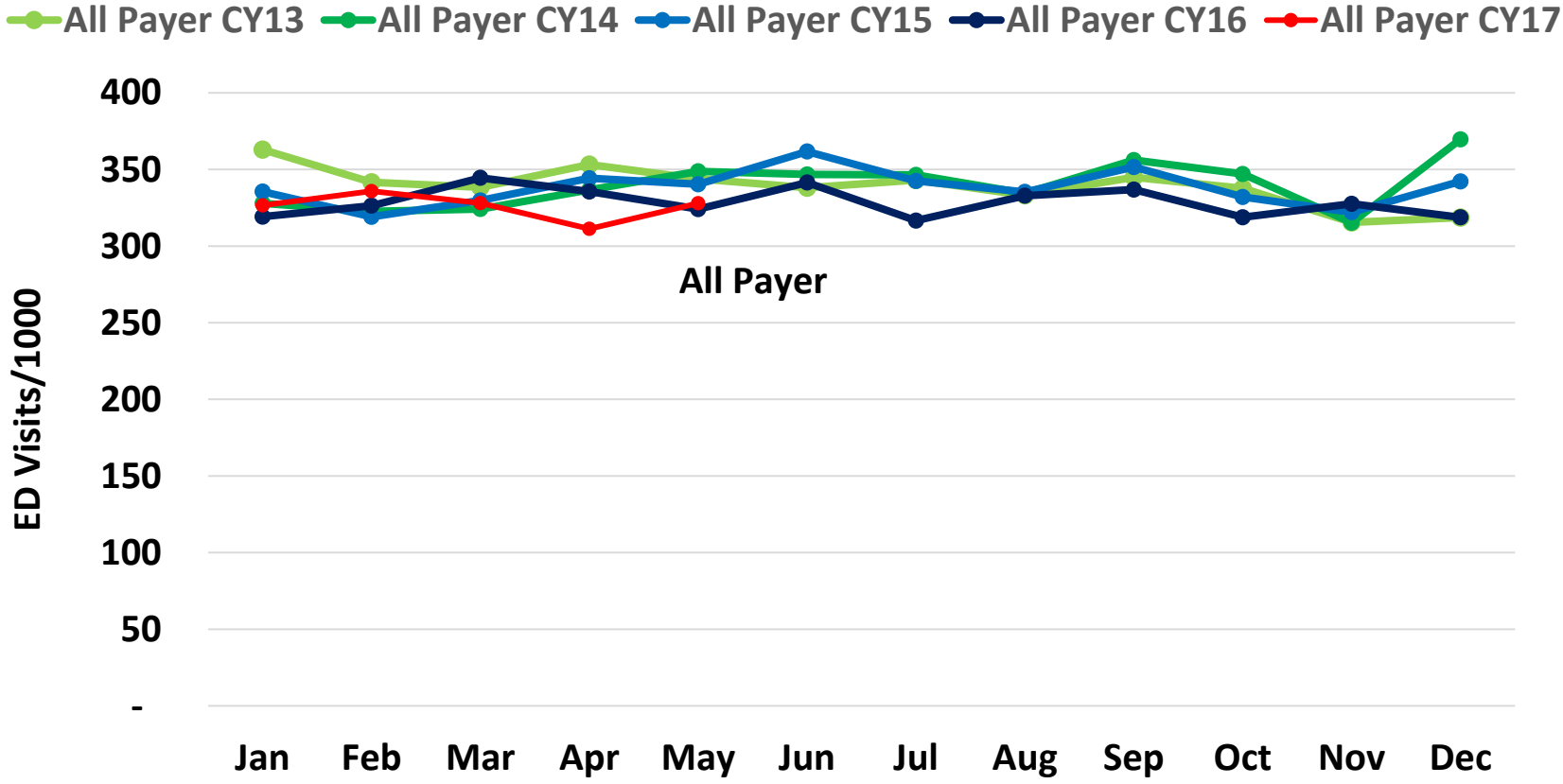   **Change in Medicare FFS BDK CYTD 14 vs. CYTD 15 = -2.29%**
    Change in Medicare FFS BDK CYTD 15 vs. CYTD 16 = -4.05%
    Change in Medicare FFS BDK CYTD 16 vs. CYTD 17 = -3.92%

HSCRC
Health Services Cost Review Commission

Annual Trends for EDK Annualized

All Payer (CY 2013 through CY2017 May)

Legend: All Payer CY13, All Payer CY14, All Payer CY15, All Payer CY16, All Payer CY17

Y-axis: ED Visits/1000 (0 to 400)
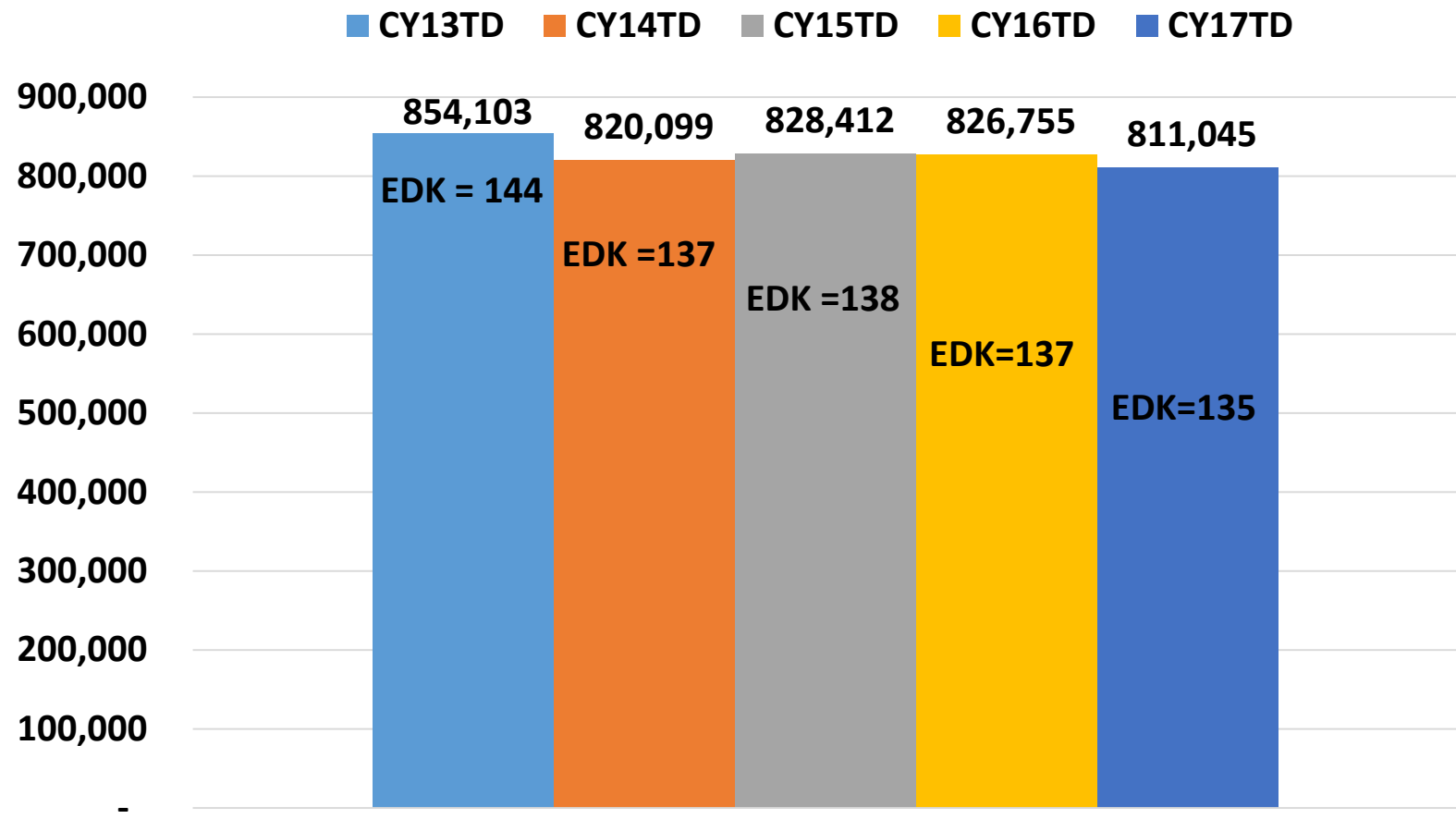
X-axis: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Chart label: All Payer

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

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

Legend: CY13TD, CY14TD, CY15TD, CY16TD, CY17TD

- CY13TD: 854,103, EDK = 144
- CY14TD: 820,099, EDK = 137
- CY15TD: 828,412, EDK = 138
- CY16TD: 826,755, EDK = 137
- CY17TD: 811,045, EDK = 135

Emergency Visits All Payer - Actual

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

HSCRC
Health Services Cost
Review Commission

Change in ED Visits by Calendar YTD May

(CY 2013 through CY 2017)

Change in ED Visits CYTD 13 vs. CYTD 14 = -3.98%

Change in ED Visits CYTD 14 vs. CYTD 15 = 1.01%

Change in ED Visits CYTD 15 vs. CYTD 16 = -0.20%

Change in ED Visits CYTD 16 vs. CYTD 17 = -1.90%

Change in EDK CYTD 13 vs. CYTD 14 = -4.56%

Change in EDK CYTD 14 vs. CYTD 15 = 0.55%

Change in EDK CYTD 15 vs. CYTD 16 = -0.56%

Change in EDK CYTD 16 vs. CYTD 17 = -1.90%

HSCRC
Health Services Cost
Review Commission

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

HSCRC
Health Services Cost
Review Commission

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.

HSCRC
Health Services Cost
Review Commission

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.

HSCRC
Health Services Cost
Review Commission

Monitoring Maryland Performance
Quality Data

July 2017 Commission Meeting Update

HSCRC
**Health Services Cost
Review Commission**

Readmission Reduction Analysis

HSCRC
Health Services Cost
Review Commission

Monthly Case-Mix Adjusted Readmission Rates

Case-Mix Adjusted Readmissions	All-Payer	Medicare FFS
CY 2013 YTD Apr	12.79%	13.56%
CY 2017 YTD Apr	11.57%	12.09%
CY13-CY17 % Change YTD Apr	-9.49%	-10.83%

Legend: All-Payer, Medicare FFS
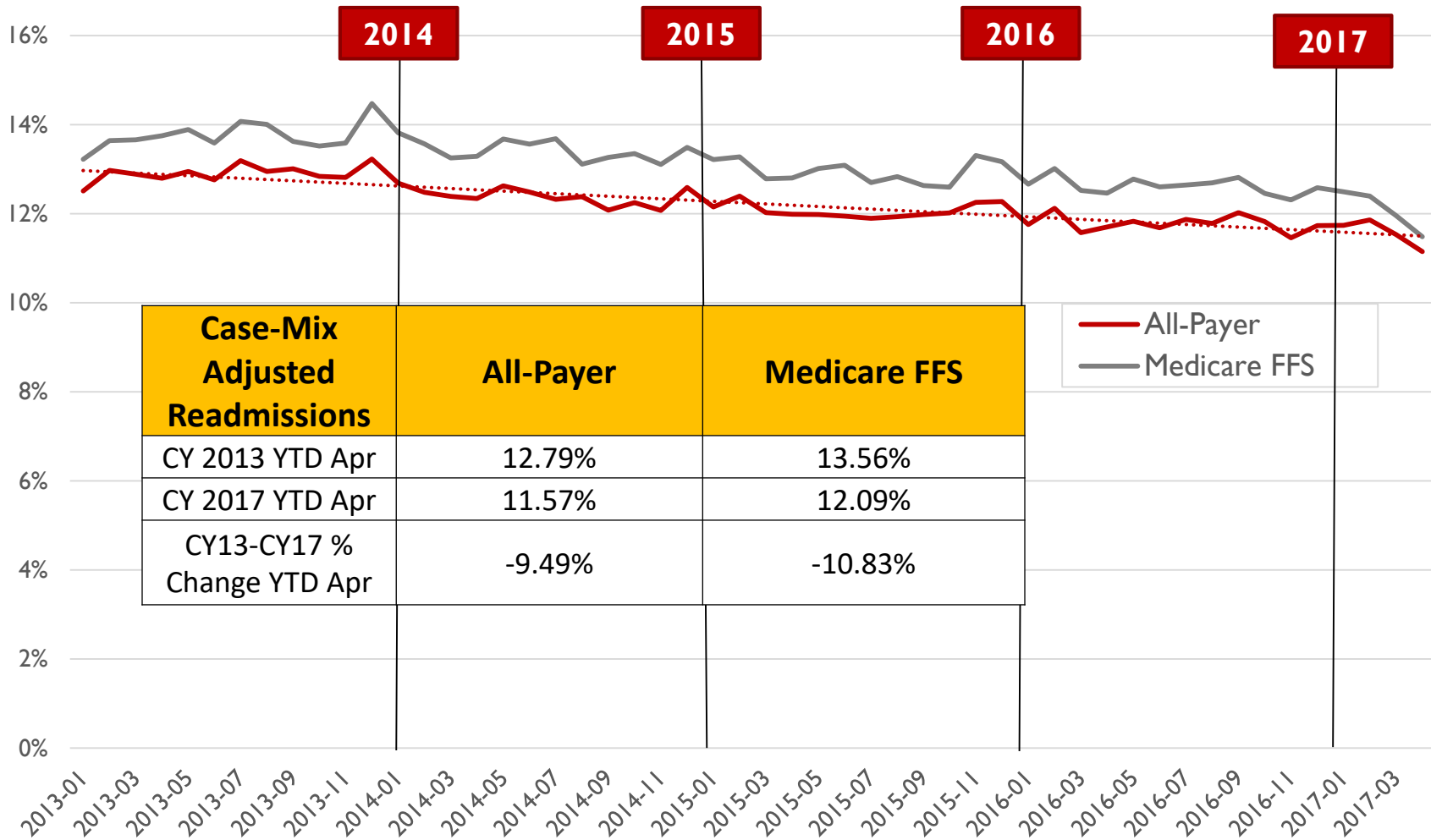
Note: Based on final data for January 2012 – March 2017

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

Cumulative change CY 2013 – CY 2016 + CY 2016 YTD to CY 2017 YTD through April

Legend:
- Hospital
- Statewide Target
- Statewide Improvement
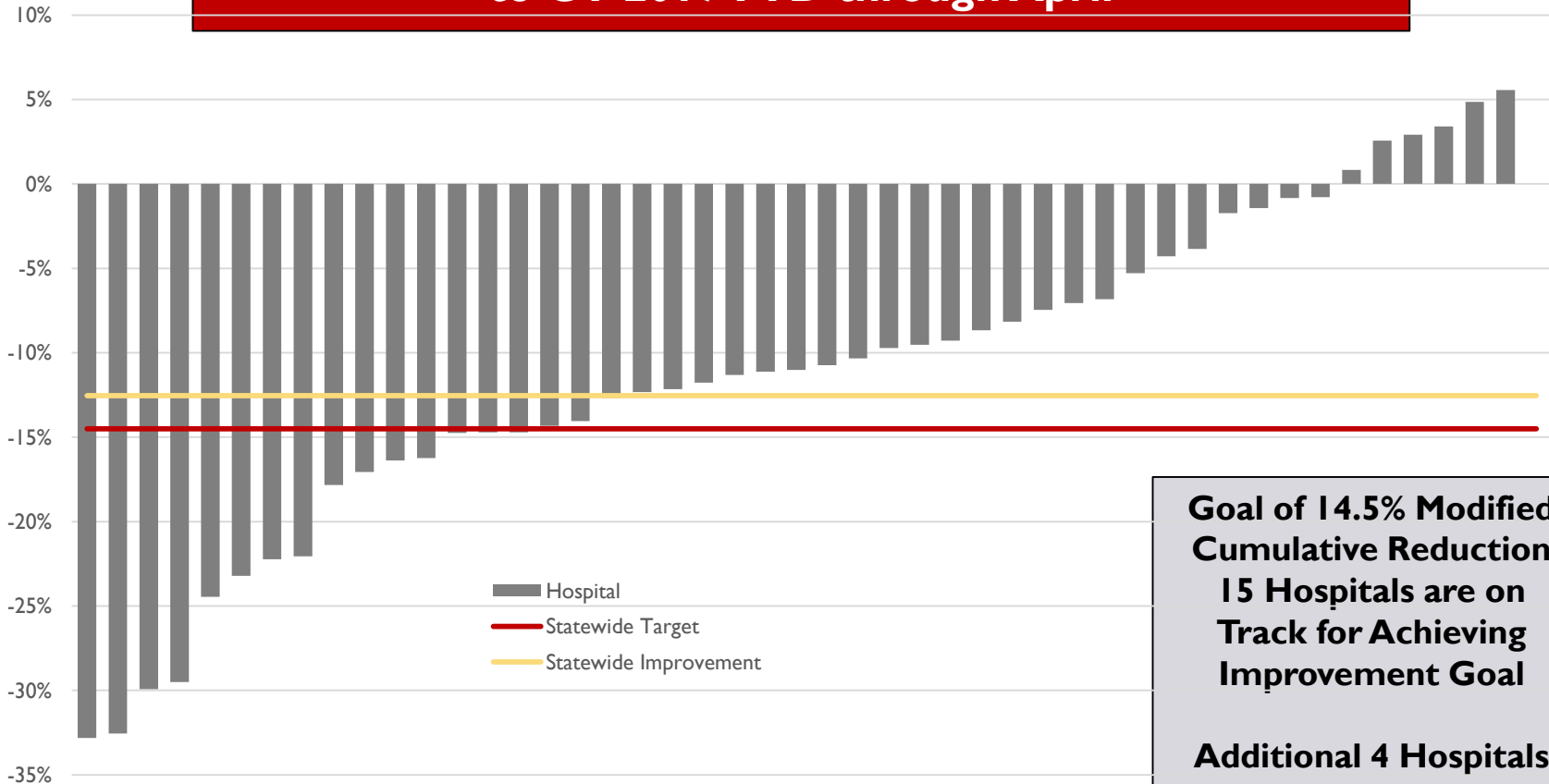
Goal of 14.5% Modified Cumulative Reduction 15 Hospitals are on Track for Achieving Improvement Goal

Additional 4 Hospitals on Track for Achieving Attainment Goal

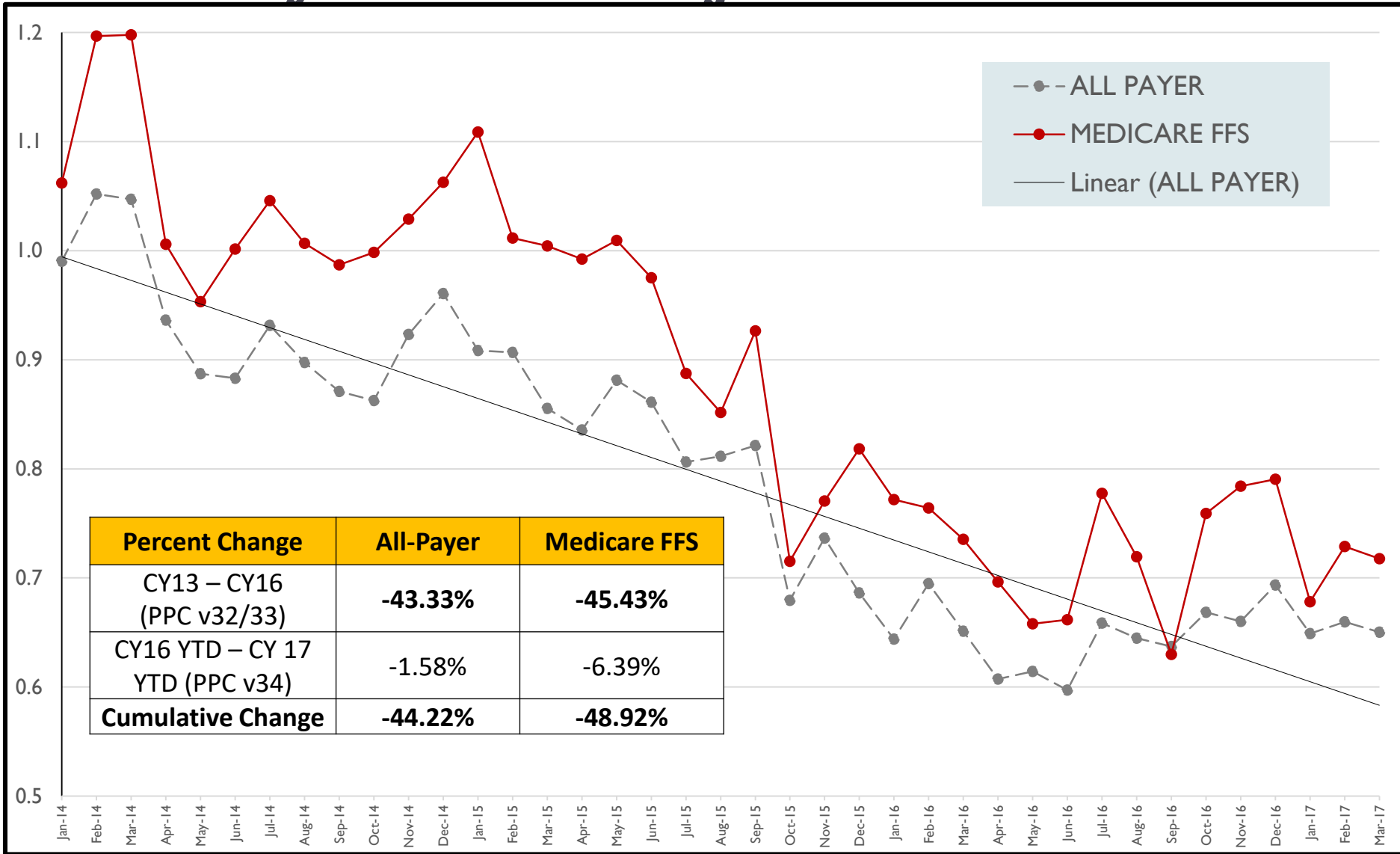▶ **Note: Based on final data for January 2013-March 2017, Preliminary through May 2017.**

Medicare Readmission Model Test

HSCRC
Health Services Cost
Review Commission

Medicare Readmissions – Maryland Compared to Nation

HSCRC
**Health Services Cost
Review Commission**
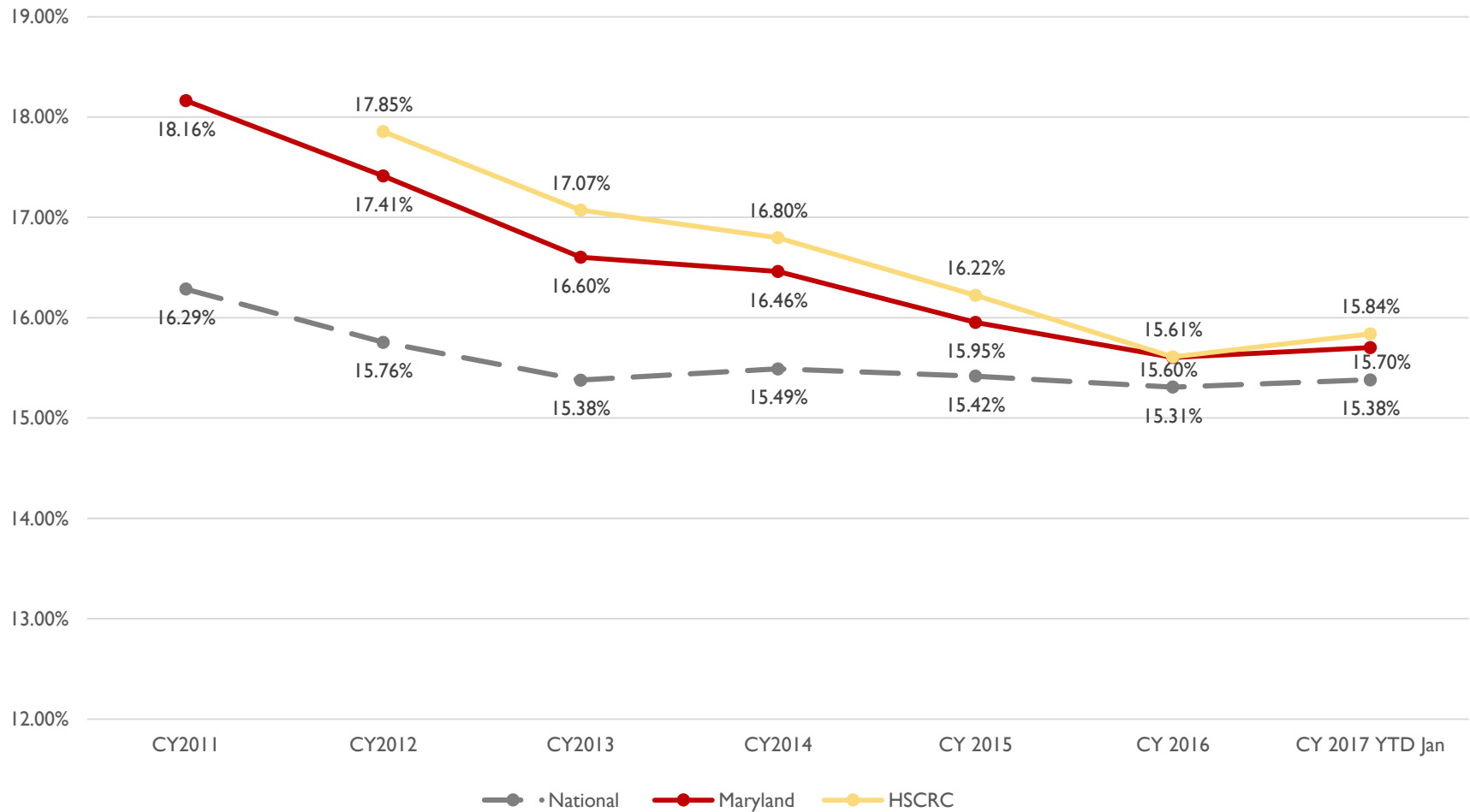
MHAC PPC Reduction Update

HSCRC
Health Services Cost
Review Commission

Monthly Case-Mix Adjusted PPC Rates

Percent Change	All-Payer	Medicare FFS
CY13 – CY16 (PPC v32/33)	**-43.33%**	**-45.43%**
CY16 YTD – CY 17 YTD (PPC v34)	-1.58%	-6.39%
Cumulative Change	**-44.22%**	**-48.92%**

Note: Line graph based on v32 prior to October 2015 and v34 October 2015- March 2017. All data are final.

IN RE: THE PARTIAL RATE   *   BEFORE THE HEALTH SERVICES

      APPLICATION OF   COST REVIEW COMMISSION

MEDSTAR FRANKLIN SQUARE   *   DOCKET: 2016

MEDICAL CENTER   *   FOLIO: 2181

BALTIMORE, MARYLAND   *   PROCEEDING: 2371R

*   *   *   *   *   *   *   *   *   *   *   *   *   *   *

<u>STAFF RECOMMENDATION</u>

July 12, 2017

OVERVIEW

MedStar Franklin Square Medical Center ("MFSMC," or "the Hospital") submitted a partial rate application on December 23, 2016, docketed as Proceeding Number 2371R. The Hospital seeks a permanent increase in its Global Budget Revenue (GBR) of 0.9percent, which amounts to $4.7 million for capital costs related to its replacement surgical services. MFSMC has requested that the rate increase be phased in beginning July 1, 2017 to coincide with the timing of the project's cash outlay, although project completion is anticipated in November, 2019.

As per the application, the project replaces the Hospital's current surgical service facilities, which includes 16 operating rooms, by constructing a new facility on its campus that will contain 14 operating rooms and associated support spaces. The project will consist of the construction of a new, two-story 75,000 square foot replacement facility, and will include a connection between the new building and the inpatient tower. MFSMC was granted a Certificate of Need ("CON") by the Maryland Health Care Commission on June 15, 2017. The MHCC approval was based, in part, on the MHCC finding that the financial feasibility of the project was not dependent on a rate increase.

BACKGROUND AND REQUEST

MFSMC is requesting an annual rate increase of $4,706,000, or about .9 percent of total revenue, to its permanent GBR approved revenue to be phased in starting July 1, 2017. The

project is anticipated to cost $70,000,000, including new construction costs of $50,900,000, equipment costs of $12,600,000, contingencies, inflation, and other costs of $6,500,000. The budget submitted by the Hospital in its CON application includes sources of funds of $39,670,000 in bonds, $10,000,000 in cash, $20,000,000 in philanthropy, and $330,000 in interest on interest income from bond proceeds.

On Page 66 of the CON application, MFSMC provided financial projections regarding patient revenue that assumed, "beginning in FY 2020 MFSMC will be reimbursed 100% of the interest expense, and depreciation and amortization expense." In the CON application, MFSMC projected $1,983,000 in new interest expense and $1,378,000 in new depreciation expense in FY 2020 for a total of $3,361,000 in new capital expense. In FY 2021, MFSMC projected $1,950,000 in new interest expense and $2,756,000 in new depreciation expense for a total new capital expense of $4,706,000.

MFSMC is requesting that the rate increase be phased in beginning July 1, 2017 with $1,277,695 added to rates July 1, 2017, $1,718,824 added to rates at July 1, 2018, and $1,709,481 added to rates at July 1, 2019. MFSMC's phased-in rate request is not consistent with the assumptions included in the CON for patient revenue, because the CON assumes that the rate increase will not be effective until the project is completed in November 2019.

In its staff recommendation dated June 15, 2017 recommending approval of the surgical facilities replacement CON for MFSMC, the MHCC staff stated that, "Although MFSMC is seeking a rate increase to cover interest and depreciation for the project, MHCC staff has

3

concluded that the project is feasible and that MFSMC will continue to be a viable hospital, even if its revenue base is not expanded in response to this project, as the hospital proposes." (See Attached Copy of Page 3 of MHCC staff recommendation.) During MHCC's review, HSCRC staff submitted a memorandum documenting its financial review and conclusion that the Hospital did not need a rate increase for financial feasibility. (See attached Memorandum of June 5, 2017 to MHCC from HSCRC staff)

In the CON, MFSMC projected profits of $21 million in FY 2019, $25 million in FY 2020, $29 million in FY 2021, and $34 million in 2022 on approximately $530 million in net revenue on an uninflated basis.

In the rate application, MFSMC included a table on Page 19 that showed that MFSMC's Potentially Avoidable Admissions (PAU's) represented 15.50 percent of MFSMC's utilization in calendar year 2015 compared to a statewide median of 12.18 percent and a statewide top quartile of 9.88 percent. The percentage of MFSMC's utilization related to PAU's in Calendar Year 2015 was 27 percent above the statewide median and 57 percent above the statewide top quartile.

HOSPITAL FINANCIAL SITUATION

The Hospital's fiscal year end is June 30. For the past three years, MFSMC has reported the following audited results:

Year Ending June 30,	Net Operating Revenue (Regulated)	Net Operating Profit (Regulated)	Operating Margin (Regulated)	Net Profits

2014	$414,241,900	$40,797,800	9.85%	$21,317,500
2015	$421,959,000	$39,840,900	9.44%	$17,142,700
2016	$430,855,400	$45,326,600	10.52%	$10,758,100

For the two years ended June 30, 2016, MFSMC averaged net revenue increases of 2.0 percent annually and expense increases of 1.7 percent annually on regulated services.

According to internal financial statements submitted by the MedStar hospitals in Maryland, MFSMC generated $33 million in profits on $367 million in net revenue for the 10 months ended April 30, 2017 on regulated services and an overall profit of $16 million. On a combined basis, the seven MedStar hospitals in Maryland reported $131 million in profits on $1.492 billion in net revenue for the ten months ended April 30, 2017 on regulated services and an overall profit of $59 million.

STAFF ANALYSIS

The HSCRC and MedStar, on behalf of its subsidiary entities including MFSMC, entered into a GBR agreement effective January 1, 2014. Since the inception of the GBR, MFSMC and the MedStar hospitals have experienced positive financial results. MedStar hospitals have benefitted from the GBR system. The MedStar hospitals have experienced significant volume declines resulting from market shift, PAU reductions and other reductions. The System has been permitted to retain revenues ranging from 50 percent to 100 percent of these declines. The revenue retained from these declines, which staff estimates at $31 million, far exceeds the capital costs for the MFSMC surgical tower. The HSCRC staff expects MedStar and MFSMC to fund the replacement facility from these retained funds and other financial resources.

5

MFSMC has consistently generated profit margins on regulated services in the ten percent range. MFSMC and MedStar hospitals continue to have significant levels of PAU. Further reductions of PAU can also provide resources for capital needs. As services have been moved from one hospital to another within the MedStar system, revenues have been moved, including the fixed cost component. While MFSMC has not had the extent of volume declines as some other MedStar facilities, the transfers of fixed cost dollars within the system are another source of funds for the MFSMC project.

Section IX B. of the GBR agreement, entitled "Approved Regulated Revenue Modifications Related to CON Projects," contains provisions regarding potential revenue modifications for related to CONs. (See relevant pages of GBR agreement attached) This agreement states that MedStar can petition for a revenue increase related to capital costs. However, MedStar must pass "highly stringent tests" of financial necessity and must demonstrate to the satisfaction of the HSCRC staff, that it is unable to fund a new capital project within its existing revenue base.

As indicated above, staff finds that the existing revenue base under the GBR agreement is sufficient, and that retained revenues from volume declines far exceed the capital requirements of the MFSMC project. MedStar and MFSMC have not demonstrated that the Hospital is unable to fund the capital project within the existing revenue base.

Summary and Recommendation

Under the GBR agreement, MedStar can petition for a revenue increase related to capital costs. However, MedStar must demonstrate to the satisfaction of the HSCRC staff, that it is unable to fund a new capital project within its existing revenue base.

MedStar has not demonstrated that it is unable to fund the MFSMC operating room replacement within its existing revenue base. To the contrary, MFSMC and MedStar hospitals report strong regulated profit margins and have retained revenues under the GBR from volume declines. Staff has concluded that there are adequate funds for this project within the existing GBR of MFSMC and MedStar. Finally, MHCC concurred with the HSCRC staff's conclusion that a rate increase was not necessary for financial feasibility in granting the CON.

For these reasons, the staff recommends that MFSMC's rate request be denied.

Attachments Included

IN THE MATTER OF   *

    *   BEFORE THE

MEDSTAR FRANKLIN SQUARE   *

MEDICAL CENTER   *   MARYLAND HEALTH

    *

DOCKET NO. 16-03-2380   *   CARE COMMISSION

    *

****

Staff Report and Recommendation

June 15, 2017

Cost Effectiveness	The applicant outlined its goals and considered alternatives for this limited project. The alternative presented by the applicant -- renovation on site -- was deemed cost prohibitive given facility constraints. The applicant demonstrated that constructing a replacement facility best addresses the need to modernize hospital facilities and improve efficiency, and was the most cost effective option to meet project objectives.
Efficiency	By consolidating the two, separate surgical pods into one, the project will reduce staff duplication, resulting in a reduction of 21 full time-equivalent (FTE) staff positions.
Financial Feasibility and Viability	Equity and philanthropy will cover approximately 43% of the total project cost. MFSMC has demonstrated that it has the equity, fund-raising capability, and debt capacity to fund the project as proposed. Its utilization projections and revenue and expense assumptions are reasonable. Although MFSMC is seeking a rate increase to cover interest and depreciation for the project, MHCC staff has concluded that the project is feasible and that MFSMC will continue to be a viable hospital, even if its revenue base is not expanded in response to this project, as the hospital proposes. HSCRC staff has advised MHCC of this same conclusion.
Construction Cost	Applying the analysis outlined in the Marshall Valuation Service methodology yields a conclusion that the estimated project cost is 2% higher than the benchmark calculated by staff ($12.06 per SF above the benchmark of $595.10 per SF calculated by staff). Accordingly, staff recommends that if the project is approved it include a condition excluding the excess cost from any rate increase that might be authorized to cover the capital costs associated with this project.
Impact	The proposed project is a modernization, replacement, and "right-sizing" of the existing facility. It will align MFSMC's surgical services with updated design standards, while reducing the OR complement by two rooms. It should have no negative impact on existing providers or on services for patients. MFSMC has filed a partial rate application with HSCRC for the incremental capital costs related to this project. HSCRC has not yet acted on it. Obviously, if granted, charges would be affected.

II.   PROCEDURAL HISTORY

A. Review of the Record

Please see Appendix 1, Record of the Review.

B. Interested Parties in the Review

There are no interested parties in this review.

Nelson J. Sabatini
Chairman

Herbert S. Wong, PhD
Vice-Chairman

Joseph Antos, PhD

Victoria W. Bayless

George H. Bone,
M.D.

John M. Colmers

Jack C. Keane

Donna Kinzer
Executive Director

Katie Wunderlich, Director
Engagement
and Alignment

Vacant, Director
Population Based
Methodologies

Chris L. Peterson, Director
Clinical and Financial
Information

Gerard J. Schmith, Director
Revenue and Regulation
Compliance

Health Services Cost Review Commission
4160 Patterson Avenue, Baltimore, Maryland 21215
Phone: 410-764-2605 · Fax: 410-358-6217
Toll Free: 1-888-287-3229
hscrc.maryland.gov

June 5, 2017

To: Kevin McDonald
            Chief – CON, MHCC

From: Gerard J. Schmith
            Deputy Director, Hospital Rate Setting, HSCRC

Subject: Review of financial projections for MedStar Franklin Square Medical Center CON
            for Surgical Facilities Replacement Project

This memo is in response to your memo dated May 10, 2017 where you requested that HSCRC
staff provide an opinion as to whether MedStar Franklin Square Medical Center' (MFSMC)
CON project for replacing its surgical facilities would still be viable if the staff did not approve
the MFSMC's rate request to fund the project.

In staff's review of the project we noted that MFSMC assumed that the staff would approve a
rate request of $4.7 million effective November 2019 which was equal to the incremental
depreciation and interest expense associated with the project. The rate request that MFSMC
recently submitted to the HSCRC for the project requested an effective date of July 1, 2017,
which is more than 2 years earlier than the effective date of the increase assumed in the CON. ·

The uninflated projected financial statements included as part of the CON assumed annual
profits ranging from $16,998,000 in FY 2017 to $34,421,000 in FY 2022. The inflated projected
financial statements included as part of the CON assumed annual profits ranging from
$16,999,000 in FY 2017 to $11,758,000 in FY 2022. The reason for the wide discrepancy in
projected future profits in the uninflated projections versus the inflated projections was that
MFSMC assumed in the inflated projections that net revenues would increase by approximately
1.8% per year while non-capital expenses would increase by about 3.0% per year causing the
lower projected profits in the inflated projections.

Based on staff's experience over the last 40 years, hospitals have been able to historically
manage their expenses in line with their allowed rate increases so staff believes that the larger
profits projected by MFSMC under the uninflated financial statements are more representative of
what will actually occur. If staff does not approve MFSMC's recent rate request there will be no
impact on MFSMC projected financial statements in the CON for FY 2017 through 2019
because MFSMC did not assume it would receive a rate increase for the project until November

2019. If the $4.7 million rate request assumed by MFSMC in the projected financial statements in the CON is not granted, MFSMC's projected profit margin for FY 2022 would decrease from the 6.4% assumed in the CON to a revised 5.5%.

On a system-wide basis MFSMC's parent, MedStar Health Inc., generated significant net revenue during the year ended June 30, 2016. The HSCRC staff believes that MedStar Health Inc. may have the capacity, on a system-wide basis, to reduce its existing excess volumes and fixed expenses sufficiently to absorb this estimate cost increase.

Staff does not believe that the denial of MFSMC's assumed rate increase associated with the CON for the replacement of surgical facilities will have a material impact on the viability of the project.

AGREEMENT

BETWEEN

THE HEALTH SERVICES COST REVIEW COMMISSION

AND

MEDSTAR HEALTH, INC.

REGARDING

GLOBAL BUDGET REVENUE AND NON-GLOBAL BUDGET REVENUE

AGREEMENT
BETWEEN
THE HEALTH SERVICES COST REVIEW COMMISSION
AND
MEDSTAR HEALTH
REGARDING GLOBAL BUDGET REVENUE AND NON-GLOBAL BUDGET REVENUE

This Agreement, made this 1st day of January , 2014, between (the MARYLAND HEALTH SERVICES COST REVIEW COMMISSION (the "Commission," or "HSCRC") and MedStar Health, Inc. ("MedStar") on behalf of the following subsidiary entities: Franklin Square Hospital Center, Inc. d/b/a MedStar Franklin Square Medical Center, The Good Samaritan Hospital, of Maryland Inc. d/b/a MedStar Good Samaritan Hospital, Harbor Hospital, Inc. d/b/a MedStar Harbor Hospital, MedStar Southern Maryland Hospital Center, Inc., and The Union Memorial Hospital d/b/a MedStar Union Memorial Hospital, (individually "Hospital," or collectively "Hospitals"), each of which agrees to adopt the Global Budget Revenue ("GBR") Model.

I.   Overview

The Global Budget Revenue ("GBR") model is a revenue constraint and quality improvement system designed by the Maryland Health Services Cost Review Commission to provide hospitals with strong financial incentives to manage their resources efficiently and effectively in order to slow the rate of increase in health care costs and improve health care delivery processes and outcomes. The GBR model is consistent with the Hospitals' mission to provide the highest value of care possible to their patients and the communities they serve.

This Agreement is intended to promote the achievement of the goals of the Maryland All-Payer Model Agreement between the State of Maryland and the Center for Medicare & Medicaid Innovation (CMMI). MedStar and HSCRC agree to modify this Agreement, if necessary, to ensure that it is consistent with the main provisions, objectives and requirements of the application that was filed with CMMI in October 2013, and meets the requirements of the final contract between CMMI and the State of Maryland.

The GBR Model assures hospitals that adopt it that they will receive an agreed-on amount of revenue each year—i.e., the hospitals' "Approved Regulated Revenue" (Approved Regulated Revenue) under the GBR system-- regardless of the number of Maryland residents they treat and the amount of services they deliver provided that they meet their obligations to serve the health care needs of their communities in an efficient, high quality manner on an ongoing basis. The GBR model removes the financial incentives that have encouraged hospitals to increase their volume of services and discouraged them from reducing their levels of "Potentially Avoidable Utilization" (PAU) and marginal services. It provides hospitals with much-needed flexibility to use their agreed-on global budgets to effectively

VIII. Possible Future Modifications in the GBR Model to Achieve Improved Alignment of Incentives in the Health Care Delivery System

Under healthcare reform, a number of strategies are being considered to contain healthcare costs. For example, primary care medical homes, Accountable Care Organizations, and the bundling of services under single payment amounts are strategies that have been identified as possible ways to improve care while aligning providers for the efficient delivery of healthcare services. Health care reform efforts are progressing rapidly, and may produce environmental changes that warrant some modifications to this Agreement. Therefore, the Hospital and the HSCRC staff agree to monitor such changes and to make changes in this Agreement, on a mutually acceptable basis, as needed in the future to accommodate or to comply with future developments that are mandated or permitted by law, regulation, or the final contract between CMMI and the State of Maryland, including any subsequent amendments thereto.

IX. Other Potential Modifications

A. Approved Regulated Revenue Modifications

Each Hospital may request a reevaluation of its Approved Regulated Revenue for any Rate Year by submitting its request in writing to the HSCRC staff and including the supporting rationale and documentation for its request to the HSCRC staff. The HSCRC staff will make a determination to approve, modify, or deny the request of the Hospital under this agreement. When it deems necessary, the staff will prepare a recommendation regarding the request, and the HSCRC will review the staff recommendation and render a decision. Similarly, the HSCRC may open discussions with the Hospital regarding modifications to the GBR constraint based on its ongoing review and monitoring of the Hospital's operations, performance, market share changes, and other factors. The HSCRC staff reserves the right to modify the GBR constraint in accordance with the terms of this agreement.

B. Approved Regulated Revenue Modifications Related to CON Projects

MedStar, on behalf of a Hospital, may apply for and receive a "Certificate of Need" (CON) approval to provide a new service or to undertake a major capital project. In such instances, the Hospital may elect to petition the HSCRC staff for an associated adjustment to the Hospital's Approved Regulated Revenue. The Hospital will be expected to demonstrate to the satisfaction of the HSCRC staff that it is unable to provide the new service or to fund the major capital project within its existing revenue constraints. Requests of this kind will be evaluated by the HSCRC staff on a case-by-case basis. However, the Hospital must recognize that the new All-Payer Model that will be established in the final contract between CMMI and the State of Maryland limits the total amount of hospital revenue that can be approved within the State for any given period of time, and that this constraint will require any approvals of additional revenue for individual hospitals to pass highly stringent tests of financial and clinical necessity and to be funded by reductions in the revenue approved for other hospitals.

The HSCRC staff will work with the relevant Work Group(s) and MHCC to develop and refine policies that will appropriately address the financial issues raised by CON projects and other capital and service expansions. The HSCRC staff will make recommendations to the HSCRC regarding any requests from the Hospital for additional revenues for these reasons, when necessary.

X.   Out-of-Area and Out-of-State Volumes and Revenues

Significant changes in out-of-state volumes and volumes from outside the Hospital's PSA and SSA have the potential to positively or negatively affect the success of the GBR model.   In FY 2013, approximately three percent (3.%) of the Hospital's total revenue came from non-Maryland residents.

Hospital	Out of State	
	Revenue	Percent
Franklin Square Hospital Center	$6,462,841	1.4%
Union Memorial Hospital	15,744,419	3.9%
Harbor Hospital	4,643,236	2.3%
Good Samaritan Hospital	7,527,450	2.5%
Southern Maryland Hospital Center	18,103,089	7.2%
MedStar GBR Hospital Total	$52,481,035	3.2%

Source: FY 2013 HSCRC abstract data

If this percentage changes materially during the term of this Agreement, the HSCRC staff and the Hospital will evaluate the causes of the change to ensure that the goals and objectives of this Agreement, the GBR model and the final contract between CMMI and the State of Maryland are not being undermined by such changes.

XI.   Readmissions, Quality and Reductions of Potentially Avoidable Utilization ("PAU")

The new All-Payer Model that will be established in the final contract between CMMI and the State of Maryland will include specific requirements for readmission reductions and quality improvements. In addition, the success of the new model depends on the effectiveness of the Maryland hospitals in achieving reductions in PAU in general and, in particular, for Medicare. By July 1, 2014, the HSCRC staff will establish targets for reductions in PAU. The achievement of these targets will be tied to payment in a way that is consistent with the Three Part Aim of improving care and reducing cost.

IN RE: THE PARTIAL RATE	*	BEFORE THE HEALTH SERVICES
APPLICATION OF	*	COST REVIEW COMMISSION
MCCREADY MEMORIAL	*	DOCKET: 2017
HOSPITAL	*	FOLIO: 2200
CRISFIELD, MARYLAND	*	PROCEEDING: 2390N

....

Staff Recommendation

July 12, 2017

Introduction

On May 19, 2017, McCready Memorial Hospital (the "Hospital") submitted a partial rate application to the Commission for a new Interventional Radiology/Cardiovascular (IRC) rate. The Hospital requests the new rate as several CPT codes are being reallocated from the Radiology- Diagnostic to the IRC rate center. The Hospital requests that the IRC rate be effective July 1, 2017.

Staff Evaluation

Based on Staff's review, the IRC rate based on the Hospital's projected data would $22.51 per minute, while the statewide median to provide IRC services is $79.11 per minute.

Recommendation

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

1. That an IRC rate of $22.51 per minute be approved July 1, 2017;

2. That the IRC rate center not be rate realigned until a full year of cost data has been reported to

   the Commission; and

3. That no change be made to the Hospital's Global Budget Revenue for IRC services.

IN RE: THE APPLICATION FOR   *   BEFORE THE MARYLAND HEALTH

ALTERNATIVE METHOD OF RATE   *   SERVICES COST REVIEW

DETERMINATION   *   COMMISSION

JOHNS HOPKINS HEALTH   *   DOCKET: 2017

SYSTEM   *   FOLIO: 2203

BALTIMORE, MARYLAND   *   PROCEEDING: 2393A

Staff Recommendation

July 12, 2017

I. INTRODUCTION

Johns Hopkins Health System ("System") filed an application with the HSCRC on May 30, 2017 on behalf of its member hospitals, Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, and Howard County General Hospital (the "Hospitals") for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC to participate in a revised global rate arrangement with the Priority Partners Managed Care Organization. Inc., the Johns Hopkins Employer Health Programs, Inc., and the Johns Hopkins Uniformed Services Family Health Plan. The System wishes to add Spine surgery services to the currently approved Bariatric surgery services under this arrangement. The System requests approval of the revised arrangement for a period of one year beginning August 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 System 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 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 ANDASSESSMENT 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 for bariatric services have been favorable and believes that the Hospitals can achieve a favorable experience under this arrangement for spine surgery services.

VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for Bariatric and Spine Surgery Procedures for a one year period commencing August 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	*	BEFORE THE MARYLAND HEALTH
ALTERNATIVE METHOD OF RATE	*	SERVICES COST REVIEW
DETERMINATION	*	COMMISSION
JOHNS HOPKINS HEALTH	*	DOCKET: 2017
SYSTEM	*	FOLIO: 2204
BALTIMORE, MARYLAND	*	PROCEEDING: 2394A

Staff Recommendation

July 12, 2017

I. INTRODUCTION

On June 30, 2017, the Johns Hopkins Health System ("System") filed a renewal application on behalf of its member hospitals Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center (the "Hospitals") requesting approval from the HSCRC to continue to participate in a global rate arrangement for cardiovascular, pancreas, bariatric surgery and joint procedures with Quality Health Management. The Hospitals request that the Commission approve the arrangement for one year effective August 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 System 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 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 payment, 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

Staff found that there was no activity under this arrangement for the last year. However,

staff believes that the Hospitals can achieve favorable performance under this arrangement.

VI.   **STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for cardiovascular, joint, pancreas, and bariatric surgery procedures for one year beginning August 1, 2017. The Hospitals must file a renewal application annually 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.
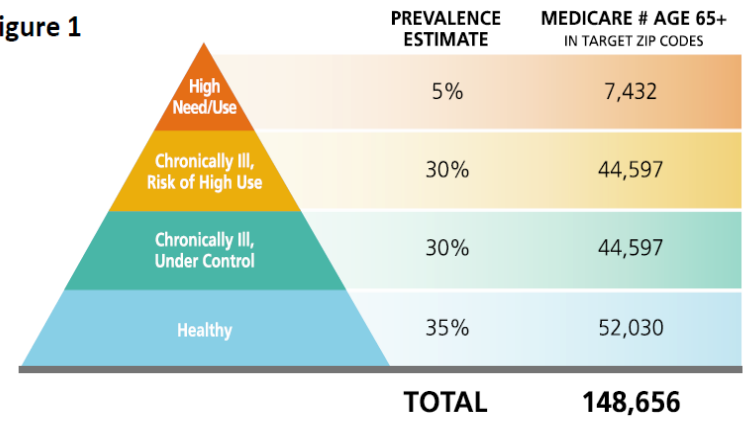
Nexus Montgomery Regional Partnership

HSCRC Update
July 12, 2017

Six Hospitals. Four Systems. One Community.

- Nexus hospitals have overlapping patient populations, including high-utilizing patients, and primary care referral sources

- Serve 1.3 million diverse residents in Montgomery and Prince Georges counties[*]

- Partnership with the Primary Care Coalition and other community-based organizations

- Targeting four high-risk and high-cost populations

- Partnership inspires ongoing evaluation of current and new collaborative opportunities

Figure 1

	PREVALENCE ESTIMATE	MEDICARE # AGE 65+ IN TARGET ZIP CODES
High Need/Use	5%	7,432
Chronically Ill, Risk of High Use	30%	44,597
Chronically Ill, Under Control	30%	44,597
Healthy	35%	52,030
TOTAL		**148,656**

[*] U.S. Census Bureau, 2010: Community Facts. Retrieved June 26, 2017, from https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#
[Figure 1] US Census Data, 2010: Medicare beneficiaries for the NM RP ZIP codes described in section 1a, geographic scope, Proposal for HSCRC

NEXUS MONTGOMERY

Nexus Service Area
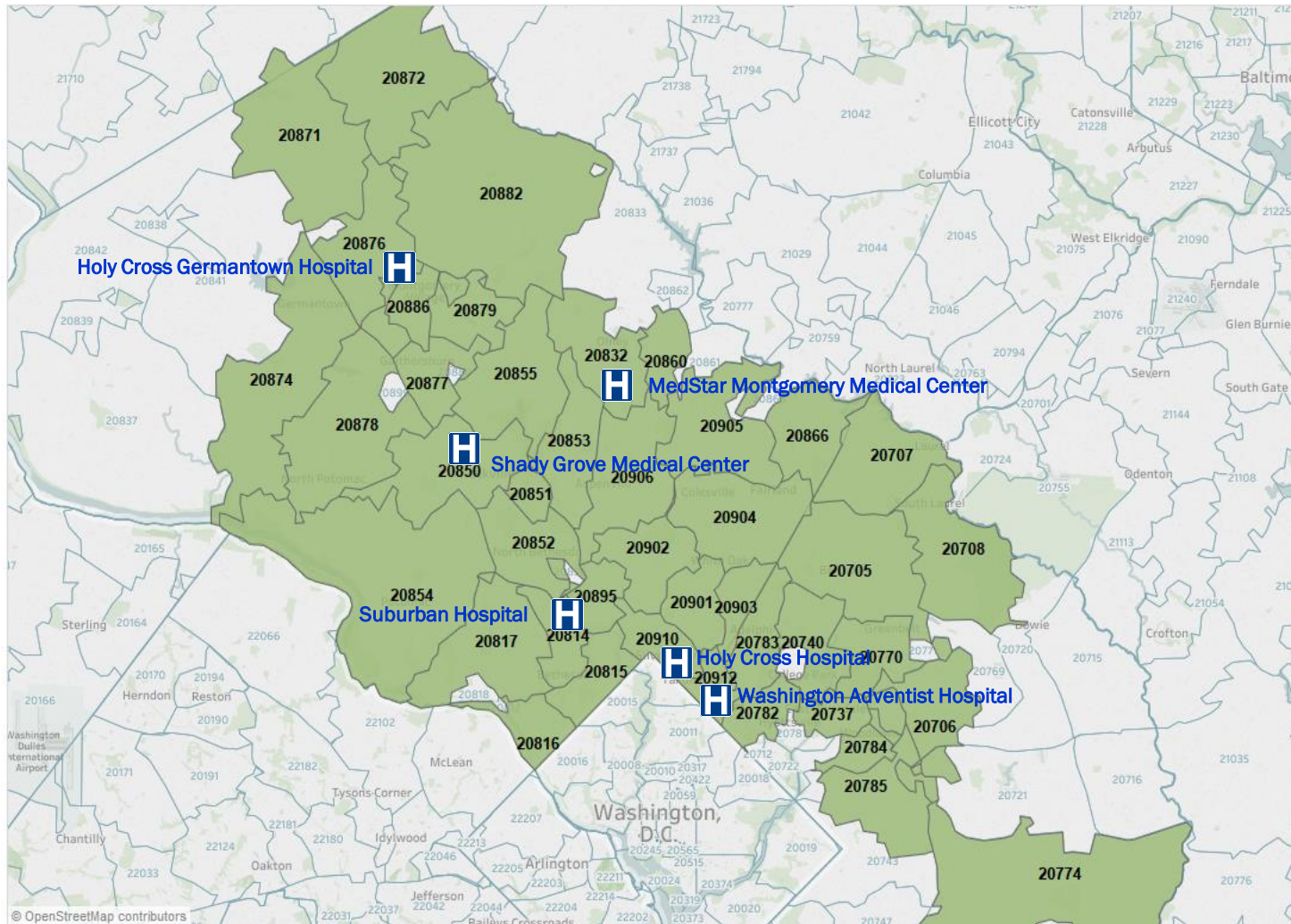
Shaded area indicates NMRP service area.

Nexus Hospitals & Board of Managers

Annice Cody

President
Holy Cross Health Network

Daniel Cochran

Vice President
Chief Financial Officer
Chief Operating Officer
Adventist Health Care, Shady
Grove Medical Center

Yancy Phillips, MD

Chief Quality Officer
Holy Cross Health

Diana Saladini

Director of Population Health &
Outpatient Services
MedStar Montgomery Medical
Center

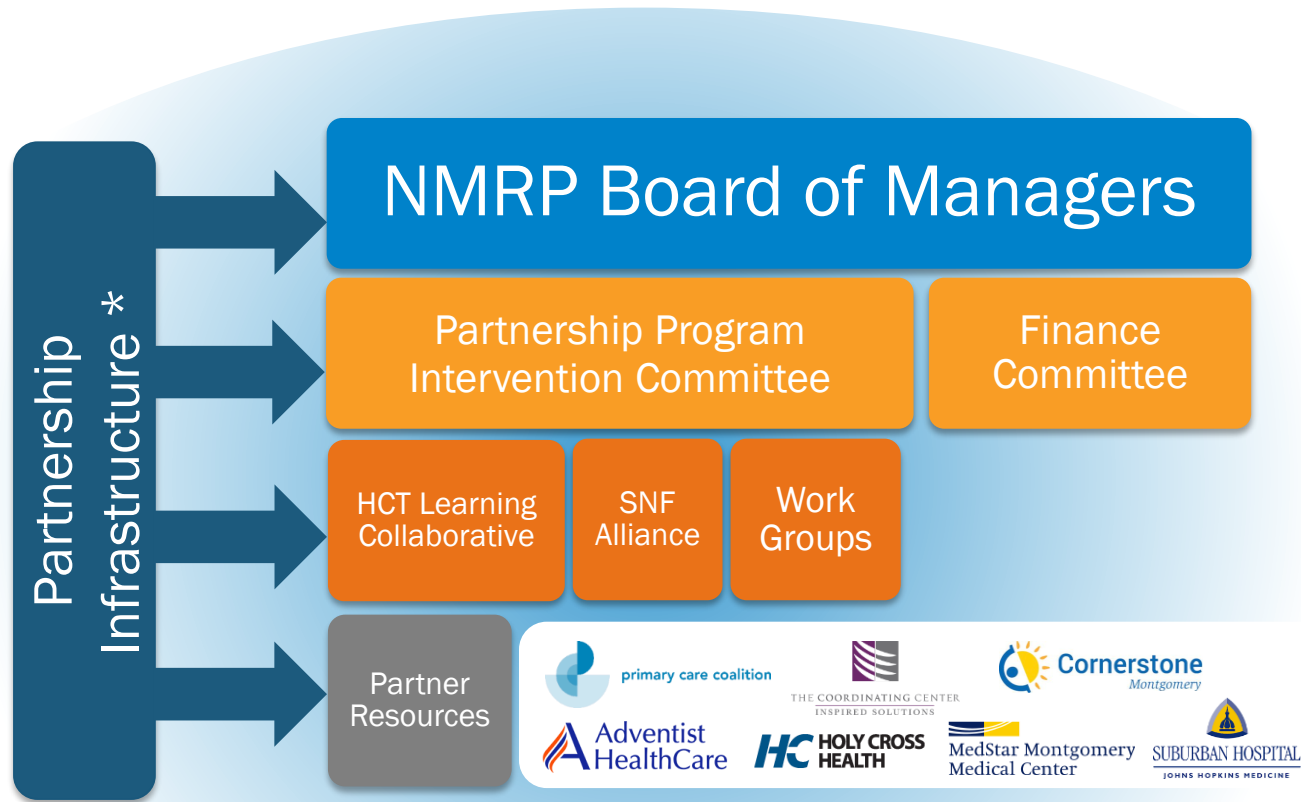**Monique Sanfuentes**

Director of Community Health
and Wellness
Suburban Hospital Johns
Hopkins Medicine

Erik Wangsness

President
Washington
Adventist Hospital

NEXUS MONTGOMERY

A Partnership of Hospitals and Community Organizations

Nexus Programs Overview

	Wellness and Independence for Seniors at Home (WISH)	Hospital Care Transitions	Uninsured / Project Access	Severely Mentally Ill / Behavioral Health
Goal	Stabilize health of older adults to reduce hospital admissions	Improve transitions from hospital-to-home	Connect uninsured to specialty care	Improve community based resources for severely mentally ill
Eligible Population	• 65+; Have Medicare • High to moderate risk of PAU within 120 days	• High to moderate risk of re-admission • High utilizers; high risk of re-admit or PAU	• Uninsured and without coverage eligibility • Prior hospital interaction within 30 days with referral for specialty care	• Behavioral Health diagnosis and in crisis, or Severe Mental Illness diagnoses • High utilizers; high risk of PAU
Services Offered	• Health coach with navigation to community-based services	• Hospital-based Care transition services • Connection to community-based services	• Specialty care visits scheduled by a case manager • Low or no patient responsibility	• Expanded Crisis House capacity • New Assertive Community Treatment Team (ACT) • Behavioral Health Integration Manager

NEXUS MONTGOMERY

Nexus Programs Overview

	Wellness and Independence for Seniors at Home (WISH)	Hospital Care Transitions	Uninsured / Project Access	Severely Mentally Ill / Behavioral Health
Population Metrics	Admissions, IP/OBS/ED costs, TCOC	Re-admissions (RARR)	Number and type of Specialty visits	IP/OBS/ED for high utilizing cohort

Operating Update	Start: September, 2016
	• Two care teams
	• 42 ILFs/ ~7k residents
	• Through May 2017:
	  • 304 Active clients
	  • 482 Passive clients
		Start: July, 2016
		• Program capacity independently increased at member hospitals
		• Joint training on Motivational Interviewing
			Start: August 2016
			• 199 uninsured patients treated
			• 619 specialty visits provided
				Crisis House:
				• House acquired and renovated
				• Expected to open mid-July
				
				ACT Team:
				• 48 clients
				• ACT Fidelity achieved June 2017

NEXUS MONTGOMERY

New and Potential Initiatives

PCP Engagement - Reduce PAU and TCOC by coordinating with PCPs for the care of high-risk, chronically ill patients

Status Feasibility study completed May 2017, phase II underway

SNF Alliance - Reduce re-admissions and TCOC by improving quality of care and care transitions with SNFs, post-discharge

Status June 2017 focus groups; July 26th Kick Off Meeting

Medical Respite Care for the Homeless - Reduce readmissions among high risk homeless individuals by providing staffed medical respite beds

Status concept under development, Nexus participation TBD

SMI Home Health/Nursing - Reduce PAU among SMI population by coordinating with in-home physical health providers

Status Concept under development with Cornerstone Montgomery

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

July 12, 2017

Health Services Cost Review Commission

4160 Patterson Avenue
Baltimore, Maryland 21215
(410) 764-2605
FAX: (410) 358-6217

This is a final recommendation for Commission consideration at the July 12, 2017, Public Commission meeting..

TABLE OF CONTENTS

FIGURES

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 Maryland[1]), 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

surplus[3]. 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 Aim[4], and the Institute of Medicine's (IOM's) Future of Nursing Report[5] 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://bhw.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingproject ions.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 about older RNs leaving the workforce and potential of 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, inadquate 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 explaination 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

Total Hospital NSP I Spending:
2013 & 2014 - $16 M
2015 - $17 M
2016 - $18 M

Legend: 2013 2014 2015 2016

Categories: Education and Career Advancement, Quality and Safety, Advancement of the Nursing Workforce, Other
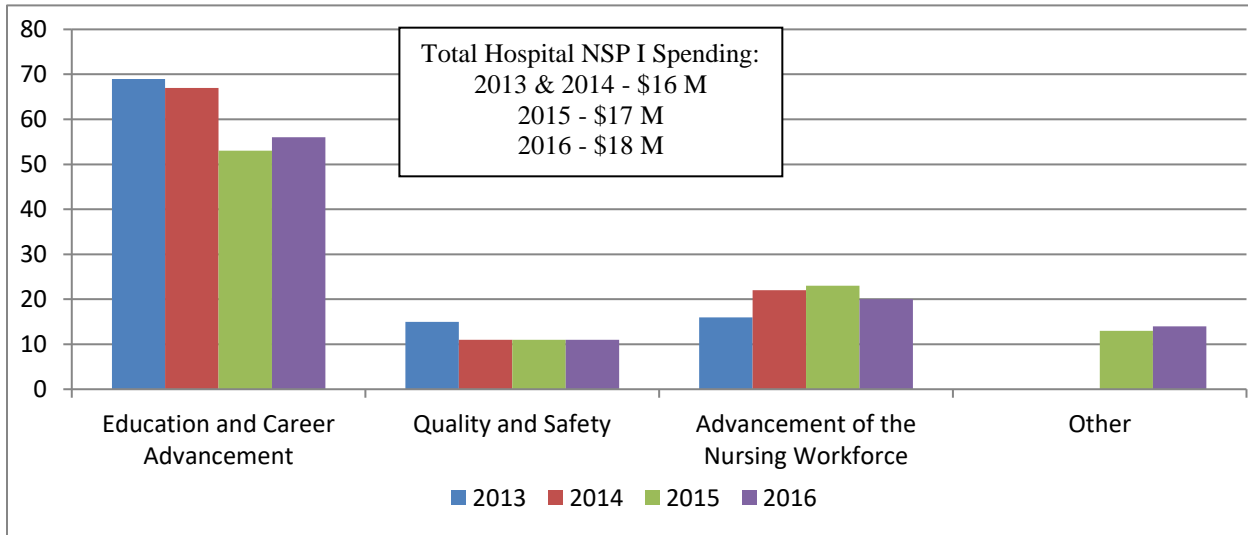
Figure 2: NSP I Top Funding Categories, FYs 2013 - 2016

More than 40% of NSP I (about $5 million annually) spent on RN residency and orientation programs

Legend: 2013 2014 2015 2016

Categories: Residency & Orientation, RN Tuition Assistance, Continuing Education, Nursing Excellence, Quality, EBP, Research, All Other Categories*

*Includes shared governance, nursing student tuition assistance, professional & technical certification, transitional RN programs, & other (2015 & 2016 only)

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 sited 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 attrition[6]. 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 5,800 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 a 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 RN[7]. 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] Jones, C. B. Revisiting Nurse Turnover Costs: Adjusting For Inflation. *JONA*. 2008; 38(1): 11-18.

Figure 3: Comparison of 1-Year Nurse Residency and No Nurse Residency Program Voluntary Turnover Rates, FY 2015 vs 2016
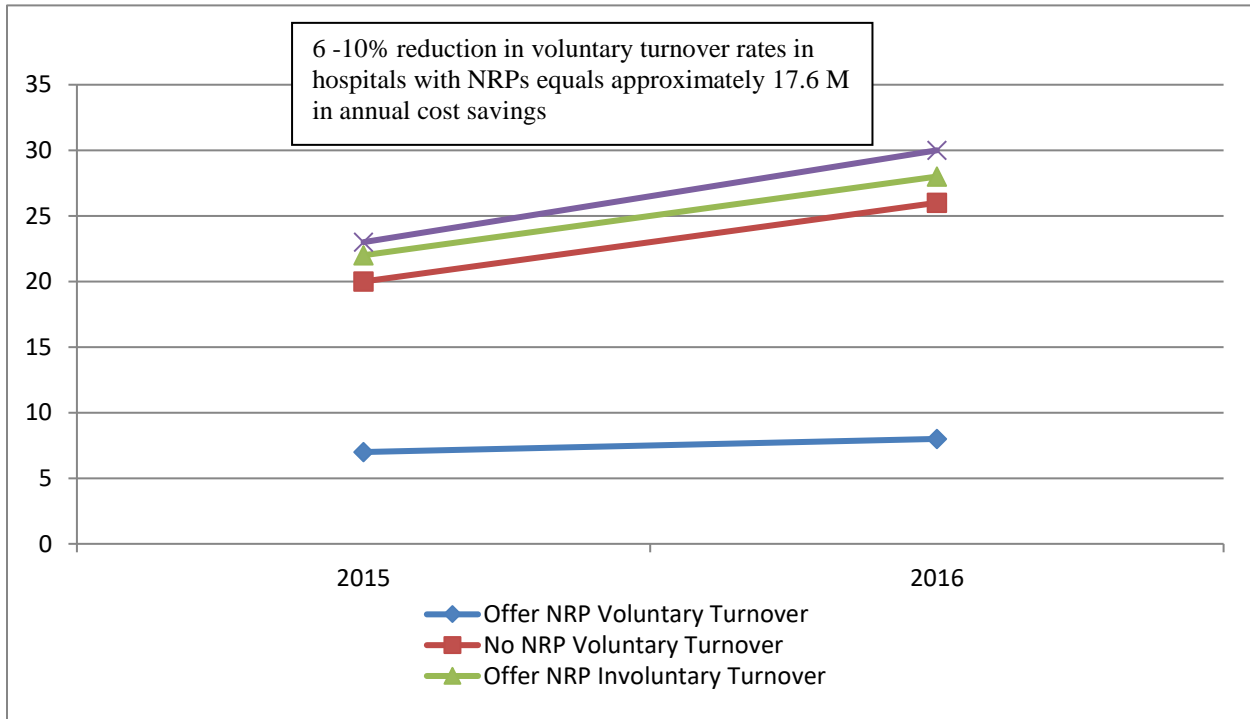
Decreasing Turnover Rates for Hard-to-Fill Critical Need Positions

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 fill[8]. 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 report[9] 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
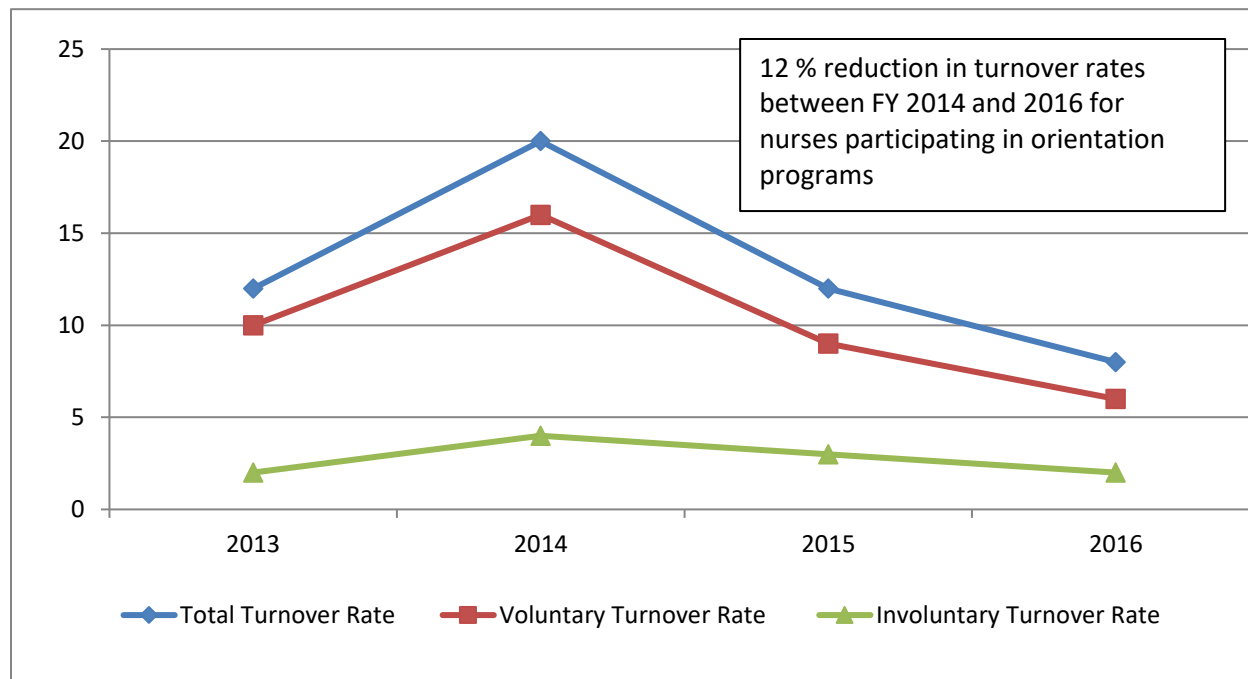
Preparing a Highly Educated RN Workforce

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 levels[10]. 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.Hscrc.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. For example, NSP II programs that are helping to facilitate this movement are the newly-funded Associate-to-Bachelor's nursing programs that facilitate duel 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 programs[12] 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 patients[13]. Hospitals employing certified wound care nurses were found to have better RN pressure ulcer assessment and prevention practices and lower rates of pressure ulcers[14]. 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

*Does not include succession planning, nursing excellence and classes identified as other

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
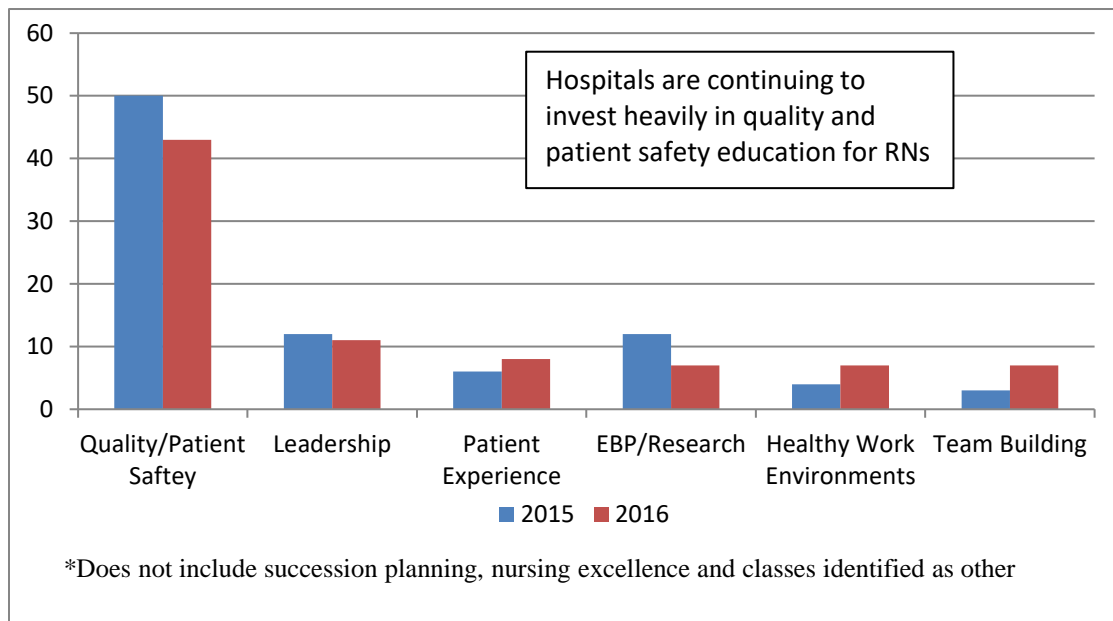
---

[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-Beringer, 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

Between FY 2014 and 2016, 4% reduction in vacancy rates for RNs

— RN Vacancy — RN Voluntary Turnover — RN Involuntary Turnover
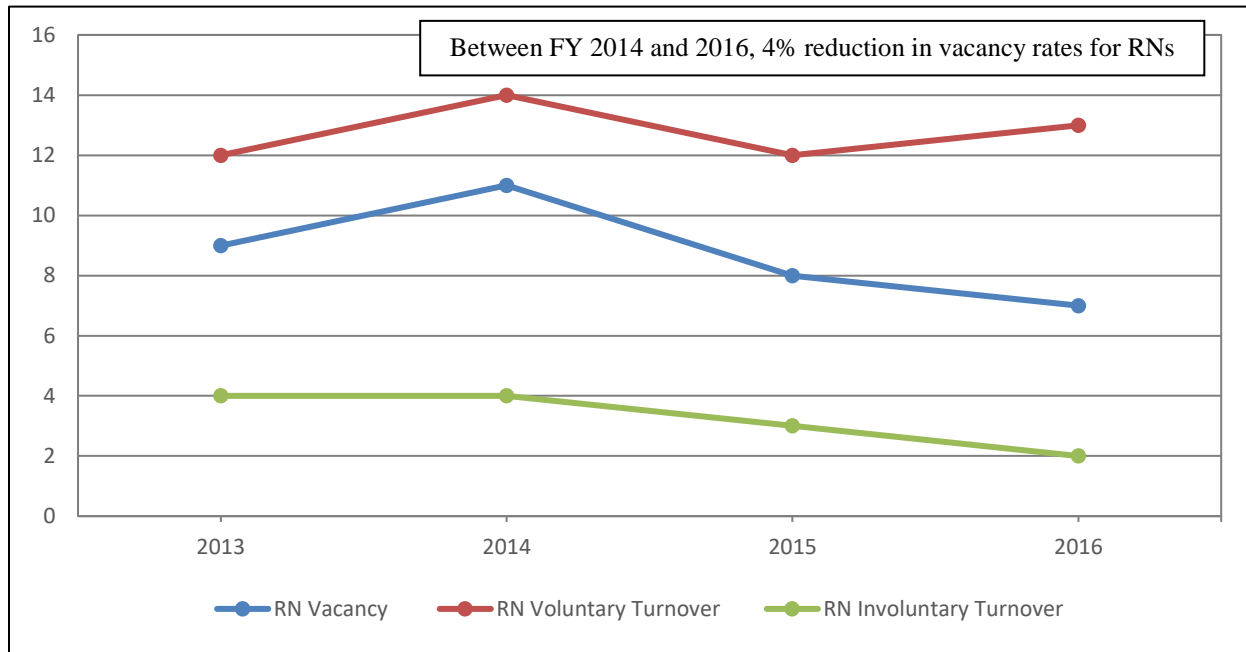
Recommendations for the NSP I for FY 2018 - 2022

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 Regions. 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 2030[15]. 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 <u>hospital-based</u> 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.

Final Recommendation for the Uncompensated Care Policy for Rate Year 2018

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.

HSCRC
Health Services Cost
Review Commission

The UCC Methodology

- The HSCRC uses a logistic regression methodology 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 current Hospital Fiscal Year's financial audited UCC levels and the hospitals estimated UCC levels is used to determine hospital-specific adjustments.

- The RY 2018 Statewide UCC amount is set at 4.51 percent.

HSCRC
Health Services Cost
Review Commission

Results of the Model

The results of this model is contained in Appendix 1 of the final recommendation. This shows hospital-specific UCC adjustments.

Appendix II. Table 1. shows UCC reduction rate by hospital between FY 2015 and FY 2016. Reduction rates vary by hospital.

Appendix II. Table 2. 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. Medicare and other payers accounted for 16.31 and 6.31 percent of UCC, respectively.

HSCRC
Health Services Cost
Review Commission

RECOMMENDATIONS

Staff recommends the following for RY 2018:

- Continue to do 50/50 blend of FY16 audited UCC and the hospitals estimated UCC levels.

- Reduce statewide UCC provision in rates from 4.69 % to 4.51 % effective July 1, 2017.

HSCRC
Health Services Cost
Review Commission

Final Recommendations for the Uncompensated Care Policy for Rate Year 2018

July 12, 2017

Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215
(410) 764-2605
FAX: (410) 358-6217

Table of Contents

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 Ace

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.

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

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

3

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.

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%

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 Chesepeake 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. The FY 2016 Percent UCC from the RE Schedule of 8.17% for Univ. of Maryland Medical Center Midtown Campus includes write-offs for chronic patients.

APPENDIX II. WRITE-OFF DATA SUMMARY STATISTICS

The table 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%

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 Chesepeake 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 table 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%

Maryland Hospital Association

Logistic Regression Methodology (1 of 5)

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

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

16

Maryland Hospital Association

1

Logistic Regression Methodology (2 of 5)

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

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)

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

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

Maryland Hospital Association

3

Logistic Regression Methodology (4 of 5)

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

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

Maryland Hospital Association

4

19

Logistic Regression Methodology (5 of 5)

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

| | | | | | | | | | A1 | A2 | B | C | A1*B*C | A2*B*C |
| | | | | | | | | | | | | | Expected $UCC | Expected $UCC |
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			(Avg. Charge)	(Actual Charge)
00000001	A	90	OP	Blue Cross	$ -	0	$ 700	$ 700	23.5%	15.82%			$ 26.02	$ 26.02
00000002	A	20	IP	Medicare	$ 250	1	$ 4,000	$ 3,000	15.6%	6.93%			$ 32.43	$ 43.24
00000003	A	55	IP	Medicare	$ 150	1	$ 2,000	$ 3,000	19.2%	6.93%			$ 39.92	$ 26.61
00000004	B	55	IP	Medicare	$ -	0	$ 5,000	$ 5,000	19.2%	6.93%			$ 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%

Maryland Hospital Association

5

CRISP Vision, Mission & Principles

- ## **Our Vision**
  - *To advance health and wellness by deploying health information technology solutions adopted through cooperation and collaboration.*

- ## **Our Mission**
- *We will enable and support the healthcare community of Maryland and our region to appropriately and securely share data in order to facilitate care, reduce costs, and improve health outcomes.*

Our Guiding Principles

1. *Begin with a manageable scope and remain incremental.*

2. *Create opportunities to cooperate even while participating healthcare organizations still compete in other ways.*

3. *Affirm that competition and market-mechanisms spur innovation and improvement.*

4. *Promote and enable consumers' control over their own health information.*

5. *Use best practices and standards.*

6. *Serve our region's entire healthcare community.*

What is the Integrated Care Network?

In 2014, HSCRC & DHMH established a Care Coordination Work Group to offer advice on how hospitals, physicians, and other key stakeholders can work together with government leaders on effective care coordination to support the Maryland All-Payer model. The ICN initiative grew from several of the workgroup's recommendations, made in Spring 2015:

4. Tap CRISP to organize data	5. Build data infrastructure and identify target populations	6. Designate CRISP to identify consistent information that can be shared among provides and support different care management platforms
Designate CRISP to serve in the role of a "general contractor" in the data synthesis, data acquisition, cleaning and storage process. By engaging and overseeing the work of various "sub-contractors," or vendors, CRISP can also support and lift other promising care coordination initiatives already underway.	Build and secure a data infrastructure to facilitate the identification and risk stratification of individuals who would benefit most from care coordination. This will permit the identification of the patients with the most complex needs. The investment in data acquisition, along with a parallel effort to organize and synthesize the data already in hand, will allow acceleration of the process of creating individualized care profiles in a standardized format.	Enhance data sharing capabilities already built into the CRISP Health Information Exchange (HIE). This holds the promise of ultimately connecting the various provider and payer care coordination initiatives.

The Venues for ICN

The goals of ICN are organized around the "venue" where information is provided and used. Broadly speaking, information and coordination is needed:

- At the Point of Care
- By Care Managers & Coordinators
- By Population Health Teams
- For Patients

As specific Care Redesign Programs are being developed, a fifth venue has been added. Information is needed:

- By Program Administrators, Provider Executives, and Policy Makers

FY16: Planning & Foundational Technology

1. Turned HSCRC Care Coordination Workgroup recommendations into detailed plan, assembled initial team

2. Established ICN steering committee with representatives across the Maryland healthcare industry, accountable to CRISP board

3. Devised strategy to leverage federal 90/10 matching funds

4. Expanded existing ambulatory connectivity efforts to focus on deeper clinical integration

5. Established "Patient Care Overview" – a common dashboard of high-value care coordination information accessible to all clinicians and care managers via CRISP portal

6. Implemented "Smart Router" – novel technology to route clinical data from hospitals and practices to care managers, ACOs and payers

Query Portal – Patient Care Overview

Rollins, Jenny K Female 12/20/1978 (37 yrs) (Community ID:3344223)

2985 Oxford Court, Columbus, MD 39701

| Summary | More Patient Information | Patient Groups | eHT HIE Worklist | Patient Care Overview | Interstate PDMP |

Organizations Subscribed to this Patient via CRISP's Encounter Notification Service

Organization	Care Program	Care Manager	Primary Care Provider
Name: Bowie Health Center Phone Number:	N/A	N/A	N/A
Name: Carroll Family Medicine Phone Number:	N/A	N/A	dummy

Care Alerts

Sender	Date	Alert
University of Maryland Medical Center	2016-08-18	8/18/2016 3:19 PM KK Usual presenting history: intoxicated, exhibiting loudly negative mood, with or without SI. His usual pattern is to self present to ED, typically with high BAL, for treatment of severe depression/SI after an event that precipitated heavy alcohol intake. With rest/ food in the ED, even prior to evaluation, he often reports more positive mood and freedom from depressive symptoms/ SI, and subsequently he requests discharge from ED. Even if he initially undergoes evaluation and considers placement, he will often request discharge prior to placement. Violence / suicidality propensity: History of arrest for armed robbery/ assaults/ possession with intent. Most recent event of violence noted to be 4 years ago. Atypical presentation features or indicators for hospitalization: If pattern differs significantly from that described above. Collateral / community resources: Long history of Omni House accommodating him. Contact info there:_____. Other key notes/Recommendations: Allow patient to wake on his own. Don't rush placement as he will often change his mind about admission. He self presents and can be discharged with improved mood/ symptom presentation.

Recent Encounter Events

Date	Facility	Event
2016-10-03	Crofton Convalescent & Rehab Center	ADT 01 Emergency
2016-10-03	Prince George's Hospital Center	ADT 01 Emergency
2016-10-03	VNA of Maryland	ADT 03 Inpatient
2016-10-03	Frederick Memorial Hospital	ADT 04 Emergency
2016-10-03	Carroll Health Group	ADT 06 Inpatient
2016-10-03	Health EC	Outpatient Appointment check-in
2016-09-22	Bon Secours Hospital	ADT 03 Inpatient
2016-09-19	Bon Secours Hospital	ADT 01 Inpatient

Chronic conditions and visit data are derived from monthly hospital inpatient and outpatient administrative submissions.

Chronic Conditions

Last primary payer group	05
Last secondary payer group	08
Is high utilizer	true
Has asthma	true
Has COPD bronchiectasis	true
Has kidney disease	true
Has diabetes	true
Has hearth failure	true

Visit Information

Visit information from Johns Hopkins Bayview Acute Care on 2016-07-21

1. **Flag Patient Care Management Relationships:** Notify CRISP for each patient who is enrolled/dis-enrolled in a care management program, including contact information for the patient, care coordinator, and primary care provider.

2. **Share Care Planning Data**: Whenever care management information appropriate for sharing is created or updated for a participating patient, send a copy of the information to CRISP.

3. **Use In-Context Alerts:** Create an "alert mechanism" in your hospital EHR so your clinicians know when a person who is in care management has shown up, with easy access to the full data.

4. **Use CRISP Reports:** Incorporate CRISP reports and compiled data into the work of the population health team. (For patient identification and performance measurement.)

This approach aligned with broader interventions and programs in place to support the high need / complex patients.

Examples of Care Alerts

"Mr. Jones has dementia, diabetes, and COPD. His baseline, every day exam is notable for wheezes and rales and there is a stable finding of a LLL 'infiltrate' on his CXR. Typically his COPD exacerbations are due to anxiety and to not using his maintenance medications. Please securely text his primary care physician, Dr. Smith, if admission or testing is considered."

"Mrs. Franklin's pain medications are managed entirely by Dr. Dolor. Securely text him prior to prescribing any controlled substances."

"Mr. Stevens has CHF exacerbations that typically and rapidly respond to 40 mg IV furosemide in the ED with close follow up the next day in the office. Call/text Dr. Diur FIRST at 111-333-4444 if you are considering admission."

"This patient has a MOLST. Please note: DNR, DNI, no feeding tube, no antibiotics."

FY17 Results at a Glance

- 70% of high needs Medicare patients now have a known PCP listed with CRISP (40% at beginning of FY17)

- 22% of these patients have a care coordinator noted in CRISP (<1% at beginning of FY17)

- There are over 15,000 care alerts in CRISP, sourced from 26 hospitals

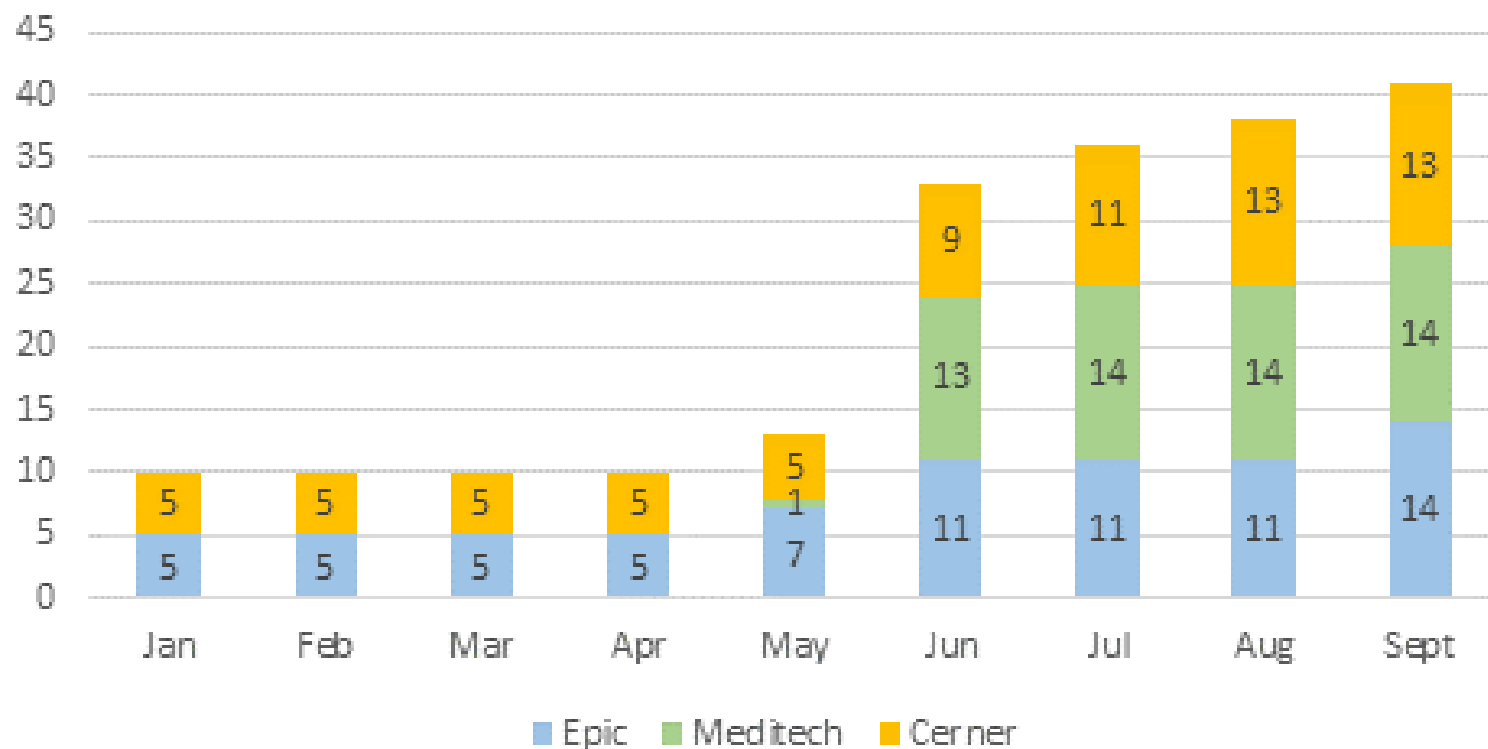- There are 3,100+ care alerts for high needs Medicare patients

High Needs With Care Plan or Care Alert in CRISP

~400

~3,100
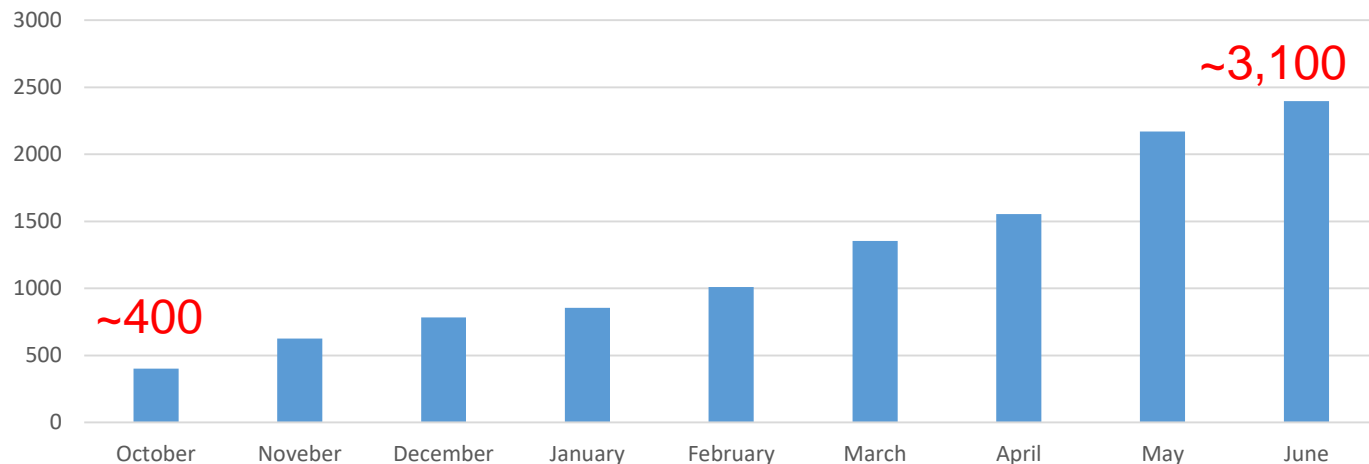
Total Number of Hospitals Live in Context by Integration

Other Highlights

- 2,000 ambulatory providers now sending clinical data to CRISP, 5,000 sending "encounter data"

- More than 90,000 documents have been sent in real-time to care management organizations, ACOs and payers using smart router

- CRISP integrated with care management software at 14 organizations

- 28 healthcare organizations sending care alerts or care plans for patients in a care management intervention

- Landed comprehensive, identified Medicare claims data and prepared to launch analytics platform for hospitals and HSCRC, supporting Care Redesign and Phase 2

- Refactored analytics capability to reduce the cost of processing and reporting on HSCRC casemix data by 40%

- Board approved CRISP role of Care Redesign administrator and HCIP and CCIP launched

FY18 Plan & Budget

Expectations for FY18

Prioritize	**Go Slow – Low Spend**	**No Spending**
1. Operationalize successes – e.g. Care Alerts, info at the point-of-care, PaTH	1. Ambulatory connectivity for CCDAs	1. Standardizing interoperable care plan elements
2. Expand ambulatory connectivity for encounter data and operationalize panel management at scale	2. Allowing patients more granular consent choices	2. Standardizing health risk assessments
3. Publish CCLF Medicare reports	3. Sending alerts to patient families/proxies	3. Publishing weekly leading indicator reports from ADTs
4. Refactor/improve working technology, such as with an API gateway, improved matching	4. Capture encounter data from community resources, such as Meals of Wheels	4. Expanding capacity for electronic clinical quality measures
5. Support learning collaboratives and ways to improve use of tools	5. Deploying new basic care management software	
6. Offer core services to 42 CFR part 2 behavioral health providers		

New shared care coordination infrastructure was always expected to be expensive, but to cost much less than the aggregate of each hospital pursuing infrastructures on its own. The original budget estimate emerging from the Care Coordination Workgroup was that shared infrastructures would cost $51M to build, over a two to three year period. The estimates was especially sensitive to the uncertain cost of achieving broad ambulatory connectivity.

Original Implementation Estimate, April 2015	
Build/secure data infrastructure	$8,500,000
Data sharing	$4,200,000
Collaboration (training, support, TA)	$7,000,000
Provider Connectivity	$31,000,000
TOTAL	**$50,700,000**

Ongoing operations was expected to cost between $8M and $28M annually, with the cost of shared care management software the biggest unknown.

Original Annual Ops Estimate, April 2015	
Low Range	High Range
$8,000,000	$28,000,000

The first detailed "Planning Budget" broke the project into "workstreams" as shown below. An additional $24M was reserved for new Reporting & Analytics capabilities, which were expected to include distribution of standard Medicare data based reports to hospitals and ambulatory providers.

First Detailed Budget, November 2015	
Ambulatory Connectivity	$31,400,000
Data Router	$2,200,000
Clinical Portal Enhancements	$2,400,000
Alerts & Notifications	$3,700,000
Reporting & Analytics	$23,700,000
Basic Care Management Software	$3,900,000
Practice Transformation	$8,000,000
TOTAL	$75,300,000

Annual operations costs were not projected in the first detailed budget. However, the growing expectation was that the state would not be using a single mammoth care management software for all Medicare beneficiaries, so costs would be lower than originally predicted by the Care Coordination Workgroup.

Spending after Two Years

After two years and $33M of spending, a third year of the initiative is planned.

ICN BUDGET SUMMARY								
		2016		2017 Current Estimate		2018 Budget Proposal v5/9		3-YEAR TOTAL
Workstream	Original Full Project "Planning Budget"	FY2016 State Actual	FY2016 Federal Actual	FY2017 HSCRC State Forecast	FY2017 Federal Funding Forecast	FY2018 State Proposal	FY2018 Federal Funding Forecast	3-Year Forecasted State & Federal Total
Point of Care	$26,309,796	$1,315,146	$267,460	$4,475,164	$1,201,000	$1,094,500	$2,475,000	$10,828,270
Care Managers & Coordinators	$2,731,936	$361,068	$0	$1,034,813	$0	$1,468,500	$304,000	$3,168,381
Population Health Teams	$7,049,757	$1,506,624	$0	$2,241,427	$1,457,000	$1,485,000	$0	$6,690,051
Patients	$0	$0	$0	$0	$0	$368,500	$737,000	$1,105,500
Common Infrastructure	$15,467,781	$1,364,075	$114,626	$3,322,030	$1,096,000	$924,000	$425,000	$7,245,731
Sub-Total	$51,559,270	$4,546,913	$382,086	$11,073,434	$3,754,000	$5,340,500	$3,941,000	$29,037,933
Administrators & Policymakers	$23,737,353	$4,756,234	$0	$8,314,145	$0	$4,642,000	$0	$17,712,379
TOTAL	$75,296,623	$9,685,233		$23,141,579		$13,923,500		$46,750,312

FY18 Budget

Venue	ICN (State)	IAPD (Federal)
Point of Care	$1,094,500	$2,495,000
Care Mgrs & Coordinators	$1,468,500	$314,000
Pop Health Teams	$1,485,000	$0
Patients	$368,500	$737,000
Common Infrastructure	$924,000	$425,000
Subtotal	**$5,340,500**	**$3,971,000**
Administrators & Policymakers	$4,642,000	-
Total	**$9,812,500**	**$3,971,000**
Combined	**$13,923,500**	

FY18 Budget – What's Inside?

Medicare Data Analytics (30%)	Care Redesign Administration (23%)
Point Solutions (17%)	Program/Project Management (13%)
Infrastructure/ Ops (12%)	Quality Assurance (5%)

Supporting All Payer Model

Infrastructure Goal: It Just works!
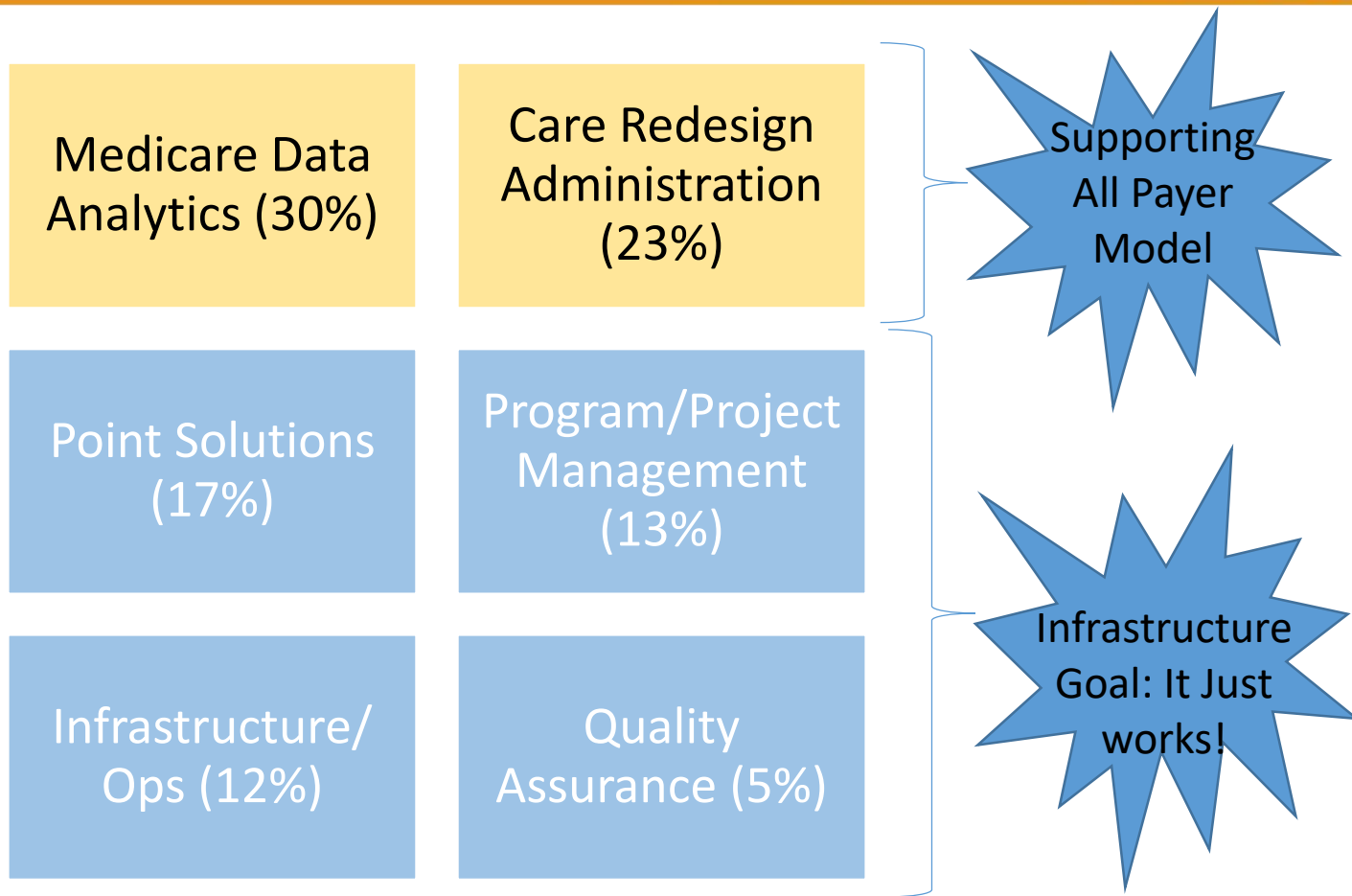
Percentage of ICN (state) dollars only.

Expected Operations Expense

With growing clarity as to the infrastructures which will be supported at the end of the buildout, the range of the expected operations cost is well below that originally predicted. While many variables remain, the PMPM cost of care management software remains a significant point of uncertainty.

Annual Ops Estimate, February 2017		
	Low	**High**
Infrastructure	165,000	570,000
Basic Care Management Software	238,000	1,192,000
Ambulatory Connectivity	301,000	971,000
Router	120,000	392,000
In-context Alerts	129,000	661,000
Reporting & Analytics	1,020,000	1,607,000
Total:	**1,973,000**	**5,393,000**

ICN User Stories

Based on User Stories from 07/18/2016

Updated 03/18/2017

Goal for The Point of Care

Our aim is that in every hospital in Maryland, when a patient presents for treatment, the clinician knows if her patient is in a care management program without having to log into a separate system. She has contact information for the coordinator of this patient's care team and other engaged clinicians, regardless of whether those individuals are employed by her hospital. And she has efficient means to contact other care team members, including by secure text message. She is able to see who the PCP is and when the patient last visited. She is able to review the most current care plan if one exists *and is aware of special resources available for her patient.* *And if a peer clinician has made important notes about this patient – a "care alert" – she has those at her fingertips.*

Goal for Care Managers / Coordinators

CRISP aims to offer care managers access to rich, real-time data for patients who have been enrolled into care management, whether the care manager is part of a hospital-based intervention, and ambulatory ACO, a payer, or otherwise. Whether a care manager uses our lightweight care management software or a system maintained locally, CRISP will feed the system records to help him track and coordinate a patient's care at other hospitals, the primary care practice, specialists, and long-term care. He is notified when a patient under his care has an encounter elsewhere, including at ambulatory practices. *He can identify gaps and redundancies in care. He is able to coordinate with community resources.* *And, he knows that his own contact information, critical notes and care planning instructions are shared with others when appropriate, and is even available to others via secure text message.* *His care management documents and health risk assessments follow statewide best-practice, making his documentation easy for others to understand.*

Goal for the Population Health Team

CRISP aggregates data, combining the hospital's own records with those of peer hospitals and Medicare claims. For the population health team, CRISP tools make identification of at-risk patients more comprehensive and allow coordination between hospitals as to which is taking point for a particular patient. The population health team knows who among its patient population is a shared patient, who is considered at risk *according to common criteria developed by the hospitals,* *and what portion of those patients are enrolled in care management.*

Total-cost-of-care and episode-of-care reports show the team the progress by region and by hospital service area. Using a Maryland-specific Medicare Limited Data Set, CRISP provides

reports to the population health team so they can understand line-of-service performance in comparison with peers, analyze non-hospital costs incurred at partner organizations, and examine total incurred costs at the physician level. Using aggregated casemix files, the population health team tracks performance on quality metrics (such as PAUs and MHACs) each month. CRISP's weekly "early indicator" reports show readmissions and census information for the prior week.

If the hospital's team possesses sophisticated tools to conduct such analysis, CRISP's main role is to facilitate the hospital receiving the raw Medicare data and the complete casemix data for any patient of the hospital. The CRISP infrastructure for managing patient consent is an asset in obtaining the data in this manner, giving the stakeholders who release the data confidence that patient privacy is being protected.

Goal for Patients

Most of the patient engagement required is by the provider community and not CRISP. However, we will engage patients around consent. When a patient visits his ambulatory provider, he will be informed at least once a year that the practice participates in a health information exchange. He will always be able to learn more information from a notice of privacy practices, or from an easy to navigate CRISP web site. If he chooses not to participate, the process to opt-out will be easy, and he will have the option to exclude only records from certain providers or certain types of providers.

When a patient is enrolled in a care management program, he will understand that his records will be shared among his care team, and he will approve of the activity before it happens. If he so chooses, he will be notified when a clinician references his medical records from the HIE. He can request that his healthcare proxy, such as his daughter, be notified when he has a hospital encounter. He can upload his advance directive online, and CRISP will make it available at the point of care.

New – Goal for Administrators/Policy Makers

CRISP will supply Maryland hospital CFOs or members of a hospital's finance team with thoughtful, actionable analytics, including total-cost-of-care and episode-of-care reports. The hospital CFO can use CRISP reports to understand her hospital or system's standing regionally and by hospital service area. Using a Maryland-specific Medicare Limited Data Set, she can use CRISP reports to understand line-of-service performance in comparison with peers, analyze non-hospital costs incurred at partner organizations, and examine total incurred costs at the physician level. The data helps the CFO and her team design and manage hospital initiatives under state programs such as the Care Redesign Amendment.

CRISP will support Maryland health policymakers charged with ensuring Maryland's healthcare system delivers high-quality, reasonably priced care, particularly for patients with the greatest and/or most complex needs. We will do this by serving as a convener of industry stakeholders on issues that align with CRISP's mission and in accordance with the recommendations of the HSCRC's Care Coordination Workgroup. Within the mandate approved by CRISP's board, CRISP will serve the state as the administrator of programs under the Care Redesign Amendment.

TO: Commissioners

FROM: HSCRC Staff

DATE: June 14, 2017

RE: Hearing and Meeting Schedule

August 9, 2017   To be determined - 4160 Patterson Avenue
                                HSCRC/MHCC Conference Room

September 13, 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://hscrc.maryland.gov/commission-meetings-2017.cfm.

Post-meeting documents will be available on the Commission's website following the Commission meeting.