

State of Maryland  
Department of Health

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Vice-Chairman

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John M. Colmers

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**Health Services Cost Review Commission**

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**546th MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION  
December 13, 2017**

**EXECUTIVE SESSION**

**9:30 a.m.**

(The Commission will begin in public session at 9:30 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. 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)

**PUBLIC SESSION**

**1:00 p.m.**

1. Review of the Minutes from the Public Meeting and Executive Session on November 13, 2017
2. Executive Director's Report
  - a. Mid-Year Update Factor
  - b. Update on Policy White Paper

**3. New Model Monitoring**

4. Docket Status – Cases Closed
  - 2405N – Atlantic General Hospital
  - 2408A – Johns Hopkins Health System

**5. Docket Status – Cases Open**

- |   |   |
|---|---|
| 2399A – Priority Partners                     | 2402A – MedStar Medicare Choice               |
| 2403A – MedStar Family Choice                 | 2406A – Maryland Physicians Care              |
| 2407A – Johns Hopkins Health System           | 2409A – University of Maryland Medical System |
| 2410A – University of Maryland Medical System |   |
| 2411A – University of Maryland Medical System |   |
| 2412A – University of Maryland Medical System |   |
| 2413A – University of Maryland Medical System | 2014N – Garrett Regional Medical Center       |
| 2415A – Johns Hopkins Health System           | 2416A – Johns Hopkins Health System           |
| 2417A – Johns Hopkins Health System           | 2418A – Johns Hopkins Health System           |

- 6. Recommendation for Revenue Increase for Anne Arundel Medical Center**
- 7. Final Recommendation on Updates to the QBR Policy for RY 2020**
- 8. Confidential Data Request**
- 9. Legal Report – Adoption of Proposed Regulations to Amend Full Rate Review Process**
- 10. Joint Chairman’s Report on Emergency Department Overcrowding**
- 11. Update on CRISP Activities**
- 12. Hearing and Meeting Schedule**

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

**November 13, 2017**

Upon motion made in public session, Vice Chairman Antos 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 10:11a.m. and held under authority of §3-103 and §3-104 of the General Provisions Article.

In attendance in addition to Chairman Sabatini were Commissioners Antos, Bayless, Colmers, Kane and Keane.

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

Also attending were Jack Myer, Stu Gutterman, Deborah Gracey, and Eric Lindeman, Commission Consultants, and Stan Lustman and Adam Malizio Commission Counsel.

**Item One**

Ms. Kinzer and the Commissioners discussed various personnel matters.

**Item Two**

Ms. Kinzer and the Commission discussed the progression of the Model and the vision going forward. The discussion was facilitated by Mr. Myer.

### **Item Three**

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

### **Item Four**

Ms. Kinzer updated the Commissioners on the federal clearance process.

The Closed Session was adjourned at 1:02 p.m.

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

**November 29, 2017**

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

1. Comfort Order– Authority General Provisions Article, §3-305(b)(6)

The Closed Session was called to order at 4:04 p.m. and held under authority of §3-305(b)(6) of the General Provisions Article.

Participating by telephone in addition to Chairman Sabatini were Commissioners Antos, Bayless, Colmers, and Kane.

In attendance representing Staff were Donna Kinzer, Chris Peterson, Allan Pack, Jerry Schmith, and Dennis Phelps. Stan Lustman and Adam Malizio Commission Counsel were also present.

Participating by telephone and representing the University of Maryland Medical System (UMMS) were Henry J. Franey, Executive Vice President & Chief Financial Officer UMMS, Michele Lee, Senior Vice President Corporate Finance and System Controller UMMS, and Alicia Cunningham, Senior Vice President Corporate Finance and Revenue Advisory Services UMMS. Also participating were Sherry B. Perkins, Executive Vice President and Chief Operating Officer of Maryland Capital Region Health (MCRH), Bill Brocius, Chief Financial Officer MCRH, and Brian Strum, Senior Director Financial and Capital Planning MCRH.

**Item One**

Jerry Schmith, Director Revenue & Regulation Compliance, presented staff's recommendation for the Comfort Order request by UMMS of approximately \$195.4 million associated with construction of future UCRH facilities to replace the University of Maryland Prince George's Hospital Center and University of Maryland Laurel Regional Hospital.

After discussion, the Commission voted unanimously to approve Comfort Order request of UMMS. The Commission adjourned the closed session back into public session where the vote was ratified.

The Closed Session was adjourned at 4:20 p.m.

**MINUTES OF THE**  
**545th MEETING OF THE**  
**HEALTH SERVICES COST REVIEW COMMISSION**  
**November 13, 2017**

Chairman Nelson Sabatini called the public meeting to order at 10:11 a.m. Commissioners Joseph Antos Ph.D., Victoria Bayless, John Colmers, Adam Kane, and Jack C. Keane 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 1:06 p.m.

**REPORT OF THE NOVEMBER 13, 2017 EXECUTIVE SESSION**

Mr. Dennis Phelps, Associate Director, Audit & Compliance, summarized the minutes of the November 13, 2017 Executive Session.

**ITEM 1**  
**REVIEW OF THE MINUTES FROM THE OCTOBER 11, 2017**  
**EXECUTIVE SESSION AND PUBLIC MEETING**

The Commissioners voted unanimously to approve the minutes of the October 11, 2017 Public Meeting and Executive Session.

**ITEM II**  
**EXECUTIVE DIRECTOR'S REPORT**

Ms. Donna Kinzer, Executive Director, noted that the Commissioners asked the Staff to report back at this meeting regarding the rate year (RY) 2018 update. There was concern that the current update could lead to excess growth in total cost of care (TCOC), especially for Medicare, if utilization did not fall as it did in 2016.

Ms. Kinzer stated that Staff will discuss this topic at today's meeting. Ms Kinzer stated that key considerations for the 2018 update factor are as follow:

- The reduction in the final federal update from preliminary update
- Medicare utilization reduction
- Medicare Total Cost Of Care
- Annual savings in TCOC relative to the 2013 base year
- Changes in the Medicare data set and the audit underway
- CY 2018 growth guardrail

Ms. Kinzer observed that the Model TCOC savings target is \$120,000,000 for CY 2018. Staff's TCOC savings target is \$150,000,000. Ms. Kinzer noted that the question to the Commission is how to achieve the Staff's TCOC savings of \$150,000,000.

Chairman Sabatini asked if in December it appears that the State is going beyond the total cost of

care guardrails, whether the Commission would be prepared to make a mid-year adjustment to stay within the guardrails.

Ms. Kinzer stated that currently the State is within the guardrails. Because the Commission will only have an estimate of what will happen from October to December and the data can vary significantly from month to month, there may be a need to take action (i.e., reduce the update factor) in January.

Commissioner Colmers asked how State Medicare total cost of care performance over the last four months compares to the nation, and what are the projections through the end of the calendar year.

Ms. Kinzer indicated the State should be able to do better in the second half of the fiscal year compared to the first because the federal government has its update in October, whereas the State's update is in July.

Commissioner Bayless asked if a reduction to the update factor can be done in stages, with a portion being implemented in January and another (if necessary) in July, in order to limit the impact on hospital budgets.

Ms. Kinzer agreed that could potentially be an option; however, she also pointed out that if the adjustment is delayed, it may necessitate a more severe adjustment in July.

Ms. Kinzer stated that review by the Centers for Medicare and Medicaid Services (CMS) of the Enhanced Total Cost of Care Model is ongoing and is proceeding according to the agreed timeline. The Secretary of the Maryland Department of Health is planning to develop two workgroups to accelerate the movement forward. The first workgroup will be focused on implementation of the new Model, and the second workgroup will be focused on innovation, care redesign, and transformation.

Ms. Kinzer noted that based on the new Maryland Institute for Emergency Medical Services System (MIEMSS) report, Mobile Integrated Health Programs, a study of emergency transport cases shows the majority of cases did not require an ER visit.

Ms. Kinzer noted that it is important to have MIEMSS as part of the innovation and transformation planning for the Enhanced TCOC Model.

Chairman Sabatini asked whether there were studies being conducted to ascertain the origin of this population; for instance, how many are transfers from nursing homes.

Ms. Katie Wunderlich, Director Engagement and Alignment, indicated that she was not sure that the data is broken down by the origin of the patient. However, it does underscore the point that many people transported by MIEMSS do not require emergency services.

Chairman Sabatini stated that this not new or surprising. It is not uncommon for elderly people to

call an ambulance because they are lonely and want someone to talk to or for nursing homes to ship patients off to the hospital by ambulance rather than take care of them where they belong.

Ms. Kinzer noted the new telemedicine technology which adds a layer of support to MIEMMS workers and is now deployed in many nursing homes to ramp up patient evaluation. Also there is now the willingness of the delivery system, MIEMSS, and the community providers to work together.

### **MID-YEAR UPDATE FACTOR DISCUSSION**

Chairman Sabatini stated that several months ago, as we started planning for the implementation of the Enhanced Model, he asked Commissioners Colmers and Keane if they would review our current methodologies to identify those that could be clarified, simplified, or generally made more responsive to the needs of the industry that we regulate.

Based on their review, Commissioners Colmers and Keane made the following recommendations for improvements and modifications to current methodologies.

- **Market Shift Adjustment (MSA) and Demographic Adjustment**  
Recommendations – That the Market Shift Adjustment and Demographic Adjustment be replaced with a budget adjustment methodology whereby hospitals would be provided with 50% variable cost adjustments for non-Potentially Avoidable Utilization (PAU) volumes, with a 60% VCF for drugs and 100% VCF for organ acquisition. Adjustments would be made twice a year, with a statewide limit on volume growth.
- **Potentially Avoidable Utilization (PAU)**  
Recommendations – The definition of PAUs be changed to encompass all types of unnecessary care. That hospitals be given the opportunity to propose programs to reduce all types of unnecessary utilization.
- **Rate Realignment**  
Recommendation – Amend realignment policies to bring hospital charges into line with costs on a revenue center basis.
- **Readmission Reduction Incentive program (RRIP)**  
Recommendations – Modify the existing RRIP to focus on Medicare readmissions only. Apply positive and negative revenue adjustments on a continuous scale, based on their absolute level of Medicare readmissions.
- **Quality-Based Revenue (QBR) and MHAC Programs**  
Recommendations – Review and retain those MHACs that identify preventable conditions in a reliable way in a revised MHAC, or incorporate them into a revised QBR policy in a way that will ensure compliance with the Model Agreement and the proposed Enhanced Model. Place a greater emphasis on patient satisfaction and patient safety measures, and on a limited number of other quality measures that can

be objectively and reliably measured against national standards, including Emergency Department wait times.

- **Medicare Performance Adjustment (MPA)**  
Recommendations – Proceed with MPA for CY 2018 inclusive of any changes settled prior to CY 2018 and continue to work on refinements during the first half of CY 2018. Alternative MPA arrangements should be consistent with the requirements of the Model agreement and Enhanced Model. The trend factor for the Medicare TCOC target budgets would not be pre-set for CY 2018; it would be tied and reconciled to the Medicare TCOC test in the waiver agreement.
- **General Improvement and Clarification of Rate Setting Methodologies**  
Recommendations – Use continuous scales in determining incentive rewards and penalties. Eliminate the use of contingency structures in which hospitals are put at risk for the performance of other hospitals at a statewide level. Eliminate the use of combined attainment, improvement, and consistency scales. In constructing methodologies and adjustments, whenever possible, rely on straight-forward, non-complex techniques that can be readily understood by hospital CEOs, CFOs, and Commissioners.
- **Timing of Proposed Methodological Changes**  
Recommendations – Elimination of the MSA and the establishment of the budget adjustment methodology be implemented 1/1/2018. Hospitals should be allowed to submit alternatives to the PAU program prior to 7/1/18 with start-up of approved programs by 7/1/2018. Recommended improvements and modifications to the standard PAU policy should be implemented for 7/1/2018. The following methodological and other changes should be specified in detail during the first half of CY 2018 for implementation on 7/1/2018: rate realignment, modification of the RRIP, revisions to the MHAC and QBR programs. Proposed solicitation of alternative MPA methods should be issued by 7/1/2018 with first implementations to occur on 1/1/2019 or later. Proposed general clarifications and improvements of rate setting methodologies should be implemented effective 7/1/2018.

Ms. Kinzer did not comment on the proposed revisions of Commissioners Colmers and Keane, since Staff had not seen them prior to their presentation.

**ITEM III**  
**FINAL RECOMMENDATION ON UPDATES TO THE INTER-HOSPITAL COST**  
**COMPARISON METHODOLOGY**

Mr. Allan Pack, Director of Population Based Methodologies presented Staff's final recommendations on the updates to the Inter-Hospital Cost Comparison (ICC) methodology (see "Final Recommendations for Updates to the Inter-hospital Cost Comparison Tool Program" on the HSCRC website)

The State of Maryland is leading an effort to transform its health care system by increasing the emphasis on patient-centered care, improving population health, and lowering health care costs. To achieve these goals, the State of Maryland worked closely with hospitals, payers, other providers, consumers and CMMI at the federal CMS to develop the new Maryland All-Payer Model, which was implemented in 2014. The new Model moved away from a volume based payment system and limitation on growth in charge-per-case to a system that limits growth in total hospital spending per capita and increasingly focuses on outcomes. Prior to the implementation of the new Model, the HSCRC had begun to transform the payment system away from charge-per-case; with ten rural hospitals on global hospital payment models initiated in 2010, and most other hospitals with readmissions incorporated into a charge-per-episode system.

In November 2015, full rate reviews were suspended to allow development of tools and methodologies consistent with the new Model. Regulations were introduced at the September 2017 Commission meeting that updated filing requirements for full rate reviews. These updated filing requirements are intended to collect information that will support a more robust review of cost and efficiency, going beyond the cost-per-case or per visit efficiency previously embodied in the review. Cost-per-case and per visit continue to be an important part of the efficiency consideration. This draft recommendation provides staff analysis and proposed updates to the Inter-hospital Cost Comparison (ICC) methodology, a tool that HSCRC staff proposes to continue using in evaluating hospitals' cost-per-case or per visit efficiency as a key element of full rate reviews. It also provides policy recommendations that go beyond the historical per-case/visit efficiency construct to address the need of evaluating efficiency in the context of a per capita system that also considers levels of utilization.

In light of the change in the All-Payer Model from the historic cost-per-case focus to a per capita system with demonstrable care delivery and outcomes improvement requirements, Staff makes the following recommendations for consideration:

- Hospitals filing full rate reviews should demonstrate efficiency in both price and utilization, and the evaluation should consider the total hospital cost of care subject to the Commission's' rate setting authority.
  - a. Price efficiency (i.e., the cost of performing cases or episodes) should take into account ICC comparison results, supplemented with unit cost or other efficiency analysis of those "cycle billed" services excluded from the ICC. The rate setting process should also continue to consider other information and analysis supplied by the hospital or performed by HSCRC staff regarding efficiency.
  - b. For evaluation of utilization efficiency, hospitals should be required to demonstrate that they are making substantial and demonstrable ongoing progress in achieving more appropriate levels of care, reducing avoidable utilization, eliminating unnecessary care and improving efficiency in the use of health care resources. They should also be expected to demonstrate that they are making substantial and specific efforts and investments to improve care and to reduce unnecessary care

and potentially avoidable care. Additionally, the staff should be directed to consider reducing the allowed global budget of hospitals that have high levels of avoidable utilization requiring them to achieve additional utilization efficiency over time.

- c. Through this process, the evaluation should take into account efficiency in both price and utilization of inpatient and outpatient regulated services.
- The HSCRC staff should seek review from a Technical Review Group on its proposed modifications to the Inter-hospital Cost Comparison. This group may provide input, similar to the Total Cost of Care Advisory Group, but rate setting is a regulatory tool and does not lend itself to consensus-based input.
  - The HSCRC staff should evaluate an expansion of claims data submissions from hospitals for outpatient hospital claims that are “cycle billed claims” to allow for more accurate construction of ECMADs and benchmarks for the outpatient visits and episodes that are now excluded from the ICC.

Commissioner Antos inquired when proposals are being sought.

Mr. Pack responded that the workgroup is planning to have two to three meetings over the next 90 days to come to a consensus, however, in favor of good technical output, this timeline may not be feasible.

Robert Murray, CareFirst Consultant, stated that CareFirst had a chance to look at some technical analysis and is strongly in support of the draft recommendation of the core methodology. CareFirst is particularly supportive of how much hospitals are focused on their ability to reduce unnecessary care; however, he recommends that there can be more structure in place around that exercise. CareFirst also supports looking into how unregulated services have contributed to losses and analyzing the financial status of hospitals in systems, as issues of cost variability and/or allocation may become visible. An additional consideration by CareFirst would be to look into the excess capacity in the system.

Brett McCone, Vice President Rate Setting Maryland Hospital Association (MHA), stated that MHA supports the staff recommendation and looks forward to the technical review process as openness and transparency are needed. MHA suggests that in the context of total cost of care, the ICC should be observed as a component of the overall system (price and utilization) and include health system considerations. The Commission needs to assess health system flexibility to allocate GBR throughout the system, if full rate reviews are to be evaluated across the whole system. Mr. McCone also stated hospitals are being asked to invest in activities outside of the hospital, so those associated investments, as well as actions stemming from requests to lower utilization, should be considered in the Commission’s evaluation.

The Commissioners voted unanimously to approve Staff’s recommendation.

**ITEM IV**  
**FINAL RECOMMENDATION ON THE MEDICARE PERFORMANCE ADJUSTMENT**

Chris Peterson, Director of Clinical and Financial Information, presented Staff's final recommendation on the Medicare Performance Adjustment (see "Final Recommendation for the Medicare Performance (MPA) for Rate Year 2020" on the HSCRC website).

The State of Maryland is leading an effort to transform its health care system by increasing the emphasis on patient-centered care, improving population health, and lowering health care costs. To achieve these goals, the State of Maryland worked closely with hospitals, CMMI, and CMS to develop the new Maryland All-Payer Model, which was implemented in 2014. The State, in partnership with providers, payers, and consumers, has made significant progress in this statewide modernization effort. Under the State's existing All-Payer Model, Maryland hospitals participate in a global hospital payment system with both individual and shared responsibility for limiting cost growth, including Medicare's total cost of care (TCOC).

This final recommendation outlines how Maryland hospitals would assume increasing responsibility for limiting the growth in TCOC for Medicare Fee-for-Service (FFS) beneficiaries over time, beginning with performance in Calendar Year (CY) 2018. To incorporate this additional responsibility, Maryland will utilize a value-based payment adjustment, referred to as a Medicare Performance Adjustment (MPA). The MPA will place hospitals' federal Medicare payments at risk, based on the total cost of care for Medicare beneficiaries attributed to a hospital.

The MPA will incentivize increased focus on TCOC growth by adjusting Medicare payments based on TCOC spending. This new TCOC measure will be constructed by attributing Maryland Medicare beneficiaries with Part A and Part B FFS coverage to one or more hospitals. Their Medicare TCOC will include costs in both hospital and non-hospital settings. For its initial year (Performance Year 2018, affecting hospital payments from Medicare in Rate Year (RY) 2020), the MPA will be based on per capita TCOC spending for the beneficiaries attributed to a given hospital.

The final recommendation differs from the draft recommendation in two important ways. First, while the draft recommendation left open for discussion the possibility of using either a pre-set scale or a prospectively set methodology, the final recommendation from staff is to set the TCOC Trend Factor for RY 2020 at 0.33% below the national Medicare growth rate. Second, the final recommendation places greater emphasis on the importance of monitoring the MPA and sharing information with hospitals for RY 2020, and on assessing potential changes to the MPA for the RY2021 policy. Staff recommends the following for RY 2020

- Implement the Medicare Performance Adjustment, based on HSCRC calculations.
- Measure TCOC using the hierarchical algorithm of ACO-Like, MDPCP-Like, and PSAP attribution.
- Set the maximum penalty at 0.5% and the maximum reward at 0.5% of federal Medicare revenue with maximum performance thresholds of  $\pm 2\%$ .

- Include the MPA as part of the aggregate revenue at-risk under HSCRC quality programs.
- Set the TCOC benchmark as each hospital's TCOC from 2017, updated with a Trend Factor of 0.33% below the national Medicare growth rate for CY 2018.
- Continue to evaluate the MPA throughout the year and consider enhancements for a Year 2 MPA policy, obtaining input through continued meetings of the TCOC Workgroup.
- Provide national Medicare growth rate estimates relative to Maryland throughout the year to help hospitals monitor their progress.
- Work with CMS and CRISP to provide information to hospitals so they can more effectively engage in care coordination and quality improvement activities, assess their performance, and better manage the TCOC by working in alignment with both independent and affiliated providers whose beneficiaries they serve.

Commissioner Kane observed that there have been some complaints from hospitals about the lists of primary care providers associated with the hospitals. It seemed that there were a number of providers who did not belong on the list. Commissioner Keane noted that although this is a very important program, there is a small amount of revenue at risk. He asked whether there was some flexibility for hospitals to take some more risk as a pilot program. Mr. Peterson stated that Staff was meeting one-on-one with hospitals to address the provider issues. Some hospitals have physicians in ACOs and, thus, have multiple lists, so efforts are being taken to ensure physicians are being coded correctly. Regarding the second question on financial incentive, this is an important component; however, more research and analysis need to be undertaken before such action can be taken.

Mr. Murray stated that CareFirst has serious reservations about this recommendation primarily around the concept of assigning individuals to hospitals, and recommends this policy be approached on a regional basis. CareFirst thinks there is no natural relationship between primary care physician groups and hospitals. Due to this and the additional concern of the small level of financial incentive, CareFirst requests that action on this policy be deferred until other options or approaches can be considered.

The Commissioners voted unanimously to approve Staff's recommendation.

#### **ITEM V** **NEW MODEL MONITORING**

Ms. Amanda Vaughan, Associate Director, Financial Data Administration, stated that Monitoring Maryland Performance (MMP) for the new All-Payer Model for the month of September 30, 2017 focuses on the fiscal year (July 1, 2017 through September 30, 2017) as well as calendar year results.

Ms. Vaughan reported that for the three months of the fiscal year ended September 30, 2017, All-Payer total gross revenue increased by 4.17% over the same period in CY 2016. All-Payer total

gross revenue for Maryland residents increased by 4.28%. All-Payer gross revenue for non-Maryland residents increased by 2.99%.

Ms. Vaughan reported that for the nine months of the calendar year ended September 30, 2017, All-Payer total gross revenue increased by 4.76% over the same period in CY 2016. All-Payer total gross revenue for Maryland residents increased by 4.75%; this translates to a per capita increase of 4.38%. All-Payer gross revenue for non-Maryland residents increased by 4.80%.

Ms. Vaughan reported that for the three months of the fiscal year ended September 30, 2017, Medicare Fee-For-Service gross revenue increased by 2.86% over the same period in CY 2016. Medicare Fee-For-Service gross revenue for Maryland residents increased by 2.81%. Maryland Fee-For-Service gross revenue for non-residents increased by 3.34%.

Ms. Vaughan reported that for the nine months of the calendar year ended September 30, 2017, Medicare Fee-For-Service gross revenue increased by 3.88% over the same period in CY 2016. Medicare Fee-For-Service gross revenue for Maryland residents increased by 3.64%; this translates to a per capita increase of 2.72%. Maryland Fee-For-Service gross revenue for non-residents decreased by 6.66%.

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

- All Payer in State capita growth was 3.91%.
- Medicare Fee for Service in State growth was 1.85%.

According to Ms. Vaughan, for the three months of the fiscal year ended September 30, 2017, unaudited average operating profit for acute hospitals was 3.22%. The median hospital profit was 3.44%, with a distribution of 1.79% in the 25<sup>th</sup> percentile and 7.59% in the 75<sup>th</sup> percentile. Total Profit margin was 6.17%.

Ms. Andrea Zumbur, Chief, Quality Analysis and Reporting, presented a report on the current trends in hospital readmissions (through August 2017).

## Readmissions

- The All-Payer risk adjusted readmission rate was 11.44% for August 2017 YTD. This is a decrease of 13.41% from the June 2013 risk adjusted readmission rate.
- The Medicare Fee for Service risk adjusted readmission rate was 11.90% for August 2017 YTD. This is a decrease of 15.37% from the June 2013 YTD risk adjusted readmission rate.
- Based on the new Model, hospitals must reduce Maryland's readmission rate to or below the national Medicare readmission rate by 2018. The Readmission Reduction incentive program has set goals for hospitals to reduce their adjusted readmission rate by 14.5%

during CY 2017 compared to CY 2016. Currently, 22 out of 46 hospitals have reduced their risk adjusted readmission rate by more than 14.5%. An additional 8 hospitals are on track for achieving the attainment goal.

Ms. Laura Mandel, HSCRC Analyst, presented the current trends for potentially avoidable utilization.

Potential Avoidable Utilization – Readmissions and Prevention Quality Indicators (PQIs) revenue as a percentage of hospital revenue:

- All-Payer readmission revenue declined from 7.5% in CY 2013 to 6.8% for CY September 30, 2017 as a percentage of all-payer hospital revenue.
- All- Payer readmission revenue September 2017 YTD has declined by .02% over the all-payer readmission revenue for the same period in 2016.
- All-Payer PQI revenue has been constant over the period from CY 2013 to CY August 31, 2017 between 4.2% and 4.1% of all-payer hospital revenue.
- Medicare Fee for Service readmission revenue has declined from 10.8% in CY 2013 to 9.4% in CY August 2017 as a percentage of Medicare Fee for Service revenue.
- Medicare Fee for Service readmission revenue August 2017 YTD has declined by 0.4% over the Medicare Fee for Service revenue for the same period in 2016.
- Medicare Fee for Service PQI revenue has been constant over the period from CY 2013 to CY 2017 with a decrease from 6.7% to 6.4% of Medicare Fee for Service hospital revenue.

Denise Johnson Chief Special Projects, presented utilization trend reports reflecting the Equivalent Case-Mix Adjusted Discharges (ECMAD) growth for the nine months of the calendar year ended September 30, 2017.

Ms. Johnson reported that for the nine months of the calendar year ended September 30, 2017, All Payer ECMAD growth decreased by .37% over the same period in CY 2016. ECMAD growth for Maryland residents decreased .20% over the same period in CY 2016. ECMAD growth for non-residents decreased by 2.32%.

Ms. Johnson reported that for the nine months of the calendar year ended September 30, 2017, Medicare ECMAD growth increased by 0.05% over the same period in CY 2016. Maryland Medicare inpatient ECMAD increased .17%, while and Maryland Medicare outpatient ECMAD decreased .21%.

**ITEM VI**  
**DOCKET STATUS- CLOSED CASES**

2400A- University of Maryland Medical Center  
2404A- Johns Hopkins Health System

2401A- MedStar Health

**ITEM VII**  
**DOCKET STATUS- OPEN CASES**

**2398A- University of Maryland Midtown**

On August 3, 2017, University of Maryland Midtown Campus (the "Hospital"), a member of the University of Maryland Medical System, submitted a partial rate application to the Commission requesting a new rate for Definitive Observation (DEF). The Hospital requests that the DEF rate be set at the lower of a rate based on its projected costs to provide DEF services or the statewide median and be effective November 1, 2017.

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

1. That a MSG rate of \$1,770.83 per patient day be approved effective November 1, 2017;
2. That a DEF rate of \$2,045.57 per patient day be approved effective November 1, 2017;
3. That the MSG and DEF rates not be rate realigned until a full year's cost experience data has been reported to the Commission; and
4. That no change be made to the Hospital's Global Budget Revenue.

The Commissioners voted unanimously to approve Staff's recommendation.

**2405N- Atlantic General Hospital**

On September 21, 2017, Atlantic General 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, and the Hospital has not had an IRC center rate. The Hospital requests that the IRC rate be effective July 1, 2017, as this is the effective date the Commission approved changes to the RVU scale.

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

1. That an IRC rate of \$63.27 per minute be approved effective 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.

The Commissioners voted unanimously to approve Staff's recommendation.

### **2399A- Priority Partners, Inc.**

Mr. Pack summarized staff's draft recommendation on the application filed by Johns Hopkins Health System (the "System") on behalf of John Hopkins Hospital, Johns Hopkins Bayview Medical Center, Howard County General Hospital, and Suburban Hospital (the "Hospitals"). The System is seeking approval for continued participation of Priority Partners, Inc. in the Medicaid Health Choice Program. The Hospitals are requesting to renew the contract for one year beginning on January 1, 2018.

Mr. Pack announced that the final recommendation will be presented at the December public meeting.

### **2402A- MedStar Family Choice**

Mr. Phelps summarized Staff's draft recommendation on the application filed by MedStar Health on behalf of their member hospitals. MedStar Health seeks renewal for continued participation of MedStar Family Choice in the CMS approved Medicare Advantage Plan for one year beginning in January 1, 2018.

Mr. Phelps announced that the final recommendation will be presented at the December public meeting.

### **2403A- MedStar Family Choice**

Mr. Pack summarized Staff's draft recommendation on the application of MedStar Health on behalf of their member hospitals. MedStar Health seeks renewal for continued participation of MedStar Family Choice ("MFC") in the Medicaid Health Choice Program for one year beginning in January 1, 2018.

Mr. Pack announced that the final recommendation will be presented at the December public meeting.

### **2406A- Maryland Physician Care**

Mr. Pack summarized staff's draft recommendation on the application filed by Saint Agnes Health System, Western Maryland Health System, Holy Cross Health, and Meritus Health (the "Hospitals"). The Hospitals are seeking approval for continued participation of Maryland Physician Care in the Medicaid Health Choice Program. The Hospitals are requesting to renew the contract for one year beginning on January 1, 2018.

Mr. Pack announced that the final recommendation will be presented at the December public meeting.

#### **2407A- Hopkins Health Advantage**

Mr. Phelps summarized Staff's draft recommendation on the application filed by Johns Hopkins Health System (JHHS) on behalf of their member hospitals. JHHS seeks approval for Hopkins Health Advantage to continued participation in the CMS approved Medicare Advantage Plan for one year beginning in January 1, 2018.

Mr. Phelps announced that the final recommendation will be presented at the December public meeting.

#### **2408A- John Hopkins Health System**

Johns Hopkins Health System ("System") filed an application with the HSCRC on October 31, 2017 on behalf of Johns Hopkins Hospital, Johns Hopkins HealthCare LLC, and Johns Hopkins Employee Health Plans to continue to participate in 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 rate arrangement for executive health services with Total Wine and More. The System requests approval for a period of one year beginning December 1, 2017.

Staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for executive health services, for one year period commencing December 1, 2017. 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.

The Commissioners voted unanimously to approve Staff's recommendation. Commissioner Colmers recused himself from the discussion and vote.

#### **2409A- Maryland Health Partners, Inc.**

Mr. Phelps summarized Staff's draft recommendation on the application of Maryland Health Partners, Inc. (UMHP), a Medicaid Managed Care Organization (MCO), on behalf of the University of Maryland Medical System Corporation (the "Hospitals). UMHP and the Hospitals seek approval for the MCO to continue to participate in the Medicaid Health Choice Program for one year beginning January 1, 2018.

Mr. Phelps announced that the final recommendation will be presented at the December public meeting.

#### **2410A- University of Maryland Health Advantage**

Mr. Pack summarized Staff's draft recommendation on the application filed by University of Maryland Medical System (UMMS) on behalf of its constituent member hospitals. UMMS seeks approval for University of Maryland Health Advantage to continue participation in the CMS approved Medicare Advantage Plan for one year beginning in January 1, 2018.

Mr. Pack announced that the final recommendation will be presented at the December public meeting.

**ITEM VIII**  
**PRESENTATION BY ANNE ARUNDEL MEDICAL CENTER (AAMC)**

Maulik Joshi, Chief Operating Officer and Executive Vice President AAMC, Dr. Patricia Czapp, Chairman of Clinical Integration, Barbara Jacobs, Chief Nursing Officer, and Dr. Mitch Schwartz, Chief Medical Officer, presented a population health update for AAMC (see “Anne Arundel Medical Center Population Health Update to the Health Services Cost Review Commission” on the HSCRC website).

AAMC has made a significant amount of investment in various programs and services designed to improve patient care and satisfaction.

AAMC population health programs are located at the hospital and seven clinics throughout Anne Arundel county and surrounding counties. The clinic locations are as follows:

- AAMC Pavilion- Odenton
- AAMC Pavilion- Waugh Chapel
- AAMC Pavilion- Bowie
- Pathways
- AAMC Pavilion- Pasadena
- AAMC Pavilion- Kent Island
- AAMC Pavilion- Easton (opening soon)

AAMC serves a population of 1.2 million people and with a total 750,000 visits annually.

Results of AAMC community clinics shows;

- 38% decrease in readmissions
- 26% decrease in 911 calls
- 23% decrease in admissions and
- 8% decrease in ED visits.

Accountable Care Organization shows:

- Decrease in total capita expense
- Decrease in hospital discharges per 1,000 person years
- 98% Quality Score, and
- \$3.6 million in savings.

SNF expenditures have decrease from \$7,000,000 to \$5,200,000 from the first quarter of CY 2015 to the second quarter of CY 2017.

AAMC took considerable efforts to reduce opioid prescribing, with results demonstrating a 28% decrease in opioid prescription over two years.

AAMC hospital satisfaction rating is 79% for CY 2016. The national average is 73% with the State average of 65% over the same period.

The group reported the following:

- Case-mix adjusted readmissions for FY 2016 to 2017 decreased by 17%
- Length of stay days for FY 2016 to FY 2018 decrease by 10%, and
- ED arrival to depart minutes for FY 2016 to 2018 decreased by 3%.

Chairman Sabatini commended AAMC for their continued progress and stated that their array of initiatives and results are impressive.

**ITEM IX**  
**DRAFT RECOMMENDATION ON UPDATES TO THE QUALITY BASED**  
**REIMBURSEMENT POLICY FOR RY 2020**

Ms. Diane Feeney, Associate Director Quality Initiatives, presented the Staff's quality update concerning the enhanced All-Payer Model quality programs for RY 2020 (see "Staff Draft Recommendations for Updating the Quality Based Reimbursement Program for Rate Year 2020" on the HSCRC website).

HSCRC's quality based measurement and payment initiatives are important policy tools for providing strong incentives for hospitals to improve their quality performance over time. Under the current All-Payer Model Agreement ("Agreement") between Maryland and CMS, effective January 2014 through December 2018, there are overarching quality performance requirements for reductions in readmissions and hospital acquired conditions as well as ongoing program and performance requirements for all of HSCRC's quality and value based programs.

As long as Maryland makes incremental progress towards the Agreement goals, the State receives automatic exemptions from the CMS Hospital Acquired Conditions program (HAC) and Readmission Reduction program, while the exemption from the CMS Medicare Value-Based Purchasing (VBP) program is requested annually. These exemptions from national quality programs are important because the State of Maryland's all-payer global budget system benefits from having autonomous, quality-based measurement and payment initiatives that set consistent quality incentives across all-payers.

This draft recommendation provides recommendations for updates to Maryland's Quality-Based Reimbursement (QBR) program for Rate Year (RY) 2020, which encompass the performance results from the final year (2018) of the Agreement. QBR is one of three core quality programs, and it places 2% of revenue at risk by scoring a hospital's performance relative to national thresholds and benchmarks for its Safety domain and Person and Community Engagement domain, and it utilizes Maryland specific benchmarks for its Clinical Care domain.

Last year, after experiencing difficulties in having the scale for revenue adjustments based on Maryland performance, the Commission approved a QBR scaling system that is tied to national

performance. The Commission also set out the need to revise the Clinical Care portion of the program due to increases in the use and coding of palliative care. Likewise, over the last year, the Commission has been discussing the need to improve Emergency Department performance. This recommendation discusses the results of implementing the national performance pre-scale in RY 2019, proposes changes to address concerns related to the Clinical Care mortality measure, and introduces Emergency Department pay-for-performance incentives.

Except for the changes noted above, staff is recommending that the Commission minimize changes to the QBR for RY 2020. Staff will also recommend minimizing revisions to other existing quality programs, so that it can focus on future policy development to establish quality strategies and performance goals under the Enhanced Total Cost of Care Model, which will be effective beginning in CY 2019. For example, staff will establish a clinical subgroup to vet available complication measures, while transitioning hospitals from wholesale use of Potentially Preventable Complications (PPCs) found in the Maryland Hospital Acquired Conditions (MHAC) program. The future policy changes will be used to make quality-based payment adjustments in RY 2021 and beyond.

Staff draft recommendations on the QBR program for RY 2020 are as follows:

1. Update the Maryland Mortality Measure to include palliative care cases (risk-adjusted for palliative care status) for calculating both attainment and improvement scores.
2. Consider inclusion of ED Wait Times measures in the Person and Community Engagement domain.
3. Weight the domains as follows for determining hospitals' overall performance scores:  
Person and Community Engagement - 50%, Safety - 35%, Clinical Care - 15%.
4. Maintain RY 2019 Pre-set Scaling Options, and continue to hold 2% of inpatient revenue at-risk for the QBR program.

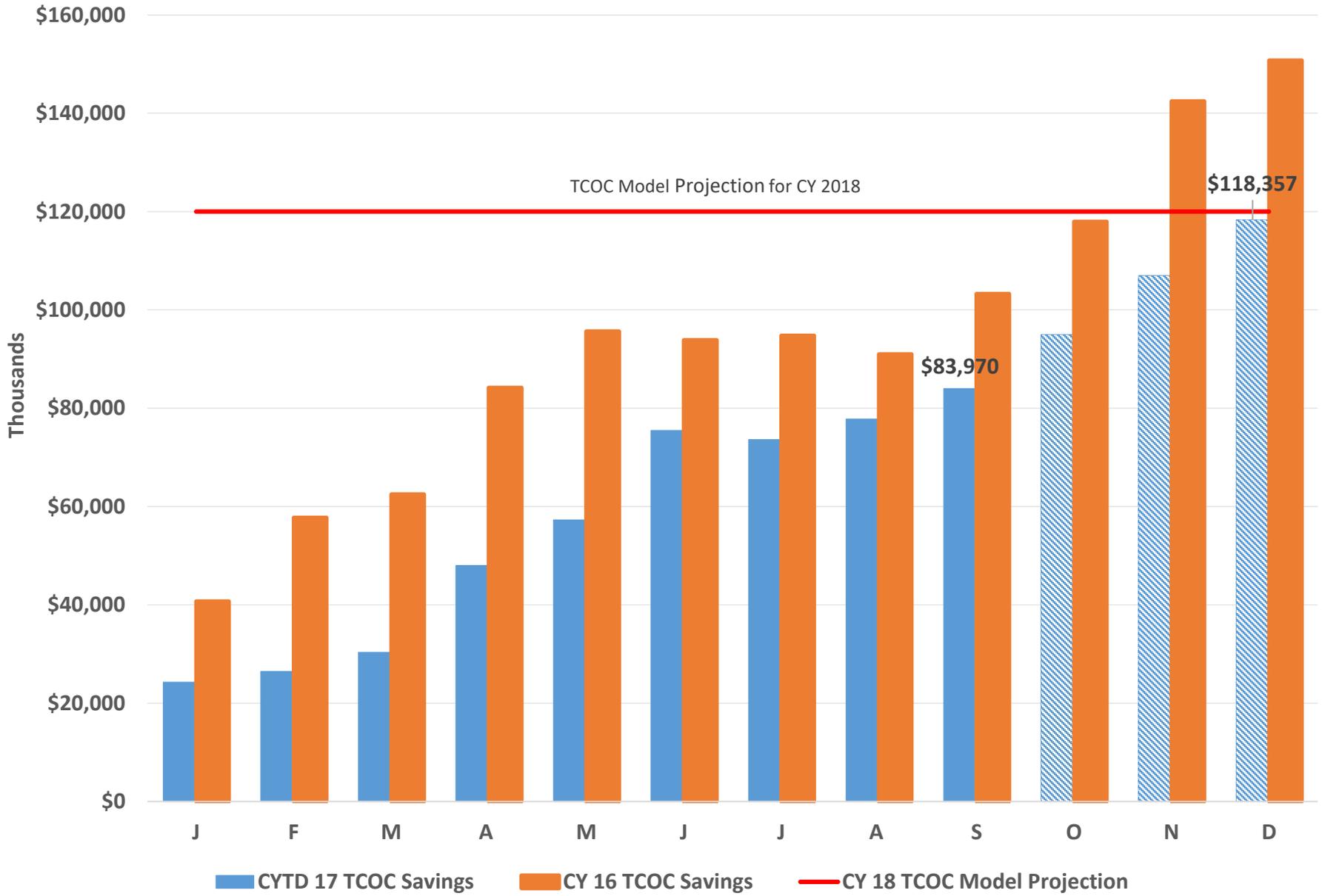
As this is a draft recommendation, no Commission action is necessary.

**ITEM X**  
**HEARING AND MEETING SCHEDULE**

November 29, 2017	Executive Session Call
December 13, 2017	Times to be determined, 4160 Patterson Avenue HSCRC Conference Room
January 10, 2017	Times to be determined, 4160 Patterson Avenue HSCRC Conference Room

There being no further business, the meeting was adjourned at 4:30 p.m.

### Annual Total Cost of Care Savings



State of Maryland  
Department of Health

Nelson J. Sabatini  
Chairman

Joseph Antos, PhD  
Vice-Chairman

Victoria W. Bayless

John M. Colmers

Adam Kane

Jack C. Keane



Donna Kinzer  
Executive Director

Katie Wunderlich, Director  
Engagement and Alignment

Allan Pack, Director  
Population Based  
Methodologies

Chris Peterson, Director  
Clinical & Financial  
Information

Gerard J. Schmith, Director  
Revenue & Regulation  
Compliance

**Health Services Cost Review Commission**

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**MEMORANDUM**

**TO: Commissioners**

**FROM: Nelson Sabatini, Chairman**

**DATE: December 7, 2017**

**RE: White Paper on Rate Setting Policies**

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During the Executive Session of September 2017, I asked Commissioners Colmers and Keane, who have a long-standing familiarity with HSCRC's policies and methods, to review our current rate setting procedures and to provide me and other Commissioners with a white paper containing their observations and recommendations for possible modifications. At my request, they reported their preliminary findings, in a summarized outlined form, at the November 2017 public meeting.

The Commission is at a critical stage in the advancement of the All-Payer Model to its next phase. The execution of a new ten-year agreement with the federal government is within our reach. As remarkable as this accomplishment would be, even more important is the recognition and acceptance of what needs to be done to execute successfully on such an agreement. To successfully transform the delivery of health care in Maryland, the Commission needs first and foremost to enlist the industry's support and commitment to bringing utilization under control within the parameters of the agreement and to improve the health of the population. This needs to be our primary focus.

At the same time, the Commission needs to assure that functionally, the system is operating on all cylinders. Our rate setting policies and methodologies rightfully need to be reviewed so that we are assured they are reasonable, understandable, predictable, and effective. We are fortunate that we have a staff capable of assisting the Commission in achieving this aim. I feel it is imperative that the Commission and its staff speak in one voice, even if no two parties can always agree on everything.

Therefore, I am directing staff to conduct a thorough analysis of the white paper presented by

Commissioners Colmers and Keane and prepare a report to be completed in time for presentation to the Commission at its January public meeting. Following discussion of the staff analysis, the Commission will be inviting hospitals, payers, employers, other state agencies and organizations and the general public to provide comments on the discussion in time for consideration at the February public meeting.

Thank you.

**Review, Comments and Recommendations  
Regarding HSCRC Rate Setting Policies  
11-15-2017**

Since the beginning of the All Payer Model Agreement, the hospital system in Maryland has made substantial progress on the road to achievement of the Triple Aim of better care for individuals, better health for populations and lower per capita costs. Global budgets (GBRs) have been established, mitigating the influence of the volume-inducing fee for service (FFS) system; financial and quality tests have been met; and much initial work has been done to focus care on patients who have the greatest needs and to bolster community efforts to build a better health care system. Credit for these successes is rightfully due to the hospitals, physicians and other providers who have contributed to this progress; to the staff of the HSCRC, who have labored tirelessly to implement the new Model; to the payer community which has heavily invested in primary care medical home programs and other care management activities; to legislative leaders and key executive branch officials who have continued to support the HSCRC's efforts to ensure that high quality hospital care is available to all Maryland residents regardless of their ability to pay; and to the general public who pay the taxes, health care premiums and out-of-pocket expenses which provide the funds that sustain the health care system.

After four years of experience under the existing Model, and on the cusp of a new period of change and opportunity, in partnership with the federal government, it is timely for the HSCRC to reflect on its policies and to identify opportunities for making the system more efficient, equitable, effective and transparent for all of its participants. Accordingly, at the request of Chairman Sabatini, with the support of our fellow Commissioners, we have undertaken to examine the HSCRC's current policies and to offer comments and recommendations for changes in those policies where we believe that improvements are desirable, feasible and consistent with the HSCRC's rate setting responsibilities.

The remainder of this document outlines our comments and the recommendations which we are offering to the HSCRC for its consideration. We believe the recommended changes are and should be consistent with the requirements of the Model Agreement and the proposed Enhanced Model. The schedule for the implementation of these changes is outlined in Section H.

**A. The Market Shift Adjustment (MSA) and Related Policies**

1. Background

- a. Since its inception, the HSCRC rate system has recognized a variable cost factor (VCF) adjustment when setting rates in response to volume changes
- b. The VCF has ranged from 50/50 to 100/0

- c. The HSCRC operated very successfully for more than a decade when the VCF was 50/50: costs were controlled, hospitals were profitable, etc.
  - d. This success was achieved without the additional constraint that exists today through the statewide revenue increase limits that are established in the waiver agreement.
2. Under the GBRs, volume changes are largely recognized through the Demographic Adjustment (DA) and the Market Shift Adjustment (MSA)
- a. The “effective” VCF under the MSA varies widely and unpredictably across hospitals and services.
  - b. The MSA is complex, hard to explain and unpredictable: when methodologies are opaque, incentives are dilute and not likely to change behavior.
  - c. The unpredictability arises partly from the lack of statistical stability that is associated with the volume measurement structure of the MSA (i.e., approximately 60 product lines x approximately 300 zip codes = roughly 18,000 cells).
  - d. The GBRs provide strong incentives to reduce volume, but the MSA creates challenges for hospitals facing “good” volume increases: specifically, they cannot know in advance whether a particular service will be paid for, or at what level, because payment depends on what has happened, or not happened, or will happen at other hospitals.
  - e. The MSA has also led, in some instances, to a lack of responsiveness to large volume declines at some hospitals that are draining needed funds out of the overall hospital system. How long must money remain with hospitals with volume declines, especially when those declines have come on an across-the-board basis rather than through reductions in “potentially avoidable utilization” (PAUs) and other forms of unnecessary care?
  - f. The complexity, instability and unpredictability of the MSA is a major source of dissatisfaction among hospitals with the GBR-based budget system; on balance, the MSA is undermining support for the HSCRC’s core objectives and activities.
  - g. The MSA was implemented with laudable objectives but, after almost four (4) years of experience under the GBRs and the new waiver system, it is appropriate to review its merits and to recommend changes.
3. The volume statistics that are used in the MSA have some significant weaknesses: while the inpatient volume statistic (CMADs) generally does a good job of measuring volume changes, some components of the outpatient volume measure—such as the methods used to measure extended recovery stays, observation stays, drug utilization and costs—may have serious weaknesses that

should be expeditiously fixed or ameliorated through enhanced data collection, methodological adjustments or other improvements.

4. The Demographic Adjustment (DA)
  - a. The DA was designed to provide GBR-based revenue increases to hospitals based on changes in the number and demographic characteristics of persons in their service areas.
  - b. In rural areas, where hospitals have well-defined service areas, the DA provides reasonably targeted compensation for volume increases tied to population changes.
  - c. However, in urban and suburban areas, demographic shifts are not closely linked with particular hospitals and the DA is spread in a manner that does not reliably place resources with the hospitals that are experiencing population-driven volume changes.
  
5. Recommendations: Given the observations outlined above, the HSCRC should do the following:
  - a. The MSA should be abandoned and replaced with a budget adjustment methodology whereby (i) hospitals would be provided with volume adjustments (+/-) to their GBRs for non-PAU volume using a VCF = 50/50 across all services except for drugs and organ acquisitions, which would be subject to the VCFs described below; and (ii) the actual volume changes that occur would be monitored by the HSCRC and, if volumes increase on a statewide or regional basis beyond the levels justified by population changes, including demographic changes, the GBRs of those hospitals with volume increases would be adjusted downward, on a basis approved by the HSCRC, at the beginning of each rate year following each calendar year covered by the Model Agreement to the levels needed to enforce the population-based volume limitations of the previous calendar year. The proposed elimination of the MSA, and the re-establishment of the recommended VCFs, should be made in a way that will not jeopardize the "population-based" nature of the GBRs, as required by CMS, and any adverse impacts of the VCF changes, and associated payments for volume, on the waiver tests should be addressed by the HSCRC in a timely manner.
  - b. The VCF for inpatient and outpatient drugs will be 60%. This VCF will provide the hospitals with substantial protection against the impact of rising drug costs, which are to a substantial degree beyond their immediate control, while maintaining an incentive to hospitals to push back on drug price increases, find substitutes, etc. The HSCRC should evaluate, as needed, the appropriateness of the drug cost "set-asides" (of 0.28% and 0.20%) that were included in the Update Factor for FY 2018.

- c. If the HSCRC finds it useful, in the future, to differentiate the VCFs for drugs, and it can develop a reliable and administratively practical method for implementation of differentiated drug cost VCFs, or if other superior methods of making appropriate adjustments for drug costs can be developed, the HSCRC should entertain those ideas and encourage their development.
- d. The prices paid by the hospitals for drugs should be examined and the charges assigned to and the volume adjustments made for drugs (including drugs funded through the 340b program) should be scrutinized as needed to ensure that they reflect the reasonable costs of such drugs to the dispensing hospitals.
- e. The volume measures used to track changes in the volume of drugs should be examined and modified to ensure that they accurately measure both changes in the volume and in the price of drugs. In particular, the overhead allocations assigned to drugs should be modified so that drugs with high prices (or large price increases) do not pull unreasonably high overhead allocations with them.
- f. The actual costs of organ acquisitions, to the extent they are set by the regional transplant centers and other authorities, will be assigned a VCF = 100% for volume increases and decreases.
- g. If the HSCRC is concerned that the elimination of the MSA might lead to inappropriate volume increases, it can take at least four steps to mitigate the possible impact of these increases: first, it can inform the hospitals that it will be monitoring volumes monthly and on a biannual basis and may take action if volumes are increasing inappropriately overall or at particular hospitals; second, it can make clear that excess volume increases will result in reductions in the overall Update Factor in order to maintain compliance with the waiver tests; third, it can tighten the volume adjustment for volume increases—e.g., by lowering the 50% VCF for volume increases to a lower amount (e.g., 40%); and, fourth, it can require the hospitals to adjust their charges to ensure they remain in compliance with their mid and full year GBRs inclusive of any volume changes.
- h. In some instances, hospitals have experienced large volume decreases since the beginning of the Model Agreement. The MSA has in general applied effective VCFs that have allowed these hospitals to retain a majority of the revenues that had been associated with these volume declines in their GBRs. The HSCRC should not permit hospitals that experienced large volume declines since the beginning of the Model Agreement, for which they retained a majority of the revenue on the way down, to collect fifty percent (or more) of the revenue on the way back up until they have reached the volume they had at the time they entered into their GBR. A relatively small number of hospitals have experienced significant volume increases since the start of the new Model for which

they have received effective VCFs which were substantially lower than the VCFs specified above. These hospitals, if they experience volume declines, should not be subjected to the VCFs that are specified above, because they would remove more money than was provided for the volume increases, until their volumes have returned to their pre-Model levels.

- i. The decrease in the incentives provided under the GBRs to reduce volume (which have already been somewhat undermined by the uncertainties associated with the MSA) by a move to a 50/50 VCF for most services can be effectively addressed by means of the recommendations offered below regarding changes in the "Potentially Avoidable Utilization" (PAU) methodology.
- j. The Demographic Adjustment should be eliminated except for the "Total Patient Revenue" (TPR) hospitals and any hospitals that are not under TPR arrangements that are operating in well-defined market areas to be defined by the HSCRC.

#### **B. Potentially Avoidable Utilization (PAU)**

1. The HSCRC currently adjusts hospital rates based on the performance of hospitals in reducing their levels of PAU.
2. The PAU methodology has three basic weaknesses:
  - a. First, the definition of PAU is very narrow—it encompasses only readmissions and "Prevention Quality Indicators" (PQIs) which consist of "ambulatory care sensitive conditions." The definition of PAUs does not include the vast array of tests, imaging services and surgical and non-surgical procedures and interventions that are major sources of unnecessary utilization.
  - b. Second, the definition of PAU is inequitable because PQIs are inpatient-related and medical in nature: hospitals that have large outpatient and surgical patient mixes are less likely to have significant PAU as a share of their total revenue. Therefore, the PAU exposes some hospitals to inequitably computed PAU-based revenue penalties.
  - c. Third, the level of PQIs at a hospital depends, to a large degree, on the extent to which adequate primary care resources are present in a hospital's service area. Although the Model Agreement and the proposed Enhanced Model encourage hospitals to work to enhance primary care capabilities in their service areas, this is a task that is only partly within the influence of hospitals. The establishment of strong primary care networks should be given high priority but it is a task that will require time and the concerted efforts of multiple parties.

3. For these reasons, many in the hospital industry view the PAU methodology as a revenue adjustment methodology that does not provide well-designed incentives for the creation of programs that would be effective in reducing the broad spectrum of unnecessary care.
4. Recommendations: On the basis of the observations outlined above, we believe the following:
  - a. The PAU adjustments should be modified on an expedited basis as described below.
  - b. Hospitals should be given the opportunity to construct and propose to the HSCRC programs designed to reduce all types of unnecessary care in accordance with general principles and guidelines which would be established by the HSCRC.
  - c. Hospital proposals to reduce unnecessary utilization would be expected to meet the following criteria:
    - They must be grounded in the medical, economics and health services literature regarding unnecessary care;
    - They must be accompanied by data compiled by the proposing hospital(s) from their own utilization with associated estimates of the amount of unnecessary care that probably exists and the proportion of that utilization that the hospitals believe they will be able to successfully eliminate over a specified time period (e.g., 3-5 years);
    - The projected reductions in unnecessary care must be significant;
    - The proposals must demonstrate strong clinical input and support from physicians at the proposing hospitals;
    - The proposals must describe the analytic, managerial, incentive and other programs that would be implemented to drive the reductions in unnecessary care;
    - The proposals must demonstrate that strong physician leadership will be at the core of the unnecessary care reduction efforts; and
    - The proposals must identify the amounts of unnecessary care reductions that the programs will be expected to achieve over the stated time horizon (e.g., 3-5 years) and the related savings and must be accompanied by a description of the methodologies that will be used to measure (and report on) these reductions.
  - d. For those hospitals that implement approved volume-reduction programs, the HSCRC would exempt volume reductions achieved in the areas of unnecessary care targeted by the programs from the downside VCF volume adjuster provided that the hospitals are able to document,

on an ongoing basis, that their programs are achieving the projected reductions.

- e. The HSCRC staff should update and improve the existing PAU policy for 7/1/2018 and on an ongoing basis but hospitals should be allowed and encouraged to submit approvable alternative programs as described above. Hospitals that do not establish alternative programs for the reduction of unnecessary care that are approved by the HSCRC will continue to be subject to the standard PAU policy.

### C. Rate Realignment

1. The HSCRC statute instructs the HSCRC to set rates on an equitable basis across payers without undue discrimination in a manner that reflects the efficient and effective provision of needed services.
2. The HSCRC initially set rates in strict accordance with direct and allocated costs inclusive of approved markups for uncompensated care, payer differentials, teaching levels and other factors.
3. Over time, partly in response to waiver test concerns and/or Medicaid budget pressures, the HSCRC departed from its historical practice of setting cost-based rates by revenue center and allowed or directed various forms of cost shifting.
4. These actions have led to significant distortions in pricing that undermine the efforts of senior hospital managers to design strategies that are based on true, rather than distorted, cost, revenue and profitability projections; they undermine transparency in the hospital industry; and they have discriminatory effects on purchasers including individuals who pay for care on an out-of-pocket basis.
5. At least some of the rate adjustment strategies that were taken by the HSCRC (such as the application of higher rate increases to outpatient services to protect the previous waiver, which covered inpatient Medicare services only) have become outmoded in addition to being problematic under the HSCRC statute's requirements.
6. Recommendations: The HSCRC should prescribe rate realignment actions that will bring hospital charges into line with direct and indirect costs (inclusive of mark-ups, etc.) on a revenue center basis with appropriate adjustments in the allocation of overhead (especially with regard to high cost drugs and organ acquisition). To the extent that this rate realignment has adverse waiver impacts, the effects should be offset by adjustments to the Update Factor or other

policies that affect Medicare revenue levels. Any needed adjustments could be phased in if necessary and appropriate.

**D. The Readmission Reduction Incentive Program (RRIP)**

1. The RRIP is designed to encourage hospitals to reduce their overall and Medicare-specific readmission rates.
2. Maryland is required by its current waiver to reduce its Medicare readmission rate to (or below) the national average Medicare readmission rate by the end of CY 2018.
3. As of CY 2017 YTD, Maryland's readmission rate had dropped by 14.75% since CY 2013 and is expected to be at or below the national Medicare readmission rate by the end of CY 2018.
4. The all-payer readmission rate in Maryland has also dropped but it is unknown whether the non-Medicare readmission rates are high, low or equal to the national average readmission rate for non-Medicare patients because comparable, sufficiently detailed data have not been available for evaluation.
5. The GBRs provide strong financial incentives to hospitals to reduce all unnecessary readmissions.
6. Some technical issues exist that may have confounding effects on readmission statistics such as the use of observation stays in lieu of readmissions, the inclusion or exclusion of psychiatric readmissions, etc. In addition, there is some debate about the length of the readmission time period (e.g., 30, 60 or 90 days) that would be most appropriate.
7. There is credible evidence that readmissions are inversely related, to some degree, to the socioeconomic status (SES) level of patients after casemix differences have been filtered out of the analyses. If low SES patients tend to have more readmissions because they have less access to primary care, weaker support systems, and other burdens, then they carry cost effects with them that are not currently recognized by the HSCRC.
8. Recommendations: On these bases, the HSCRC should take the following steps:
  - a. It should modify the existing RRIP to focus it on Medicare readmissions only and to ensure that its targets are set so that Maryland at least keeps pace with any Medicare readmission reductions that are mandated by the Model Agreement or its successor contract.

- b. The revised RRIP should apply positive and negative revenue adjustments across a continuous scale (see Section G) to hospitals based on their absolute level of Medicare readmissions, relative to national Medicare readmission levels, updated on an ongoing basis, after adjustment for casemix and SES levels.
- c. Hospitals that believe they can achieve appropriate reductions in their readmission rates for other payers (e.g. Medicaid, commercially insured patients, etc.) should be encouraged to include strategies to achieve these targeted reductions in their proposals for alternatives to the PAU policy described above. The GBRs will continue to provide strong incentives to hospitals to reduce unnecessary readmissions across all patient categories.
- d. The revised RRIP should address any technical issues associated with readmission rate measurements (including those identified above).

**E. The Quality-Based Revenue (QBR) and MHAC Programs**

- 1. The QBR provides hospitals with financial incentives tied to their performance across a range of quality domains including patient satisfaction, patient safety and clinical quality measures and the MHAC (Maryland Hospital Acquired Conditions) program encourages reductions in preventable conditions.
- 2. Maryland continues to perform poorly on most of the patient satisfaction measures; it performs in a mixed but generally average manner on the patient safety measures; and it has achieved a 47% reduction in MHACs since CY 2013.
- 3. The ongoing poor performance on the patient satisfaction measures is a serious concern of the HSCRC and an opportunity to achieve performance gains that would have substantial benefits for patients.
- 4. Many concerns have been raised about the credibility of the very large improvements in MHAC levels over the last four years (and, especially, in the immediate wake of the conversion to the new waiver and the GBR budgets). In particular, changes in clinical coding practices have been cited as a possible source of some portion of the improvements.
- 5. Recommendations: On these bases, the HSCRC should do the following:
  - a. Review the MHACs and retain those that identify preventable conditions in a reliable way in a revised MHAC program or incorporate them into a revised QBR policy in a way that will ensure compliance with the Model Agreement or the proposed Enhanced Model.
  - c. Place a greater emphasis on patient satisfaction and patient safety measures and a limited set of other quality measures that can be

objectively and reliably measured and benchmarked against national standards. In particular, ED wait times—which are unacceptably high in Maryland—should be featured in the revised QBR and the HSCRC should establish strong financial incentives for improvements in these areas after taking into account those factors (such as SES, bed availability, and volume of emergency petition patients) which may influence the ability of particular hospitals to meet the ED wait time standards.

- d. These recommended changes in the QBR, RRIP and MHAC programs should be implemented in a way that ensures that Maryland will meet the CMS requirement that its quality programs must be at least as stringent as those included in the Medicare program elsewhere in the U.S.

#### **F. The Medicare Performance Adjustment (MPA)**

1. The HSCRC has approved a final recommendation from the staff which outlines a Medicare Performance Adjustment (MPA) that is designed to place individual hospitals at risk for a small portion of their Medicare revenues based on their ability to control the Total Cost of Care (TCOC) for Medicare FFS beneficiaries who are assigned to them through a three tier attribution process.
2. The rationale for the MPA is based substantially on a desire to enhance the ability of physicians in Maryland to become eligible for MACRA-based bonuses through participation in Advanced Alternative Payment Models (AAPMs).
3. The MPA would allow physicians participating with hospitals bearing risk under the MPA to claim MACRA bonuses and might incentivize them to manage care in ways that would enhance the likelihood of success in Phase Two of the waiver.
4. However, serious objections have been raised regarding the reliability and appropriateness of the attribution methods proposed for the MPA, including the methods used to assign individuals to hospitals; the potential absence of cohesive patient/provider relationships; the challenge of creating and supporting provider networks that could effectively manage care; the stability and reliability of the Medicare TCOC target budgets that would be created for the individual hospitals; and the minimal level of financial incentives initially included in the program.
5. Recommendations: Given these concerns, the HSCRC should take the following steps:
  - a. The HSCRC should proceed with the MPA for CY 2018, as outlined by staff, inclusive of any changes that are settled on prior to the start of CY 2018.

- b. The HSCRC should continue to work on the MPA during the first half of CY 2018 to make refinements in it; in addition, the HSCRC should solicit proposals from the hospitals (individually, as systems or as geographic groups) for approaches whereby they could be placed at risk for Medicare FFS TCOC target budgets in CY 2019 and future years using alternative MPA arrangements that they would create in response to a number of key criteria that would be established by the HSCRC.
- c. The HSCRC should require the alternative MPA arrangements to be consistent with the requirements of the Model Agreement and the proposed Enhanced Model.
- d. The Trend Factor for the Medicare TCOC target budgets would not be pre-set for CY 2018; it would be tied and reconciled to the Medicare TCOC test in the waiver agreement.

**G. General Improvement and Clarification of Rate Setting Methodologies**

- 1. Many of the HSCRC's current rate setting methodologies are so complex that they are not well-understood by hospital CEOs, CFOs, and Commissioners.
- 2. Methodologies that are not well-understood by the entities that are governed by them are ineffective tools for providing incentives and driving desired behaviors.
- 3. The complex nature of many of the HSCRC's existing methodologies is a key source of dissatisfaction with the existing system.
- 4. Recommendations: On these grounds, the HSCRC should do the following to improve its rate setting methodologies and enhance their ability to motivate desired behaviors:
  - a. Use continuous scales in determining incentive rewards and penalties as described in Attachment One which provides a draft methodology whereby the HSCRC can apply incentives and penalties which can be focused or relaxed, if appropriate, on any segments of the performance distribution—for example, the HSCRC might elect to apply a modifier which would remove rewards or penalties from hospitals within any particular performance range so that the incentives could be focused on hospitals on the “good” or “bad” ends of the performance distribution. These choices would be made by the HSCRC as policy decisions in the context of the particular quality programs upon review of the relevant information.
  - b. Eliminate the use of “contingency” structures in which hospitals are put at risk for the performance of other hospitals at the statewide level. Hospitals that meet specified target levels of performance should be entitled to receive their award and should not lose any part of it because

other hospitals did not meet their targets. If there is a desire to spur inter-hospital cooperation, a bonus could be applied to the rewards of all hospitals that operate at or above a specified attainment level and the penalties applicable to all hospitals that do not reach a specified attainment level could be reduced if, on the whole, hospital performance is judged by the HSCRC to meet an acceptable overall standard.

- c. Eliminate the use of combined "attainment," "improvement" and "consistency" scales. The use of multiple performance metrics of these kinds greatly adds to the complexity of the methodologies and detracts from their understandability. Hospitals with higher attainment scores should always receive higher rewards or lower penalties than hospitals with lower attainment scores. If the scales are set on a continuous basis, then improvements are inherently recognized by an attainment-only scale because improving to higher attainment levels will always bring either higher rewards or smaller penalties.
- d. In constructing methodologies and adjustments, the HSCRC should rely whenever possible on straightforward, non-complex techniques which can be readily understood by hospital CEOs, CFOs and Commissioners who are charged with the task of operating under or establishing and maintaining key policies. Regression-based adjustments and other more complex tools should be used only when they provide clearly better results and are accompanied by persuasive logical and conceptual rationales.

#### H. Timing of Proposed Methodological Changes

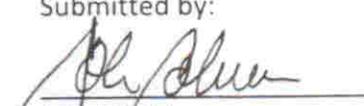
1. The HSCRC and the Maryland hospital industry took major steps on the road to a high value system and achievement of the Triple Aim through the adoption of the GBRs and other actions that were implemented under the Model Agreement. However, after nearly four years of experience, we now have an opportunity to make some important improvements in our rate setting methods based on experience and feedback from a variety of interested groups.
2. The proposed changes reflect a significant groundswell of opinion that the HSCRC should at this time make significant improvements in its key methodologies to maximize the likelihood that the objectives and requirements of the current waiver and Phase Two will be met and the interests of the public will be served.
3. It is best to make policy changes at the beginning, rather than during, rate periods. The waiver operates on a calendar year (CY) basis while hospital rate years run from July 1 through June 30 each year.

4. The elimination of the MSA and the establishment of the budget adjustment methodology that would provide VCF adjustments subject to the population-based volume limitations described above should be implemented, effective for 1/1/2018, inclusive of volume changes that occurred during CY 2017 that have not already been reflected in rate orders. If a brief period of time is needed at the start of CY 2018 to make these changes, they should be implemented as quickly as possible retroactive to 1/1/2018. These adjustments should be implemented in a way that ensures ongoing compliance with the population-based requirements of the Model Agreement.
5. The hospitals should be allowed and encouraged to submit alternatives to the PAU program prior to 7/1/2018 with the start-up of such programs that are found to be approvable by the HSCRC to begin by 7/1/2018. The improvements and modifications to the standard PAU policy that were recommended above should be implemented for 7/1/2018.
6. The following methodological and other changes should be specified in detail on a timely basis during the first half of CY 2018 for implementation on 7/1/2018:
  - a. The rate realignment changes needed to restore the close alignment of charges and costs on a revenue center basis with any steps that are appropriate, if necessary, to phase-in any significant impacts on the relevant waiver tests;
  - b. The modification of the RRIP;
  - c. The revisions to the MHAC and QBR policies;
  - d. The proposed solicitation of alternative MPA methods should be issued by 7/1/2018 with first implementations to occur, if approvable proposals are received, on 1/1/2019, with later implementations to occur on 7/1/2019 or at later dates depending on hospital responses; and
  - e. The proposed general clarifications and improvements of rate setting methodologies, described in Section G, should be implemented effective 7/1/2018 with draft recommendations and policies incorporating these changes to be brought forward to the Commission for review and approval on a staged basis during the first half of CY 2018.

Submitted by:

  
\_\_\_\_\_  
Jack C. Keane  
HSCRC Commissioner  
11/15/2017  
Date

Submitted by:

  
\_\_\_\_\_  
John M. Colmers  
HSCRC Commissioner  
11/15/17  
Date

**Attachment One:  
Illustration of Quality Scoring Tool**

<b>EXAMPLE OF CALCULATION OF QUALITY POINTS (FOR INDIVIDUAL MEASURES, DOMAINS OR TOTAL QUALITY SCORE)</b>					
<b>ASSUME:</b>					
BEST MD HOSPITAL IS 40% BETTER THAN THE STANDARD					40%
WORST MD HOSPITAL IS 35% WORSE THAN THE STANDARD					-35%
RANGE = ABSOLUTE VALUE OF BEST TO WORST					75%
ASSUMED MAXIMUM REWARD					2%
ASSUMED MAXIMUM PENALTY					-2%
<b>CALCULATION OF REWARD FOR HOSPITALS WITH SCORES BETTER THAN THE U.S. (OR MARYLAND) AVERAGE</b>					
	Reward	Max Reward	Best Hospital	Example: Hosp "X"	Example Hosp X/ Best Hosp
Assume Hospital "X" has a score which places it at 30% better than the Standard: it would receive the following: "Maximum Reward" x (Hospital Score/Best Hospital Score)	1.50%	2%	40%	30%	75%
<b>CALCULATION OF REWARD FOR HOSPITALS WITH SCORES WORSE THAN THE U.S. (OR MARYLAND) AVERAGE</b>					
	Penalty	Max Penalty	Worst Hospital	Example: Hosp "Y"	Example Hosp Y/ Worst Hosp
Assume Hospital "Y" has a score which places it at 25% worse than the Standard: it would receive the following: "Maximum Reward" x (Hospital Score/Worst Hospital Score)	-1.43%	-2%	-35%	-25%	71%
<b>MODIFIER: IN SOME INSTANCES, THE HSCRC MIGHT WISH TO FOCUS REWARDS AND PENALTIES ON THE EXTREMES OF THE RANGE. THE FOLLOWING METHOD ILLUSTRATES ONE WAY IN WHICH THIS OBJECTIVE COULD BE ACCOMPLISHED USING QUANTILES. DECILES OR ANY OTHER SEGMENTATION OF THE DISTRIBUTION COULD BE USED TO FACILITATE THE FOCUSING OF REWARDS AND PENALTIES ON ANY SEGMENT OF THE DISTRIBUTION.</b>					
		Best Quartile	Middle Quartile ("Good")	Middle Quartile ("Bad")	Worst Quartile
Assumed Adjustment Factors		1.25	1.00	1.00	1.25
Assumed Hospital "X" or "Y" Unmodified Reward or Penalty		1.50%	1.25%	-0.75%	-1.43%
Adjusted Reward or Penalty		1.8750%	1.2500%	-0.7500%	-1.7857%
Note: Adjusted Rewards and Penalties would be capped at pre-set maximum levels.					

# Executive Director's Report

## December 13, 2017

### Considerations Regarding RY 2018 Update

As discussed in the November 2017 meeting, the Commission asked the staff to evaluate the potential need for a mid-year correction of the update for the rate year ending June 30, 2018. There were concerns that the update provided for the year could lead to excess growth in total cost of care, especially for Medicare, if utilization did not fall as it did in 2016.

The staff reviewed this topic with the Commission last month and is providing an update today. Key considerations are:

- Maryland is meeting the savings requirements of the All-Payer Model
- Growth in hospital and total cost of care were well below national levels in 2016
- For CY 2017, Medicare Total Cost of Care growth is running above the national growth rate through September, but below the 1% total cost of care guardrail
- Nearly complete evaluation “audit” of changes in Medicare data set
- Considerations
  - Need to ensure annual savings in Total Cost of Care relative to the 2013 base year, in line with proposed Enhanced Model requirements
  - Need to be below national Medicare Total Cost of Care growth in CY 2018
- Recommendations
  - Continue to monitor performance
  - Hospitals need to focus on reducing avoidable and unnecessary utilization
  - Commission could make an adjustment later in the year if necessary
- Rate Year 2019 early considerations
  - RY 2018 inflation provided was 2.68%, current reports show 2.39%
  - Lower Medicare update for 2019 (last update included an increase for DSH)
  - Further reductions/changes in the population adjustment

### National Trends

#### Moody's: US not-for-profit and public healthcare outlook changed to negative with rising operating pressure

Global Credit Research - 04 Dec 2017

Moody's Investors Service has revised the US healthcare 2018 outlook to negative from stable based on the expectation that operating cash flow will contract by 2%-4% over the next 12-18 months.

According to Moody's, operating cash flow declined at a more rapid pace than expected in 2017, and Moody's expects continued contraction. The cash flow spike from insurance expansion

under the Affordable Care Act in 2014 and 2015 has largely worn off, but cash flow has not stabilized because of a low revenue and higher expense growth environment.

Moody's says hospital revenue growth is slowing due to the lower reimbursement rate increases across all insurance providers. Moreover, rising exposure to governmental payers will dampen revenue growth for the foreseeable future due to a rapidly aging US population and low reimbursement rates. Governmental payers, including Medicare and Medicaid, represent 60% of gross patient revenue in 2017.

This trend affects Maryland. ***This underscores the importance of reducing avoidable and unnecessary utilization and addressing capacity in the system to keep Maryland's system healthy.***

### **Updates to Payment Mechanisms and Preparation for Implementation of Total Cost of Care Model**

- Update on development of draft implementation priorities
- Commissioners' Keane/Colmers observations and recommendations for possible modifications. Staff will prioritize the recommendations that have short term fiscal impact for analysis and decision making.
- Expected Schedule: (Model clearance activities, holidays, and ongoing staff work could affect timing)

#### **January**

- Present Commission's draft implementation plan/priorities for public review and comment
- Staff prepares and presents analysis regarding Keane/Colmers observations and recommendations with emphasis on GBR mechanisms, avoidable utilization, and other system mechanisms
- Obtain public comments regarding draft implementation plan/priorities and possible changes to GBR mechanisms **by February 1**

#### **February**

- Discuss and receive public input regarding potential changes to GBR mechanisms, avoidable utilization, and other mechanisms
- Staff prepares and presents analysis regarding Keane/Colmers observations and recommendations relative to policy direction of quality and value-based mechanisms, including TCOC mechanisms
- Obtain public comments regarding policy direction of quality and value-based payment mechanisms **by March 1.**

### **Staff Announcements**



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

Data through September 2017 – Claims paid through October

Source: CMMI Monthly Data Set



# Disclaimer:

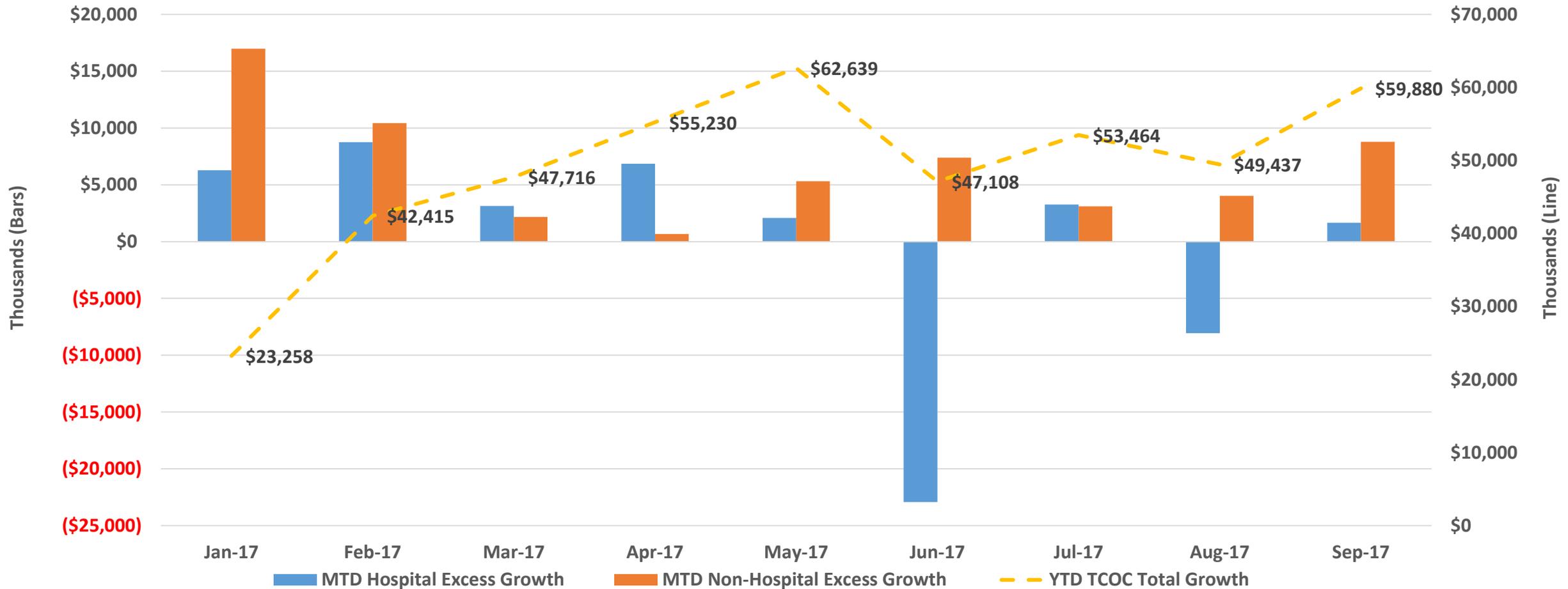
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Data contained in this presentation represent analyses prepared by HSCRC staff based on data summaries provided by the Federal Government. The intent is to provide early indications of the spending trends in Maryland for Medicare FFS patients, relative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

# Medicare Hospital & Non-Hospital Growth

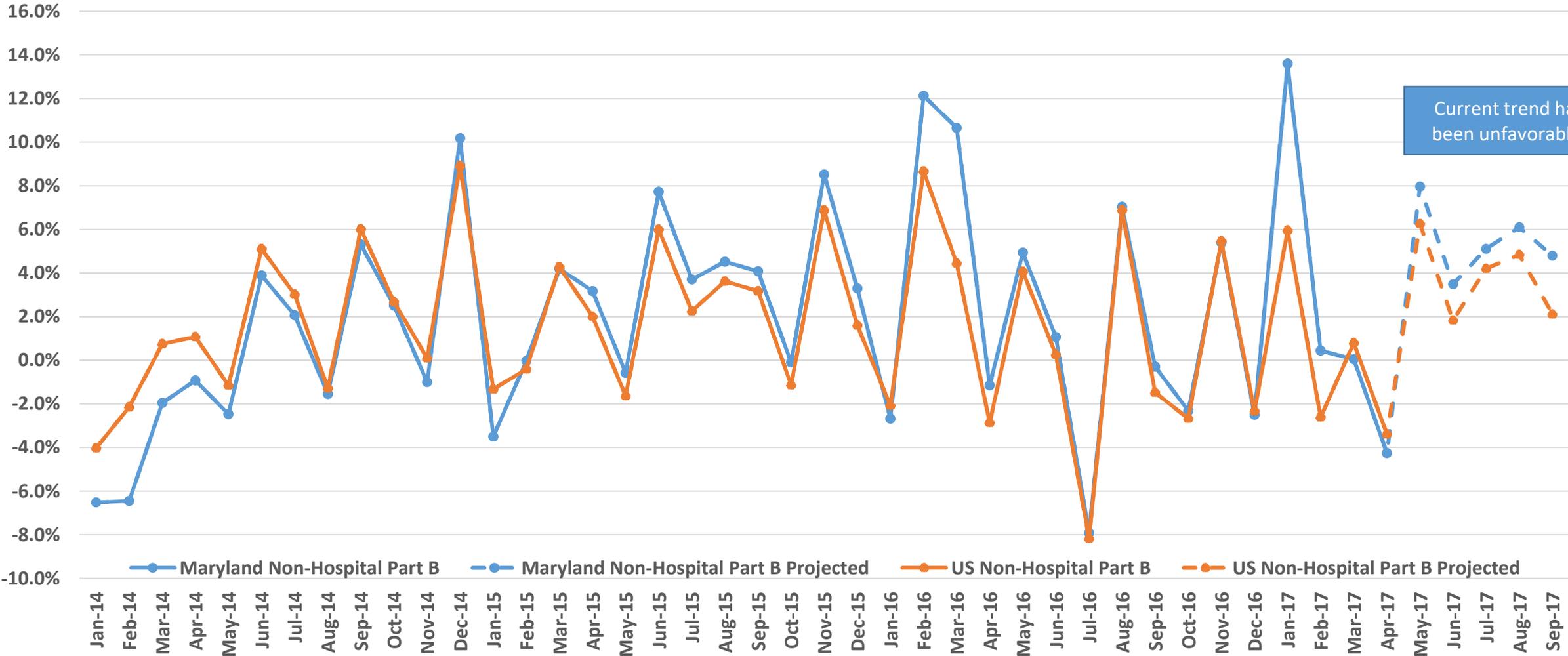
(with completion) CYTD through September 2017

\*June 2017 has been adjusted for the undercharge that occurred in July – Dec 2016.



# Medicare Non-Hospital Part B Spending per Capita

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





# Monitoring Maryland Performance Quality Data

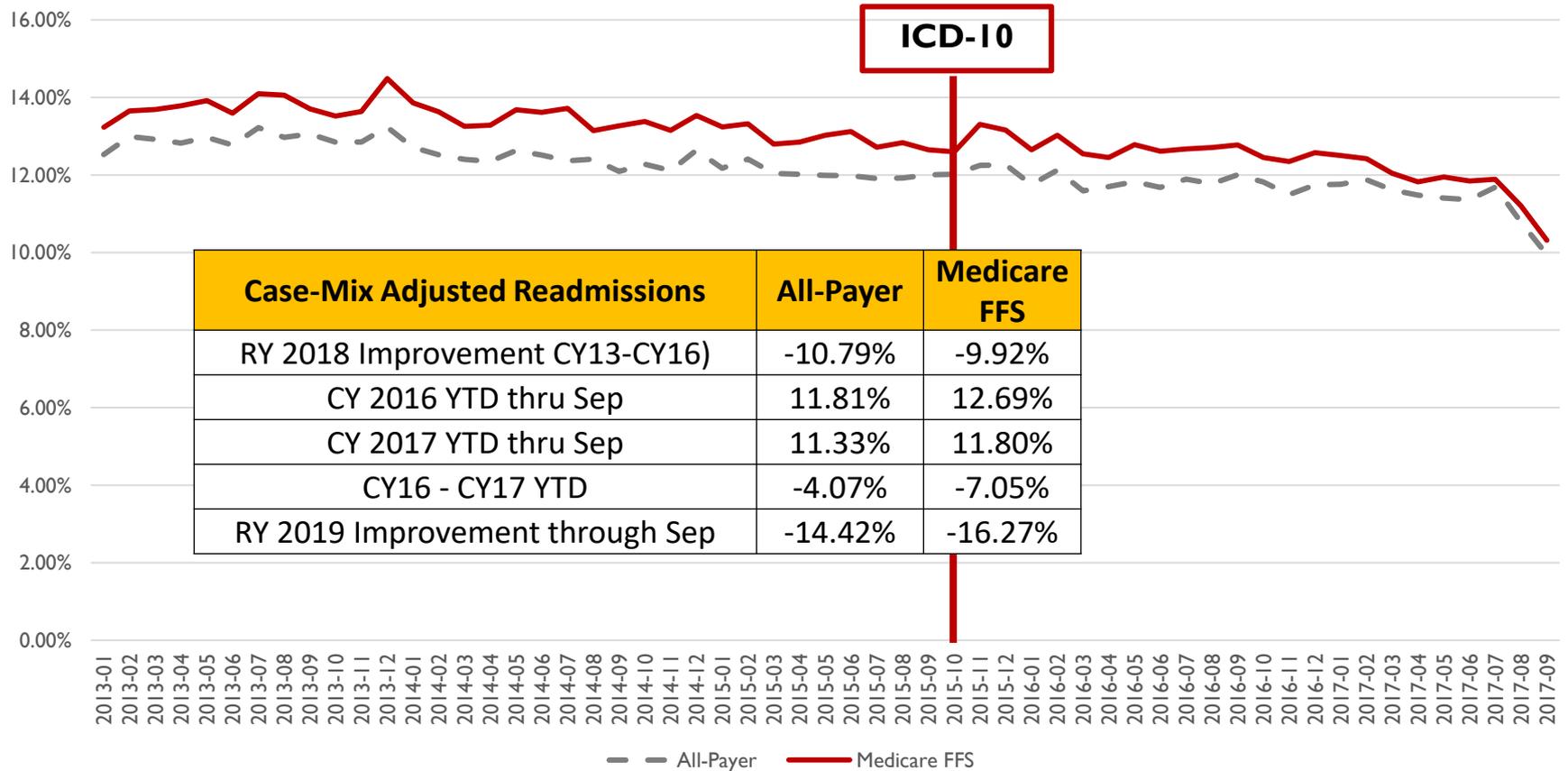
December 2017 Commission Meeting Update



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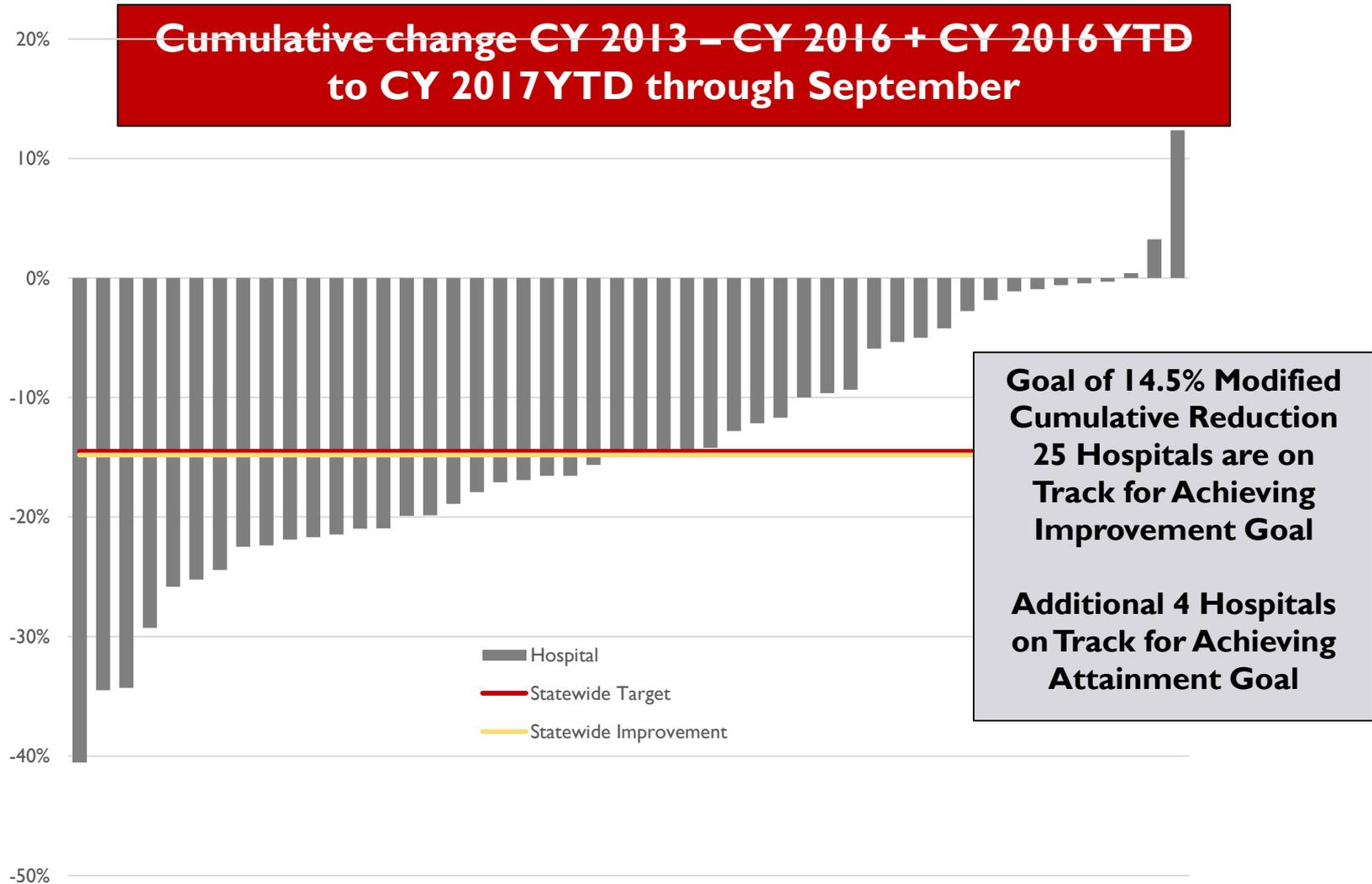
# Readmission Reduction Analysis

# Monthly Case-Mix Adjusted Readmission Rates



**Note: Based on final data for January 2012 – Jun 2017; Preliminary Data for Jul-Oct 2017. Statewide improvement to-date is compounded with complete RY 2018 and RY 2019 YTD improvement.**

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

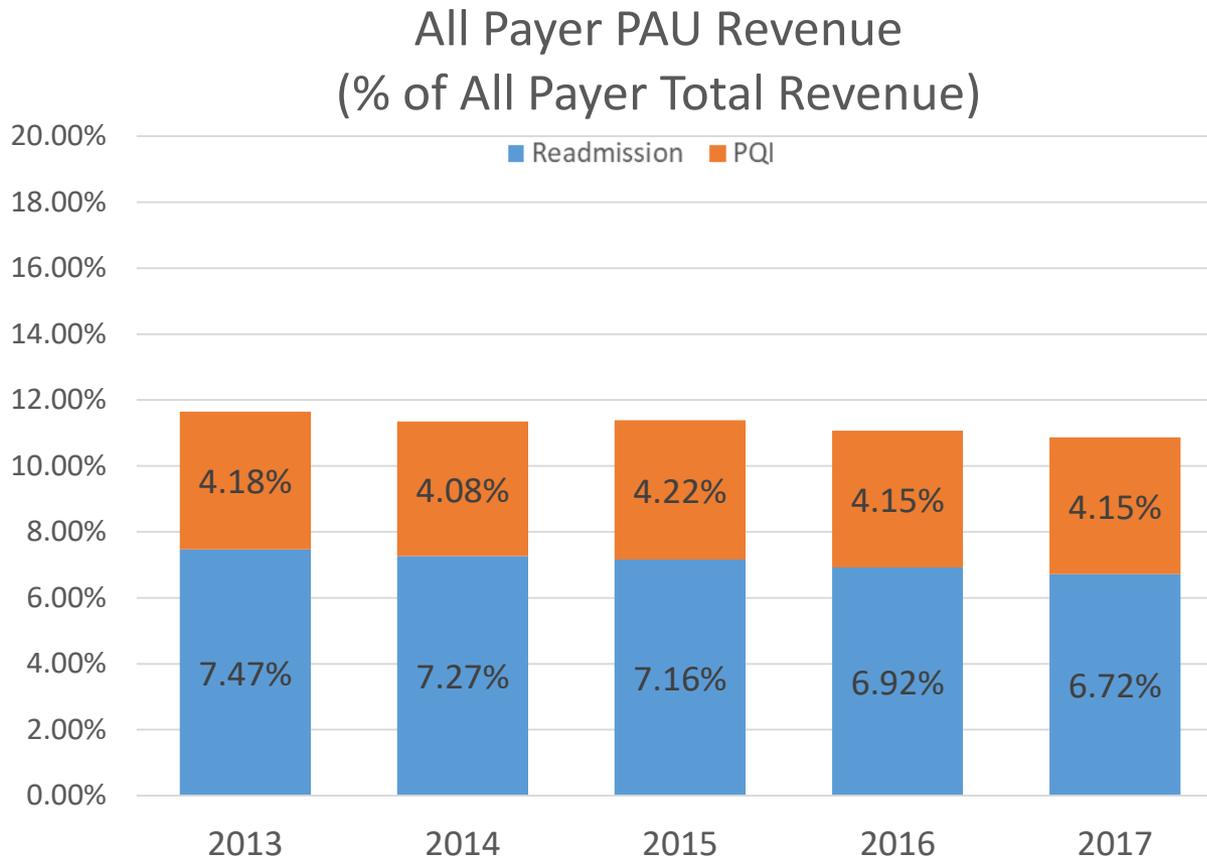


**Note: Based on final data for January 2013-June 2017, Preliminary through October 2017.**

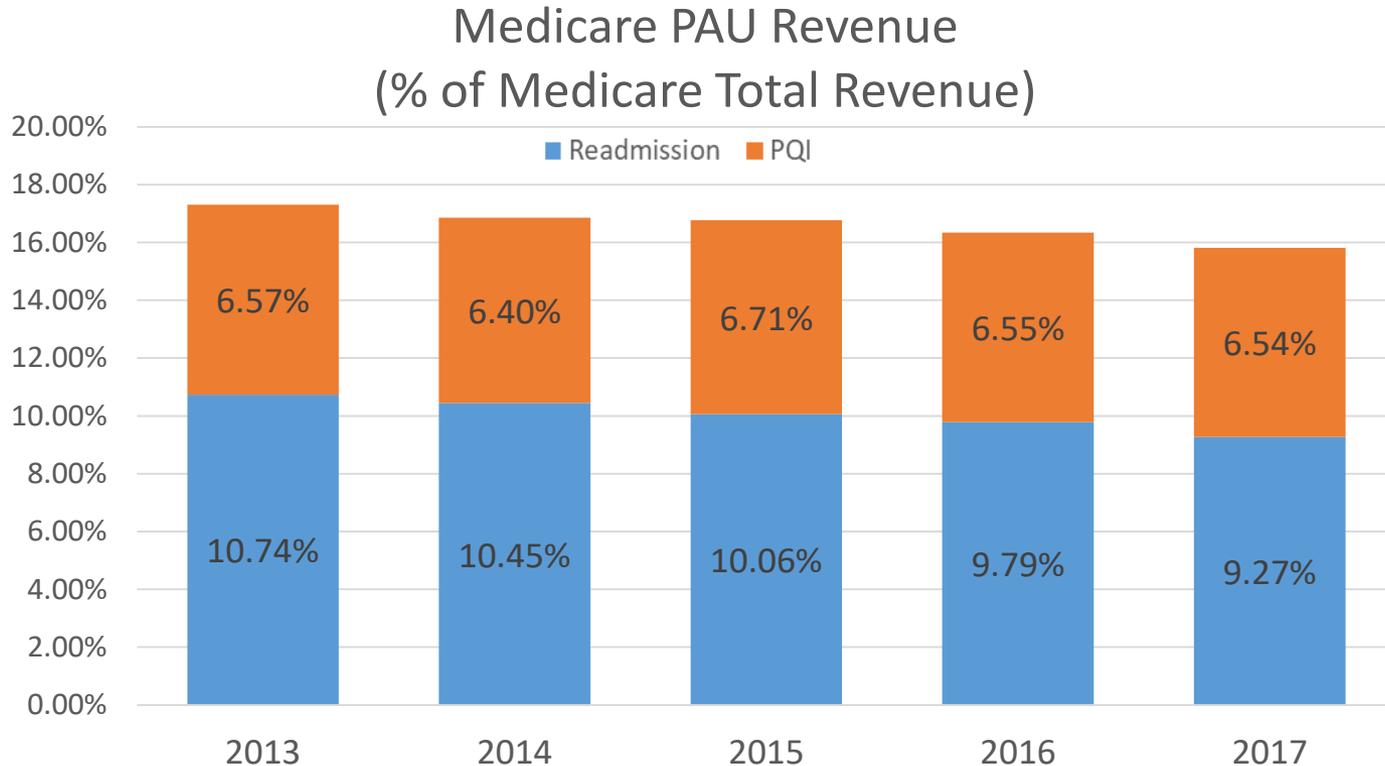
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# Potentially Avoidable Utilization (PAU) Monitoring

# Statewide CYTD (Jan-Sep) All Payer PAU



# Statewide CYTD (Jan-Sep) Medicare PAU





# Monitoring Maryland Performance Financial Data

Year to Date through October 2017

Source: Hospital Monthly Volume and Revenue and Financial Statement Data

Run: December 2017

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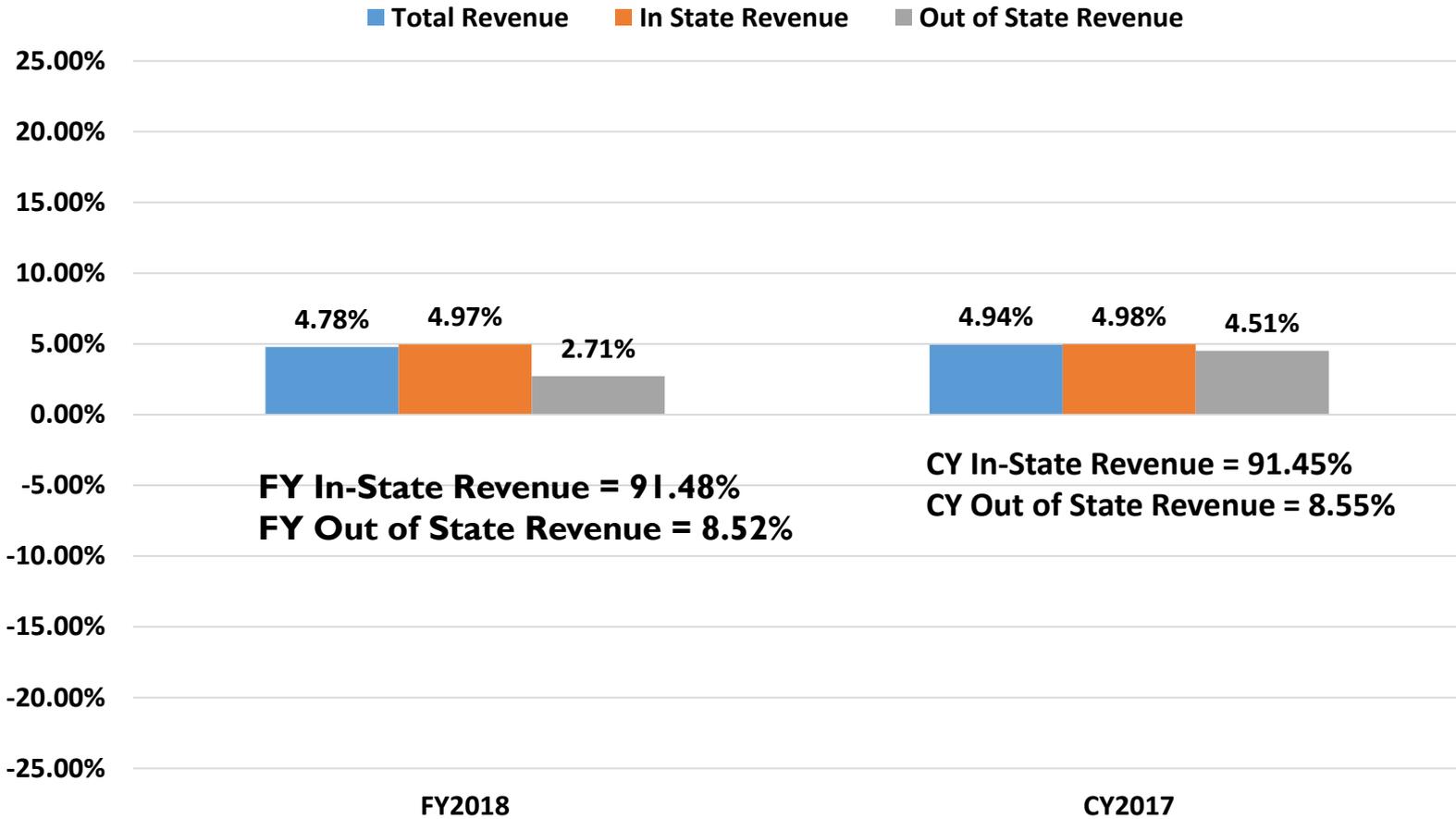
**HSCRC**

Health Services Cost  
Review Commission



# Gross All Payer Revenue Growth

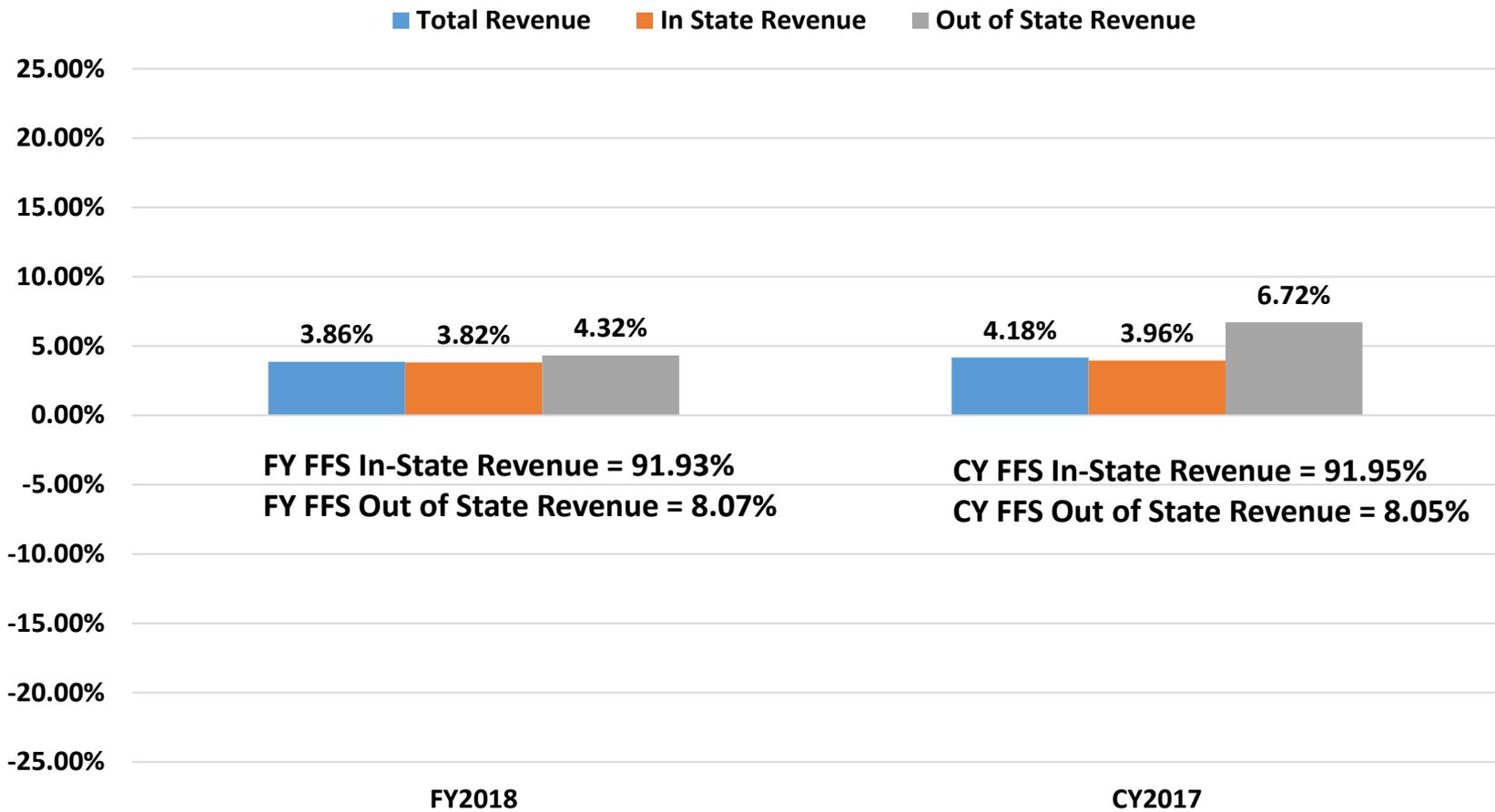
FY 2018 (July - October 2017 over July - October 2016) and CY 2017 (Jan-October 2017 over Jan-October 2016)



**These figures are not adjusted for the undercharge that occurred Jul-Dec 2016.  
 The State's Fiscal Year begins July 1**

# Gross Medicare Fee for Service Revenue Growth

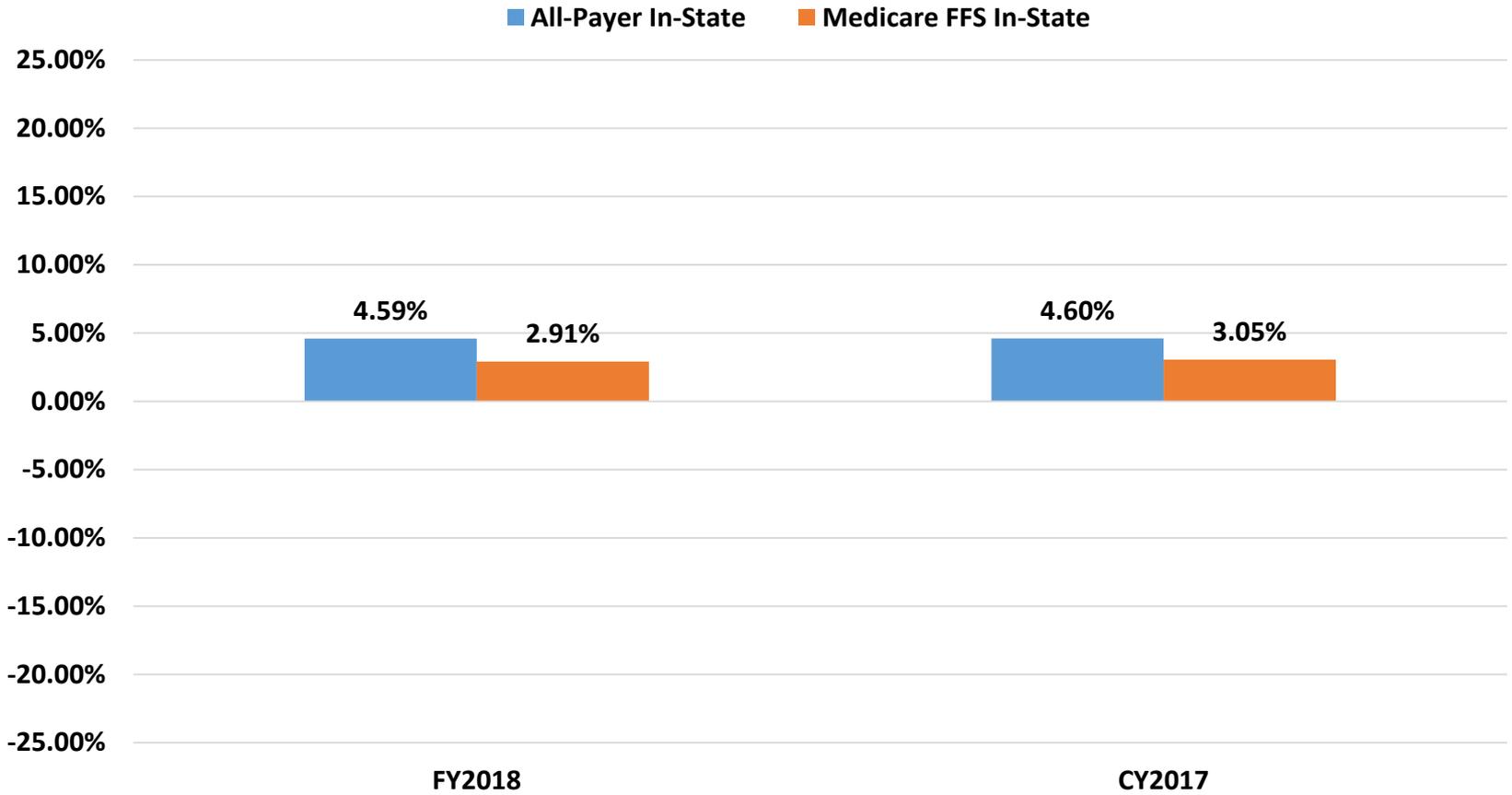
FY 2018 (July - October 2017 over July - October 2016) and CY 2017 (Jan-October 2017 over Jan-October 2016)



**These figures are not adjusted for the undercharge that occurred in Jul-Dec 2016.**  
**The State's Fiscal Year begins July 1**

# Hospital Revenue Per Capita Growth Rates

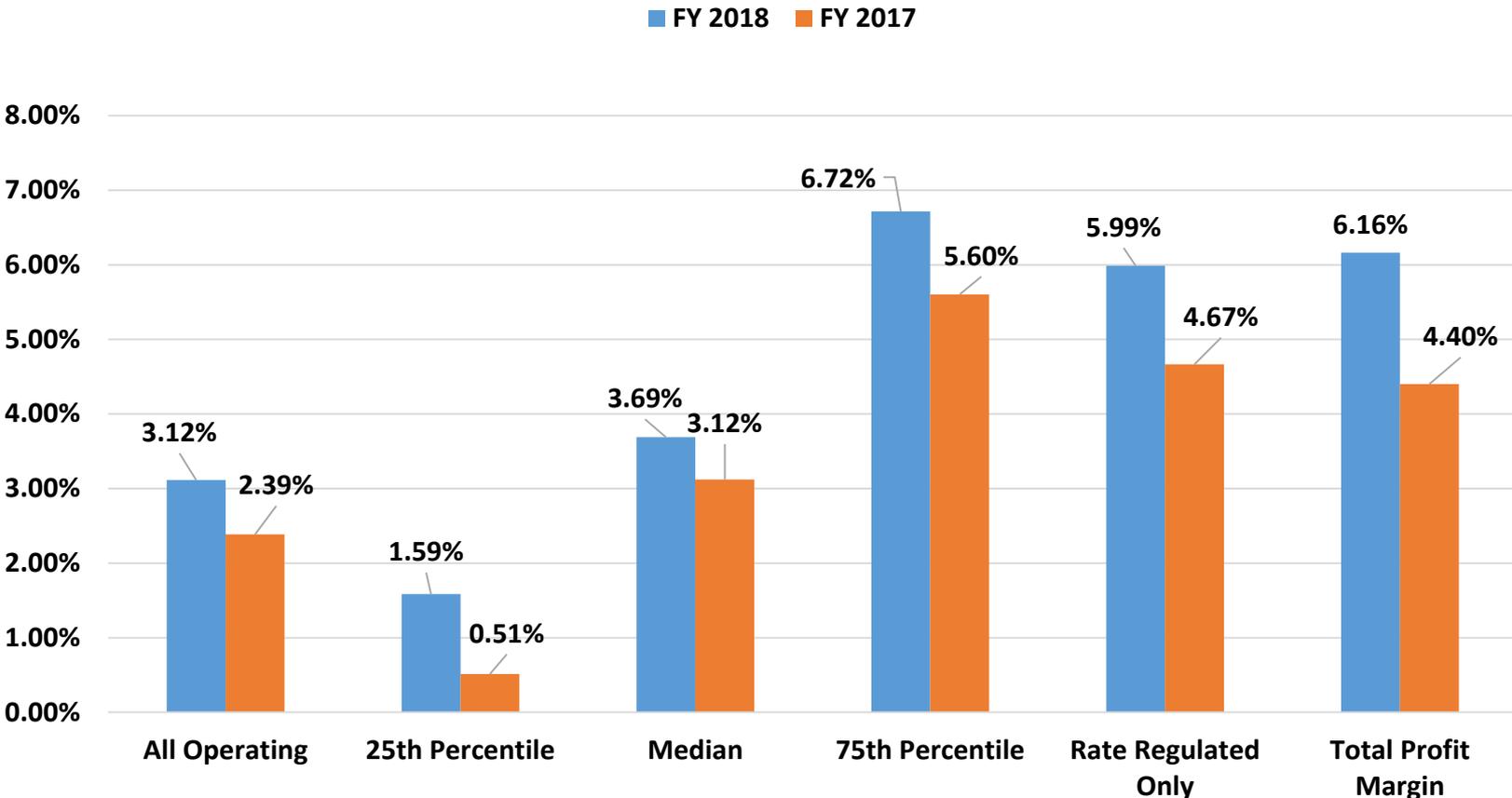
FY 2018 (July-October 2017 over July-October 2016) and CY 2017 (Jan-October 2017 over Jan-October 2016)



**These figures are not adjusted for the undercharge that occurred in July-December 2016.  
The State's Fiscal Year begins July 1**

# Operating and Total Profits

Fiscal Year 2018 (July - October 2017) Compared to Same Period in Fiscal Year 2017 (July - October 2016)



FY 2018 unaudited hospital operating profits to date show an increase of .73 percentage points in total operating profits compared to the same period in FY 2017. Rate regulated profits for FY 2018 have increased by 1.32 percentage points compared to the same period in FY 2017.

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

AS OF DECEMBER 5, 2017

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

Docket Number	Hospital Name	Date Docketed	Decision Required by:	Rate Order Must be Issued by:	Purpose	Analyst's Initials	File Status
2399A	Priority Partners	8/28/2017	N/A	N/A	ARM	AP	OPEN
2402A	MedStar Medicare Choice	9/15/2017	N/A	N/A	ARM	DNP	OPEN
2403A	MedStar Family Choice	9/15/2017	N/A	N/A	ARM	AP	OPEN
2406A	Maryland Physicians Care	10/16/2017	N/A	N/A	ARM	AP	OPEN
2407A	Johns Hopkins Health System	10/20/2017	N/A	N/A	ARM	DNP	OPEN
2409A	University of Maryland Medical System	11/2/2017	N/A	N/A	ARM	DNP	OPEN
2410A	University of Maryland Medical System	11/2/2017	N/A	N/A	ARM	AP	OPEN
2411A	University of Maryland Medical System	11/8/2017	N/A	N/A	ARM	DNP	OPEN
2412A	University of Maryland Medical System	11/8/2017	N/A	N/A	ARM	DNP	OPEN
2413A	University of Maryland Medical System	11/9/2017	N/A	N/A	ARM	DNP	OPEN
2414N	Garrett Regional Medical Center	11/27/2017	12/27/2017	4/26/2018	IRC	CK	OPEN
2415A	Johns Hopkins Health System	11/28/2017	N/A	N/A	ARM	DNP	OPEN
2416A	Johns Hopkins Health System	11/28/2017	N/A	N/A	ARM	DNP	OPEN
2417A	Johns Hopkins Health System	11/29/2017	N/A	N/A	ARM	DNP	OPEN
2418A	Johns Hopkins Health System	11/29/2017	N/A	N/A	ARM	DNP	OPEN

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

<b>IN RE: THE ALTERNATIVE</b>	*	<b>BEFORE THE HEALTH</b>	
<b>RATE APPLICATION OF</b>	*	<b>SERVICES COST REVIEW</b>	
<b>THE JOHNS HOPKINS HEALTH</b>	*	<b>COMMISSION</b>	
<b>SYSTEM</b>	*	<b>DOCKET:</b>	<b>2017</b>
	*	<b>FOLIO:</b>	<b>2209</b>
<b>BALTIMORE, MARYLAND</b>	*	<b>PROCEEDING</b>	<b>2399A</b>

**Final Recommendation**

**December 13, 2017**

## **I. Introduction**

On August 28, 2017, Johns Hopkins Health System (“JHHS,” or the “System”) filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Suburban Hospital, and Howard County General Hospital (“the Hospitals”). The System seeks renewal for the continued participation of Priority Partners, Inc. in the Medicaid Health Choice Program. Priority Partners, Inc. is the entity that assumes the risk under the contract. The Commission most recently approved this contract under proceeding 2399A for the period from January 1, 2017 through December 31, 2018. The Hospitals are requesting to renew this contract for a one-year period beginning January 1, 2018.

## **II. Background**

Under the Medicaid Health Choice Program, Priority Partners, a provider-sponsored Managed Care Organization (“MCO”) sponsored by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. Priority Partners was created in 1996 as a joint venture between Johns Hopkins Health Care (JHHC) and the Maryland Community Health System (MCHS) to operate an MCO under the Health Choice Program. Johns Hopkins Health Care operates as the administrative arm of Priority Partners and receives a percentage of premiums to provide services such as claim adjudication and utilization management. MCHS oversees a network of Federally Qualified Health Clinics and provides member expertise in the provision of primary care services and assistance in the development of provider networks.

The application requests approval for the Hospitals to continue to provide inpatient and

outpatient hospital services, as well as certain non-hospital services, while the MCO receives a State-determined capitation payment. Priority Partners pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees. The Hospitals supplied information on their most recent experience as well as their preliminary projected revenues and expenditures for the upcoming year based on the initially revised Medicaid capitation rates.

Priority Partners is a major participant in the Medicaid Health Choice program, providing managed care services to 25.2% of the State's MCO population, up from 24.5% in CY 2016.

### **III. Staff Review**

This contract has been operating under the HSCRC's initial approval in proceeding 2399A. Staff reviewed the operating performance under the contract as well as the terms of the capitation pricing agreement. Staff reviewed available final financial information and projections for CYs 2016, 2017, and 2018. The statements provided by Priority Partners to staff represent both a "stand-alone" and "consolidated" view of Priority's operations. The consolidated picture reflects certain administrative revenues and expenses of Johns Hopkins Health Care. When other provider-based MCOs are evaluated for financial stability, their administrative costs relative to their MCO business are included as well; however, they are all included under the one entity of the MCO.

The consolidated financial performance of Priority Partners was favorable in CY 2016. Priority Partners is projecting to have favorable performance in CY 2017 and an unfavorable performance in CY 2018.

#### **IV. Recommendation**

With the exception of CY 2015, Priority Partners has continued to achieve favorable consolidated financial performance in recent years. Based on past and projected performance, staff believes that the proposed renewal arrangement for Priority Partners is acceptable under Commission.

#### **Therefore:**

- 1) Staff recommends approval of this alternative rate application for a one-year period beginning January 1, 2018.**
- 2) Since losses over an extended period of time may be construed as a loss contract necessitating termination of this arrangement, staff will continue to monitor financial performance in CY 2017, and the MCOs expected financial status into CY 2018. Therefore, staff recommends that Priority Partners report to Commission staff (on or before the September 2018 meeting of the Commission) on the actual CY 2017 experience, and preliminary CY 2018 financial performance (adjusted for seasonality) of the MCO, as well as projections for CY 2019.**
- 3) Consistent with its policy paper outlining a structure for review and evaluation of applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the continued adherence to the standard Memorandum of Understanding with the Hospitals for the approved contract. This document formalizes the understanding between the Commission and the Hospitals, and includes provisions for such things as payments of HSCRC-approved rates,**

**treatment of losses that may be attributed to the managed care contract, quarterly and annual reporting, the 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 also stipulates that operating losses under managed care contracts may not be used to justify future requests for rate increases.**

<b>IN RE: THE ALTERNATIVE</b>	<b>*</b>	<b>BEFORE THE HEALTH</b>	
<b>RATE APPLICATION OF</b>	<b>*</b>	<b>SERVICES COST REVIEW</b>	
<b>MEDSTAR HEALTH</b>	<b>*</b>	<b>COMMISSION</b>	
<b>SYSTEM</b>	<b>*</b>	<b>DOCKET:</b>	<b>2017</b>
	<b>*</b>	<b>FOLIO:</b>	<b>2212</b>
<b>COLUMBIA, MARYLAND</b>	<b>*</b>	<b>PROCEEDING:</b>	<b>2402A</b>

**Staff Recommendation**

**December 13, 2017**

## **I. Introduction**

On September 15, 2017, MedStar Health filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of MedStar Franklin Square Hospital, MedStar Good Samaritan Hospital, MedStar Harbor Hospital, MedStar Union Memorial Hospital, MedStar Montgomery Medical Center, MedStar Southern Maryland Hospital Center, and MedStar St. Mary's Hospital (the "Hospitals"). MedStar Health seeks approval for MedStar Family Choice ("MFC") to continue to participate in a Centers for Medicare and Medicaid Services (CMS) approved Medicare Advantage Plan. MedStar Family Choice is the MedStar entity that assumes the risk under this contract. The Hospitals are requesting an approval for one year beginning January 1, 2018.

## **II. Background**

MFC has been operating a CMS-approved Medicare Advantage Plan under the plan name of MedStar Medicare Choice for five years in the District of Columbia. In 2014, CMS granted MFC permission to expand under the same Medicare Advantage plan number to provide coverage to Maryland eligible residents in Anne Arundel, Baltimore, Calvert, Charles, Harford, Howard, Prince George's, St. Mary's counties and Baltimore City. However, beginning in CY 2018, MFC will reduce its service area to Harford, Howard, and Prince George's counties and Baltimore City. The application requests continued approval for MFC to provide inpatient and outpatient hospital services, as well as certain non-hospital services in its service area, in return for a CMS-determined capitation payment. MFC will continue to pay the Hospitals HSCRC-approved rates for hospital services used by its enrollees.

MFC supplied financial projections for its operations in Maryland for CY 2017 through

CY 2020.

### **III. Staff Review**

Staff reviewed the reviewed the financial projections for CY 2018 through CY 2020, as well as MFC's experience and projections for CY 2017. The information reflected significant negative financial results through CY 2019 and a break-even result for CY 2020. In addition, based on its Medical Loss Ratios, MFC has been covering its medical costs but not its administrative costs. Staff also noted a significant reduction in the number of plan members and revenue associated with the reduction in service area beginning in CY 2018.

### **IV. Recommendation**

Based on its review of the financial projections, staff has concerns with the continued approval of this arrangement:

- Staff does not have information regarding the effect on MFC's financial results of the reduction in service area and the resulting sharp decline in membership beginning in CY 2018.
- This arrangement has had significant negative financial results for three years, CYs 2015, 2016, and 2017.
- MFC is projecting somewhat smaller losses for two more years, CY 2018 and CY 2019 with MFC essentially breaking even in CY 2020. It should be noted that last year MFC projected positive financial results for CY 2017.
- Five years of negative financial results is concerning to the staff. Consequently, although staff may recommend continuation under the existing Memorandum of Understanding with the MedStar System, staff believes that this arrangement

requires additional monitoring and oversight.

Therefore, staff recommends conditional approval of the Hospitals' request to continue to participate in CMS' Medicare Part C Medicare Advantage Program for a period of one year beginning January 1, 2018. The Hospitals must file a renewal application annually for continued participation. The conditions for approval are:

- MFC must meet with HSCRC staff prior to August 31, 2018 to review its financial projections for CY 2019.
- MFC must submit a copy to the Commission of its quarterly and annual National Association of Insurance Commissioners' (NAIC's) reports within 15 days of submission to the NAIC.
- MFC shall submit on a quarterly basis, 15 days after submitting its quarterly and annual NAIC reports, in the format provided by staff, a comparison of MFC's budgeted financial data with its actual experience for CY 2018 as reported in MFC's quarterly NAIC report. MFC shall also provide a detailed explanation of any material unfavorable differences between the budget and actual experience.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval also 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.

<b>IN RE: THE ALTERNATIVE</b>	<b>*</b>	<b>BEFORE THE HEALTH</b>	
<b>RATE APPLICATION OF</b>	<b>*</b>	<b>SERVICES COST REVIEW</b>	
<b>MEDSTAR HEALTH</b>	<b>*</b>	<b>COMMISSION</b>	
<b>SYSTEM</b>	<b>*</b>	<b>DOCKET:</b>	<b>2017</b>
	<b>*</b>	<b>FOLIO:</b>	<b>2213</b>
<b>COLUMBIA, MARYLAND</b>	<b>*</b>	<b>PROCEEDING:</b>	<b>2403A</b>

**Final Recommendation**

**December 13, 2017**

## **I. Introduction**

On September 15, 2017, MedStar Health filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of the MedStar Hospitals (“the Hospitals”). MedStar Health seeks renewal for the continued participation of MedStar Family Choice (“MFC”) in the Medicaid Health Choice Program. MedStar Family Choice is the MedStar entity that assumes the risk under this contract. The Commission most recently approved this contract under proceeding 2403A for the period from January 1, 2017 through December 31, 2017. The Hospitals are requesting to renew this contract for one year beginning January 1, 2018.

## **II. Background**

Under the Medicaid Health Choice Program, MedStar Family Choice, a Managed Care Organization (“MCO”) sponsored by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services, as well as certain non-hospital services, while MFC receives a State-determined capitation payment. MFC pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees. MFC provides services to 7.4% of the total number of MCO enrollees in Maryland, which represents which represents approximately the same market share as CY 2016

The Hospitals supplied information on their most recent experience as well as their preliminary projected revenues and expenditures for the upcoming year based on the Medicaid capitation rates.

### **III. Staff Review**

This contract has been operating under previous HSCRC approval (proceeding 2403A). Staff reviewed the operating performance under the contract as well as the terms of the capitation pricing agreement. Staff reviewed available final financial information and projections for CYs 2016, 2017, and 2018. Over this three year period, profits, based on Medstar's October projections, have improved from a small loss in CY 2016 to projected profits in CY 2017 and CY 2018; however, it should be noted that Medicaid data from August anticipated a net loss in CY 2017.

### **IV. Recommendation**

- (1) Staff recommends approval of this alternative rate application for a one-year period beginning January 1, 2018.**
- (2) Since losses may be construed as a loss contract necessitating termination of this arrangement, staff is recommending the following actions:**
  - a. On the earlier of July 1, 2018 or if/when Medicaid applies a mid-year adjustment, MFC shall report to HSCRC staff on the impact that any such adjustment is expected to have on CY 2018 financial performance.**
  - b. HSCRC staff shall be cognizant of the MCO's financial performance and the potential for a loss contract in considering any requested adjustments to rates or global budgets of the associated hospitals during FYs 2018 and 2019.**
  - c. In addition to the report provided in (2)(a), MFC shall report to Commission staff (on or before the September 2018 meeting of the Commission) on the actual CY 2017 experience and preliminary CY 2018**

**financial performance (adjusted for seasonality) of the MCO, as well as projections for CY 2019.**

- (3) Consistent with its policy paper outlining a structure for review and evaluation of applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the continued adherence to the standard Memorandum of Understanding with the Hospitals for the approved contract. This document formalizes the understanding between the Commission and the Hospitals, and includes provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the managed care contract, quarterly and annual reporting, the 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 also stipulates that operating losses under managed care contracts may not be used to justify future requests for rate increases.**

<b>IN RE: THE ALTERNATIVE</b>	<b>*</b>	<b>BEFORE THE HEALTH</b>
<b>RATE APPLICATION OF</b>	<b>*</b>	<b>SERVICES COST REVIEW</b>
<b>SAINT AGNES HEALTH</b>	<b>*</b>	<b>COMMISSION</b>
<b>WESTERN MARYLAND</b>	<b>*</b>	<b>DOCKET: 2017</b>
<b>HEALTH SYSTEM</b>	<b>*</b>	<b>FOLIO: 2216</b>
<b>MERITUS HEALTH</b>	<b>*</b>	<b>PROCEEDING: 2406A</b>
<b>HOLY CROSS HEALTH</b>	<b>*</b>	

**Final Recommendation**

**December 13, 2017**

On October 16, 2017, Saint Agnes Health System, Western Maryland Health System, Holy Cross Health, and Meritus Health (“the Hospitals”) filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06. The Hospitals seek renewal for the continued participation of Maryland Physicians Care (“MPC”) in the Medicaid Health Choice Program. MPC is the entity that assumes the risk under this contract. The Commission most recently approved this contract under proceeding 2406A for the period January 1, 2017 through December 31, 2017. The Hospitals are requesting to renew this contract for one year beginning January 1, 2018.

## **II. Background**

Under the Medicaid Health Choice Program, MPC, a Managed Care Organization (“MCO”) sponsored by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services as well as certain non-hospital services, while the MCO receives a State-determined capitation payment. MPC pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees. MPC is a major participant in the Medicaid Health Choice program, and provides services to 18.7% of the total number of MCO enrollees in Maryland, which represents approximately the same market share as CY 2016.

The Hospitals supplied information on their most recent experience as well as their preliminary projected revenues and expenditures for the upcoming year based on the revised Medicaid capitation rates.

## **III. Staff Review**

This contract has been operating under previous HSCRC approval (Proceeding 2406A). Staff reviewed the operating performance under the contract as well as the terms of the capitation pricing agreement. Staff reviewed available final financial information and projections for CYs 2016, 2017, and 2018. In recent years, the financial performance of MPC overall has been marginally favorable with unfavorable performance in CY 2015 (as with all of the provider-based MCOs), favorable performance in CY 2016 and favorable projections for CYs 2017 and 2018.

#### **IV. Recommendation**

With the exception of CY 2015, MPC has generally maintained favorable performance in recent years. However, all of the provider-based MCOs incurred losses in CY 2015. Based on past and projected performance, staff believes that the proposed renewal arrangement for MPC is acceptable.

#### **Therefore:**

- (1) Staff recommends approval of this alternative rate application for a one-year period beginning January 1, 2018.**
- (2) Since losses over an extended period of time may be construed as a loss contract necessitating termination of this arrangement, staff will continue to monitor financial performance for CY 2017 and the MCO's expected financial status into CY 2018. Staff recommends that Maryland Physicians Care report to Commission staff (on or before the September 2018 meeting of the Commission) on the actual CY 2017 experience, preliminary CY 2018 financial performance (adjusted for seasonality) of the MCO, as well as projections for CY 2019.**
- (3) Consistent with its policy paper outlining a structure for review and evaluation of**

**applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the continued adherence to the standard Memorandum of Understanding with the Hospitals for the approved contract. This document formalizes the understanding between the Commission and the Hospitals, and includes provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the managed care contract, quarterly and annual reporting, the 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 also stipulates that operating losses under managed care contracts may not be used to justify future requests for rate increases.**

<b>IN RE: THE ALTERNATIVE</b>	<b>*</b>	<b>BEFORE THE HEALTH</b>	
<b>RATE APPLICATION OF</b>	<b>*</b>	<b>SERVICES COST REVIEW</b>	
<b>JOHNS HOPKINS HEALTH</b>	<b>*</b>	<b>COMMISSION</b>	
<b>SYSTEM</b>	<b>*</b>	<b>DOCKET:</b>	<b>2017</b>
	<b>*</b>	<b>FOLIO:</b>	<b>2217</b>
<b>BALTIMORE, MARYLAND</b>	<b>*</b>	<b>PROCEEDING:</b>	<b>2407A</b>

**Staff Recommendation**

**December 13, 2017**

## **I. Introduction**

On October 16, 2017, the Johns Hopkins Health System (JHHS) filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of its constituent hospitals (the “Hospitals”). JHHS seeks approval for Hopkins Health Advantage, Inc. (“HHA”) to continue to participate in a Centers for Medicare and Medicaid Services (CMS) approved Medicare Advantage Plan. HHA is the JHHS entity that assumes the risk under this contract. JHHS is requesting an approval for one year beginning January 1, 2018.

## **II. Background**

On September 1, 2015, CMS granted HHA approval to operate a Medicare Advantage Plan to provide coverage to Maryland eligible residents in Anne Arundel, Baltimore, Calvert, Carroll, Howard, Montgomery, Somerset, Washington, Wicomico, Worcester counties and Baltimore City. The application requests approval for HHA to provide inpatient and outpatient hospital services, as well as certain non-hospital services, in return for a CMS-determined capitation payment. HHA will pay the Hospitals HSCRC-approved rates for hospital services used by its enrollees. HHA supplied a copy of its contract with CMS.

## **III. Staff Review**

Staff reviewed the reviewed the financial projections for CY 2018, as well as HHA’s experience and projections for CY 2017. The information reflected the anticipated negative financial results associated with start-up of a Medicare Advantage Plan.

## **IV. Recommendation**

Based on the financial projections, staff believes that the proposed arrangement for HHA

is acceptable under Commission policy. Therefore, staff recommends that the Commission approve the Hospitals' request to participate in CMS' Medicare Part C Medicare Advantage Program for a period of one year beginning January 1, 2018. The Hospitals must file a renewal application annually for continued participation. In addition, HHA must meet with HSCRC staff prior to August 31, 2018 to review its financial projections for CY 2019. In addition, HHA must submit a copy of its quarterly and annual National Association of Insurance Commissioner's (NAIC's) reports within 30 days of submission to the NAIC.

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.

<b>IN RE: THE ALTERNATIVE</b>	<b>*</b>	<b>BEFORE THE HEALTH</b>	
<b>RATE APPLICATION OF</b>	<b>*</b>	<b>SERVICES COST REVIEW</b>	
<b>UNIVERSITY OF MARYLAND</b>	<b>*</b>	<b>COMMISSION</b>	
<b>MEDICAL SYSTEM</b>	<b>*</b>	<b>DOCKET:</b>	<b>2017</b>
	<b>*</b>	<b>FOLIO:</b>	<b>2219</b>
<b>BALTIMORE, MARYLAND</b>	<b>*</b>	<b>PROCEEDING:</b>	<b>2409A</b>

**Staff Recommendation**

**December 13, 2017**

## **I. Introduction**

On November 2, 2017, the University of Maryland Medical System (UMMS) filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of its constituent hospitals (the “Hospitals”). UMMS seeks approval for University of Maryland Health Advantage, Inc. (“UMHA”) to continue to participate in a Centers for Medicare and Medicaid Services (CMS) approved Medicare Advantage Plan. UMHA is the UMMS entity that assumes the risk under this contract. UMHA is requesting an approval for one year beginning January 1, 2018.

## **II. Background**

On September 1, 2015, CMS granted UMHA approval to operate a Medicare Advantage Plan to provide coverage to Maryland eligible residents in Anne Arundel, Baltimore, Caroline, Cecil, Carroll, Dorchester, Harford, Howard, Kent, Montgomery, Queen Anne’s, Talbot counties and Baltimore City. The application requests approval for UMHA to provide for inpatient and outpatient hospital services, as well as certain non-hospital services, in return for a CMS-determined capitation payment. UMHA will pay the Hospitals HSCRC-approved rates for hospital services used by its enrollees. UMHA supplied staff with a copy of its contract with CMS.

## **III. Staff Review**

Staff reviewed the reviewed the financial projections for CY 2018, as well as UMHA’s experience and projections for CY 2017. The information reflected the anticipated negative financial results associated with start-up of a Medicare Advantage Plan.

#### **IV. Recommendation**

Based on the financial projections, staff believes that the proposed arrangement for UMHA is acceptable under Commission policy. Therefore, staff recommends that the Commission approve the Hospitals' request to participate in CMS' Medicare Part C Medicare Advantage Program for a period of one year beginning January 1, 2018. UMHA must meet with HSCRC staff prior to August 31, 2018 to review its financial projections for CY 2019. In addition, UMHA must submit to the Commission a copy of its quarterly and annual National Association of Insurance Commissioners' (NAIC's) reports within 30 days of submission to the NAIC.

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 ALTERNATIVE** \* **BEFORE THE HEALTH**  
**RATE APPLICATION OF** \* **SERVICES COST REVIEW**  
**UNIVERSITY OF MARYLAND MEDICAL** \* **COMMISSION**  
**SYSTEM CORPORATION**  
\* **DOCKET: 2017**  
\* **FOLIO: 2220**  
\* **PROCEEDING: 2410A**

**Final Recommendation**

**December 13, 2017**

## **I. Introduction**

On November 2, 2017, University of Maryland Health Partners, Inc. (UMHP), a Medicaid Managed Care Organization (“MCO”), on behalf of The University of Maryland Medical System Corporation (“the Hospitals”), filed an application for an Alternative Method of Rate Determination (“ARM”) pursuant to COMAR 10.37.10.06. UMHP and the Hospitals seek approval for the MCO to continue to participate in the Medicaid Health Choice Program. UMHP is the entity that assumes the risk under this contract. The Commission most recently approved this contract under proceeding 2410A for the period from January 1, 2017 through December 31, 2017. The former MCO known as Riverside was purchased by University of Maryland Medical System Corporation in August 2015. UMHP and the Hospitals are requesting to implement this new contract for one year beginning January 1, 2018.

## **II. Background**

Under the Medicaid Health Choice Program, UMHP, an MCO owned by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services as well as certain non-hospital services, while the MCO receives a State-determined capitation payment. UMHP pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees. UMHP is a relatively small MCO providing services to 3.5% of the total number of MCO enrollees in the HealthChoice Program, which represents approximately the same market share as CY 2015.

UMHP supplied information on its most recent financial experience as well as its preliminary projected revenues and expenditures for the upcoming year based on the revised

Medicaid capitation rates.

### **III. Staff Review**

This contract has been operating under previous HSCRC approval (proceeding 2410A). Staff reviewed the operating financial performance under the contract. Staff reviewed available final financial information and projections for CYs 2016, 2017, and 2018. UMHP reported breakeven financial performance for CY 2016. Initial projections for CYs 2017 and 2018 are unfavorable; however, it should be noted that for CY 2017 UMHP has amended its projection to favorable because of implementing claims and vendor management initiatives and because of a prior year settlement with the State.

### **IV. Recommendation**

Since Riverside/UMHP has only been in operations as a MCO for four years, one would expect multiple years of losses because of ramp up, but Riverside has had breakeven years and years of profitability. Nevertheless, staff does have concerns that UMHP's low market share and limited rate increases will make it difficult for them to not operate as a loss leader.

#### **Therefore:**

- (1) Staff recommends approval of this alternative rate application for a one-year period beginning January 1, 2017; however, staff is placing UMHP on a watch list as described in item (2) below.**
- (2) Since losses, such as those currently being experienced by UMHP, may be construed as a loss contract necessitating termination of this arrangement, staff is recommending the following actions:**
  - a. On the earlier of July 1, 2018 or if/when Medicaid applies a mid-year**

**adjustment, UMHP shall report to HSCRC staff on the impact that any such adjustment is expected to have on CY 2018 financial performance.**

**b. HSCRC staff shall be cognizant of the MCO's financial performance and the potential for a loss contract in considering any requested adjustments to rates or global budgets of the associated hospitals during FYs 2018 and 2019.**

**c. In addition to the report provided in (2)(a), UMHP shall report to Commission staff (on or before the September 2018 meeting of the Commission) on the actual CY 2017 experience, preliminary CY 2018 financial performance (adjusted for seasonality) of the MCO, as well as projections for CY 2019.**

**(3) Consistent with its policy paper outlining a structure for review and evaluation of applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the continued adherence to the standard Memorandum of Understanding with the Hospitals for the approved contract. This document formalizes the understanding between the Commission and the Hospitals, and includes provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the managed care contract, quarterly and annual reporting, the 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 also stipulates that operating losses under managed care contracts may not be used to**

**justify future requests for rate increases.**

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

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2017  
\* FOLIO: 2221  
\* PROCEEDING: 2411A**

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**Staff Recommendation**

**December 13, 2017**

## **I. INTRODUCTION**

The University of Maryland Medical Center (“Hospital”) filed an application with the HSCRC on November 9, 2017 requesting approval to continue its participation in a global rate arrangement with BlueCross and BlueShield Association Blue Distinction Centers for solid organ and blood and bone marrow transplant services for a period of one year beginning December 1, 2017.

## **II. OVERVIEW OF APPLICATION**

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

## **III. FEE DEVELOPMENT**

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

## **IV. IDENTIFICATION AND ASSESSMENT OF RISK**

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

## **V. STAFF EVALUATION**

The staff found that the experience under this arrangement for the prior year has been favorable.

## **VI. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospital’s application for an

alternative method of rate determination for blood and bone marrow transplant services, for a one year period commencing December 1, 2017. The Hospital will need to file a renewal application for review to be considered for continued participation.

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

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

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2017  
\* FOLIO: 2222  
\* PROCEEDING: 2412A**

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**Staff Recommendation**

**December 13, 2017**

## **I. INTRODUCTION**

The University of Maryland Medical Center (“the Hospital”) filed a renewal application with the HSCRC on November 9, 2017 for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The Hospital requests approval from the HSCRC for participation in a new global rate arrangement for solid organ and blood and bone marrow transplant services with Humana for a one-year period, effective December 1, 2017.

## **II. OVERVIEW OF APPLICATION**

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

## **III. FEE DEVELOPMENT**

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

## **V. STAFF EVALUATION**

Although there has been no activity under this arrangement in the last year, staff believes that the

Hospital can achieve a favorable experience under this arrangement.

## **VI. STAFF RECOMMENDATION**

Staff recommends that the Commission approve the Hospital's application for an alternative method of rate determination for solid organ and blood and bone marrow transplant services for a one year period beginning December 1, 2017.

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

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

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2017  
\* FOLIO: 2223  
\* PROCEEDING: 2413A**

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**Staff Recommendation**

**December 13, 2017**

## **I. INTRODUCTION**

The University of Maryland Medical Center (“the Hospital”) filed an application with the HSCRC on November 9, 2017 for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The Hospital requests approval from the HSCRC to continue to participate in a global rate arrangement for solid organ and blood and bone marrow transplant services with INTERLINK for a period of one year, effective December 1, 2017.

## **II. OVERVIEW OF APPLICATION**

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

## **III. FEE DEVELOPMENT**

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

## **IV. IDENTIFICATION AND ASSESSMENT OF RISK**

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

## **V. STAFF EVALUATION**

Although there has been no activity under this arrangement in the last year, staff believes that the

Hospital can achieve a favorable experience under this arrangement.

## **V I. STAFF RECOMMENDATION**

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

<b>IN RE: THE PARTIAL RATE</b>	<b>*</b>	<b>BEFORE THE HEALTH SERVICES</b>
<b>APPLICATION OF</b>	<b>*</b>	<b>COST REVIEW COMMISSION</b>
<b>GARRETT REGIONAL</b>	<b>*</b>	<b>DOCKET: 2017</b>
<b>MEDICAL CENTER</b>	<b>*</b>	<b>FOLIO: 2224</b>
<b>OAKLAND, MARYLAND</b>	<b>*</b>	<b>PROCEEDING: 2414N</b>

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**Staff Recommendation**

**December 13, 2017**

## **Introduction**

On November 27, 2017, Garrett Regional Medical Center (the “Hospital”) submitted a partial rate application to the Commission for a new rate for Interventional Radiology/Cardiovascular (IRC) services to be provided to both inpatients and outpatients. This new rate will replace its currently approved rebundled IRC rate. A rebundled rate is approved by the Commission when a hospital provides certain 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 the services provided off-site, as required by Medicare. In this case, as of July 1, 2017, due to the reallocation of several CPT codes from the Radiology-Diagnostic rate center to the IRC rate center, the Hospital will be providing IRC services on-site to both inpatients and outpatients. The Hospital requests that the IRC rate be set at the state-wide median and be effective January 1, 2018.

## **Staff Evaluation**

Based on Staff’s review, the IRC rate based on the Hospital’s projected data would be \$59.15 per minute, while the statewide median to provide IRC services is \$62.17 per minute.

## **Recommendation**

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

1. That an IRC rate of \$59.15 per minute be approved effective January 1, 2018;
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  
ALTERNATIVE METHOD OF RATE  
DETERMINATION  
JOHNS HOPKINS HEALTH  
SYSTEM  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2017  
\* FOLIO: 2235  
\* PROCEEDING: 2415A**

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**Staff Recommendation**

**December 13, 2017**

## **I. INTRODUCTION**

Johns Hopkins Health System (“System”) filed a renewal application with the HSCRC on November 28, 2017 on behalf of the Johns Hopkins Bayview Medical Center (the “Hospital”) requesting approval from the HSCRC for continued participation in a capitation arrangement among the System, the Maryland Department of Health and Mental Hygiene (DHMH), and the Centers for Medicare and Medicaid Services (CMS). The Hospital, doing business as Hopkins Elder Plus (“HEP”), serves as a provider in the federal “Program of All-inclusive Care for the Elderly” (“PACE”). Under this program, HEP provides services for a Medicare and Medicaid dually eligible population of frail elderly. The requested approval is for a period of one year effective January 1, 2017.

## **II. OVERVIEW OF APPLICATION**

The parties to the contract include the System, DHMH, and CMS. The contract covers medical services provided to the PACE population. The assumptions for enrollment, utilization, and unit costs were developed on the basis of historical HEP experience for the PACE population as previously reviewed by an actuarial consultant. Johns Hopkins HealthCare, LLC assumes the risks under the agreement, and all Maryland hospital services are paid based on HSCRC rates.

## **III. STAFF EVALUATION**

Staff found that the experience under this arrangement for FY 2017 to be favorable.

## **III. STAFF RECOMMENDATION**

Staff recommends that the Commission approve the Hospital’s renewal application for an alternative method of rate determination for one year beginning January 1, 2018. The Hospital will need to file a renewal application for review to be considered for continued participation.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding (“MOU”) with the Hospital for the approved contract.

This document formalizes the understanding between the Commission and the Hospital, and includes 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 also stipulates that operating losses under the contract cannot be used to justify future requests for rate increases.

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

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2017  
\* FOLIO: 2236  
\* PROCEEDING: 2416A**

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**Staff Recommendation**

**December 13, 2017**

## **INTRODUCTION**

Johns Hopkins Health System (System) filed a renewal application with the HSCRC on November 28, 2017 on behalf of the Johns Hopkins Bayview Medical Center (the “Hospital”) for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC for continued participation in a capitation arrangement serving persons with mental health needs under the program title, Creative Alternatives. The arrangement is between the Johns Hopkins Health System and the Baltimore Mental Health Systems, Inc., with the services coordinated through the Hospital. The requested approval is for a period of one year beginning January 1, 2018.

## **II. OVERVIEW OF APPLICATION**

The parties to the contract include the System and the Baltimore Mental Health Systems, Inc. Creative Alternatives provides a range of support services for persons diagnosed with mental illness and covers medical services delivered through the Hospital. The System will assume the risk under the agreement, and all Maryland hospital services will be paid based on HSCRC rates.

## **III. STAFF FINDINGS**

Staff found that the experience under this arrangement for FY 2017 was slightly unfavorable. However, staff believes that the Hospital can achieve a favorable performance under this arrangement.

## **IV. STAFF RECOMMENDATION**

Staff recommends that the Commission approve the Hospital’s renewal application for an alternative method of rate determination for a one year period commencing January 1, 2018.

Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding (“MOU”) with the Hospital for the approved contract. This document would formalize the understanding between the Commission and the Hospital, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted,

penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

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

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2017  
\* FOLIO: 2227  
\* PROCEEDING: 2417A**

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**Staff Recommendation**

**December 13, 2017**

## **I. INTRODUCTION**

Johns Hopkins Health System (“System”) filed an application with the HSCRC on November 29, 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 continue to participate in a global rate arrangement for heart failure services and solid organ and bone marrow transplants with Optum Health, a division of United HealthCare Services, for a period of one year beginning January 1, 2018.

## **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 AND ASSESSMENT OF RISK**

The Hospitals will continue to submit bills to JHHC for all contracted and covered services. JHHC is responsible for billing the payer, collecting payments, disbursing payments to the Hospitals at their full HSCRC approved rates, and reimbursing the physicians. The System contends that the arrangement among JHHC, the Hospitals, and the physicians holds the

Hospitals harmless from any shortfalls in payment from the global price contract. JHHC maintains it has been active in similar types of fixed fee contracts for several years, and that JHHC is adequately capitalized to bear risk of potential losses.

## **V. STAFF EVALUATION**

The staff found the experience for this arrangement last year to be favorable.

## **VI. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for heart failure, solid organ and bone marrow transplant services for a one year period commencing January 1, 2018. The Hospitals will need to file a renewal application for review to be considered for continued participation.

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

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

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2017  
\* FOLIO: 2228  
\* PROCEEDING: 2418A**

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**Staff Recommendation  
December 13, 2017**

## **I. INTRODUCTION**

Johns Hopkins Health System (the System) filed a renewal application with the HSCRC on November 29, 2017 on behalf of its member hospitals, the 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 for continued participation in a capitation arrangement serving persons insured with Tricare. The arrangement involves the Johns Hopkins Medical Services Corporation and Johns Hopkins Healthcare as providers for Tricare patients. The requested approval is for a period of one year beginning January 1, 2018.

## **II. OVERVIEW OF APPLICATION**

The parties to the contract include the Johns Hopkins Medical Services Corporation and Johns Hopkins Healthcare, a subsidiary of the System. The program provides a range of health care services for persons insured under Tricare including inpatient and outpatient hospital services. Johns Hopkins Health Care will assume the risk under the agreement, and the Hospitals will be paid based on their approved HSCRC rates.

## **III. STAFF EVALUATION**

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

## **V. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospitals’ renewal application for an alternative method of rate determination for a one year period beginning January 1, 2018. 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.

# **Final Recommendations for Anne Arundel Medical Center Revenue Adjustment**

December 13, 2017

Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215  
(410) 764-2605  
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## PROPOSED COMMISSION ACTION

This report contains a recommendation for an approved revenue increase for Anne Arundel Medical Center of \$14 million, based on a review conducted over the last six months. The Commission will be asked by staff to review and approve its recommendation.

### Overview

The HSCRC staff and Anne Arundel Medical Center (“AAMC,” or “the Hospital”) have been meeting since the fall of 2016 to evaluate AAMC’s request for a GBR revenue adjustment.

AAMC’s request focused on the need to increase revenues to meet their ongoing expenditures and to support changes in care delivery they indicate will be needed to deliver improved care and reduce avoidable and unnecessary care under the Enhanced Model with the Centers for Medicare and Medicaid Services (CMS). AAMC also requested funding for medical education programs that they have initiated.

In its effort to evaluate AAMC’s request, staff has extensively analyzed AAMC’s performance and efficiency. As a result of the analyses, staff recommends an increase of \$14 million, which represents an increase of approximately 2.3% to AAMC’s approved revenues for the rate year ending June 30, 2018.

In November 2015, the Commission suspended full rate reviews to allow HSCRC to shift its rate review approach from a sole focus on cost per case efficiency to align with the new All-Payer Model’s requirements to limit growth in per capita costs and improve quality performance. The full rate review moratorium expired at the end of October 2017.

Because this request and analysis has been ongoing for some time, staff is recommending that AAMC obtain a revenue adjustment in lieu of filing a full rate review. Staff has done sufficient work to make this recommendation over the last six months. This report lays out the review and analysis that staff has undertaken and its findings in reaching the recommendations contained in this report.

### Background

AAMC initially requested an increase in its approved revenues of \$53 million late in 2016, which included \$20 million for the direct and indirect costs of a new medical education program for physicians; \$13 million for adjustments to volumes and increases in drug costs during FY 2017; \$10 million for increased volume related to the opening of their 30 bed medical/surgical expansion; \$7 million related to the variable costs associated with the opening of the cardiac surgery program; and \$3 million for seed funding to pilot a Geographic Payment Model alternative reimbursement methodology.

In April 2017, AAMC submitted a formal request for an increase in its approved GBR revenue to fund the new physician residency program for both direct and indirect medical education costs. In this submission, AAMC requested an increase to its GBR revenue of \$7.9 million, with an increase of \$2.1 million increase effective July 1, 2017, a second increase of \$1.1 million on July 1, 2018, and a third increase of \$4.8 million on July 1, 2019. The funding encompassed 6 surgical residents on July 1, 2017, 3

additional surgical residents on July 1, 2018, and 3 additional surgical residents and 10 internal medicine residents on July 1, 2019.

Subsequently, in 2017, AAMC and HSCRC continued to discuss the request after updates for market shift and drug adjustments through the FY 2018 rate order. HSCRC and AAMC discontinued discussions about the cardiac surgery program request. After extensive meetings, review, and analysis with the HSCRC staff, and with more recent volume statistics, AAMC and HSCRC met in October to discuss a potential settlement in lieu of a full rate application. The proposed settlement is discussed in the Recommendations below.

## Staff Analyses

The HSCRC staff has reviewed costs, financial trends, system financial statements, unregulated losses, volume trends, quality performance, and Medicare per capita trends in the primary service area, among others. Recently, the HSCRC staff has reviewed the results of the draft Inter-Hospital Cost Comparisons (ICC). Summaries of several of these analyses follow:

### “Price” Efficiency

AAMC is a relatively efficient hospital in comparison to other Maryland hospitals in its cost per case. The HSCRC staff evaluated AAMC’s efficiency relative to other Maryland hospitals. During the past year of discussions and evaluations, staff compared AAMC’s charge per equivalent case mix adjusted discharge (“ECMAD”) to the state average and to peer hospitals. These comparisons showed that AAMC’s charge levels were well below the state and peer averages, and the gap was increasing as AAMC’s rate growth was moderated due to volume increases while volumes in the State were decreasing. While this apparent easing of charge per case appears favorable, excess volume growth has the potential to increase per capita costs and undermine the goals of the All-Payer Model. Staff will address this concern in the following sub-section, entitled Utilization Efficiency.

As discussed below, staff has completed an Inter-Hospital Cost Comparison and AAMC appears relatively efficient in these cost per case comparisons.

### Hospital Charge Per Case History

The table below compares the average charge per ECMAD by year for the fiscal years ending from June 30, 2014, the first year of the GBR methodology, to June 30, 2017 for AAMC compared to the statewide average:

Year Ending June 30,	Average Charge Per ECMAD		Percent Variance
	AAMC	Statewide	
2014	\$10,570	\$13,461	(21.5%)
2015	\$10,355	\$13,640	(24.1%)
2016	\$10,463	\$14,099	(25.8%)
2017	\$10,740	\$14,407	(25.5%)
Percent Change 2014-17	1.6%	7.0%	

Source: HSCRC ECMAD and Charge Utilization Reports – September Preliminary, includes imputed ECMADs for drugs

AAMC's average charge per ECMAD has moved from 21.5% below the statewide average in FY 2014 to 25.5% below the state average in FY 2017. (AAMC's charge per ECMAD is expected to be below the state because of its location and the level of teaching costs covered in the statewide figures.) From FY 2014 through FY 2017, AAMC's average charge per ECMAD increased by approximately 1.6%, while the statewide average charge per ECMAD increased by 7.0%. The major reason for the lower increase in average charges per ECMAD at AAMC compared to the statewide average is that AAMC's ECMAD's increased by 7.5% between 2014 and 2017, while statewide ECMAD's increased by 3.2%. The larger increase in volumes at AAMC caused its rates to increase at a lower rate under the global revenue budget compared to other hospitals whose volumes increased less rapidly and as a result experienced higher rate increases. As discussed above, while the charge per case comparison shows a relative improvement in price efficiency, it is also important to understand whether the volume increases resulted in cost per capita increases.

### *Inter-Hospital Cost Comparison*

The HSCRC staff has been working on the Inter-Hospital Cost Comparison (ICC) tool, a tool that is used to evaluate cost-per-case efficiency in a full rate review. The ICC is still undergoing technical review and the results will change. In the ICC, each hospital's costs per case are compared to a peer group adjusted cost per case. At this time, the HSCRC staff estimates that AAMC would receive a rate increase from a full rate review, and that the rate increase could reach up to 2 to 3%. AAMC shows relative efficiency compared to the peer group, performing more favorably than all but two small hospitals in the State. The ICC standard costs do not include outpatient oncology drugs, and the approved revenue would be increased to incorporate actual and estimated costs for these drugs under a full rate review.

The HSCRC staff also met with AAMC financial staff to discuss detailed departmental cost increases. Based on the discussions with AAMC financial staff and further review of additional information provided by AAMC financial staff, the HSCRC staff believes that AAMC's cost increases in regulated services over the past two years appear reasonable, and that variable costs have remained controlled.

### *Utilization Efficiency*

Staff evaluated how the volume increases at AAMC affected the per capita goals of the All-Payer Model. At present, staff has developed data on total cost of care per capita for Medicare. If volumes move from higher cost hospitals to lower cost hospitals, per capita costs could decrease. However, to the extent that volumes simply increase, this could result in unfavorable performance under the Model. As discussed below, staff's evaluation is that the volume increases at AAMC did not result in excessive growth in Medicare total cost of care in AAMC's primary service area.

Staff also set out to evaluate the levels of potentially avoidable utilization at AAMC relative to levels of potentially avoidable utilization at other hospitals, and AAMC's experience in reducing these volumes. As discussed below, AAMC has relatively lower proportions of potentially avoidable utilization, and AAMC has reduced its readmissions.

### *Total Cost of Care Growth*

HSCRC staff has made progress in evaluating the Total Cost of Care (TCOC) data for Medicare beneficiaries at a geography level and for attributed beneficiaries. For this analysis, staff will focus on the relative growth in Medicare's TCOC per beneficiary in AAMC's primary service area relative to the Medicare TCOC growth per beneficiary statewide. The HSCRC staff believes that it is important to

evaluate how the volume growth at AAMC, which makes it appear more efficient on a cost per case basis, is affecting the growth in total cost of care per capita. On the one hand, if AAMC's charge per case levels are lower than competitor average charge levels and AAMC is growing market share, this may improve the efficiency of the services provided. On the other hand, if the volume growth is not due to shifts in market share but simply growth in the volume of services provided, there may be a lower cost per case, but the volume growth could contribute to a higher growth in cost per capita, undermining the All-Payer Model.

HSCRC and the State have made progress in measuring Medicare total cost of care growth. As part of the work of the Total Cost of Care work group, HSCRC prepared an analysis of Medicare Total Cost of Care per beneficiary growth for the primary service area of each hospital in Maryland for the period beginning with Calendar Year 2013 and ending with Calendar Year 2016. For this three year period, there was a 1.3% decline in per beneficiary growth for AAMC's primary service area compared to 1.1% increase statewide. AAMC's primary service area was in the lowest growth (most favorable quartile) of service areas in the State. While AAMC shares this service area with other competitors, this analysis shows that AAMC's growth within its primary service area did not result in excessive growth in Medicare total cost of care for the period reviewed.

The HSCRC staff has had difficulty in obtaining total cost of care data and benchmarks for commercial and Medicaid patients at a granular level, and staff cannot yet offer information on per capita efficiency or per capita cost growth for these payer categories at this time.

#### *Potentially Avoidable Utilization*

While recognizing that there is extensive unnecessary and avoidable utilization in the system, and that HSCRC, providers, and the State have more work to do to quantify those opportunities for reduction, the staff analyzed the utilization efficiency of AAMC with the current tools it has in hand. This included an analysis of Potentially Avoidable Utilization (PAU), which currently incorporates all-cause unplanned 30-day readmissions and AHRQ's Prevention Quality Indicators.

Overall, AAMC has relatively low PAU revenue as a percent of total revenue, and continues to reduce this percent year over year. In CY 2015 and CY 2016, the AAMC percent of all-payer revenue associated with PAU was 9.24% and 8.75%, respectively, putting it within the top performing quartile in the state for both years (i.e., the percent revenue associated with PAU is lower than at least 75% of hospitals). In comparison, the statewide PAU percent of total revenue was 11.34% and 10.99% for CY15 and CY16, respectively. When revenue from newborn and obstetric service lines were excluded from the all payer PAU revenue denominator, AAMC remained in the top quartile for all payer PAU percent of revenue, with 10% in CY15 and 9.44% in CY16.

When the analysis was limited to Medicare FFS revenue only, the AAMC PAU percent of Medicare FFS total revenue was 15.63% in CY2015 and 14.43% in CY2016. In comparison, the state performance was 16.76% in CY2015 and 16.22% in CY2016. Overall for Medicare FFS, AAMC's performance was better than 70% of hospitals in the State, although it did not make the top quartile.

While there is still work to do to quantify unnecessary utilization and the PAU results are not risk-adjusted, AAMC has a lower concentration of these services than most other hospitals in the State. In CY15 and CY16, AAMC was one of four hospitals who scored in the top quartile of performance for all payer percent of revenue from both PQIs and readmissions.

Although AAMC has relatively favorable performance under these measures, significant improvements in performance will be required for AAMC to maintain its financial performance and to improve care as called for under the proposed enhanced Total Cost of Care Model. As a result, staff recommends that AAMC be required to submit its plans for reducing potentially avoidable and unnecessary utilization by July 1, 2018 as a condition of receiving the proposed revenue increase.

## Quality Performance

Staff reviewed AAMC performance on RY 2018 quality measures for readmissions, potentially preventable complications (PPCs), and the Quality Based Reimbursement domains.

Under the HSCRC’s Readmissions Reduction Improvement Program, AAMC reduced its risk adjusted readmissions by 9.5% between CY 2013 and CY 2016. Relative to case-mix adjusted readmissions levels, AAMC’s readmission rate of 10.95% is lower than the State’s average level of 11.54%, and is slightly lower than the State’s median readmission rate.

Under the Maryland Hospital Acquired Conditions program, AAMC had a 31% improvement in their case-mix adjusted PPC rate for RY 2018, putting it well above the statewide median improvement of 26%. However, AAMC’s case-mix adjusted PPC rate for CY 2016 was still slightly worse than the statewide median rate.

Under the HSCRC’s Quality Based Reimbursement (QBR) program, AAMC had an overall QBR score of 42%, meaning that they scored 42% of possible points based on their performance on HCAHPS, mortality, and safety measures. While this score is low, 42% is in the top quartile of performance relative to other hospitals in Maryland. Furthermore for HCAHPS, AAMC improved from being below the national median on 6 out of 9 measures in the base period to being above the national median on all 9 measures during the performance period (although still below the national benchmark for top performance on all measures). Highlights include that AAMC improved 6 percentage points on the “Responsiveness” and 3 percentage points on “overall hospital rating” between the base and performance periods, despite already being significantly better than the statewide average on both measures in the base. On both the Mortality and the Safety domain, AAMC scored higher than the state median, but not in the top quartile of performance relative to other hospitals in Maryland.

## Financial Background and Performance

### *Gross and Net Revenues*

AAMC’s regulated revenues have increased by \$59.9 million or 11.1% since FY 2013. (Source: AAMC’s HSCRC Annual filing).

2013	\$	541.9
2014	\$	554.1
2015	\$	563.0
2016	\$	576.3
2017	\$	601.8
Growth	\$	59.9
% Growth		11.1%

The net regulated revenue increase during this period was 14.7%, with reductions in uncompensated care under the ACA contributing to higher growth in net revenue.

### *Operating Margins*

The chart below shows the AAMC’s (the regulated entity) operating margins it reports to HSCRC. HSCRC evaluated operating margin results over a period of years, including several years prior to the 2014 implementation of the new All-Payer Model. As shown below, the Hospital had strong financial performance after the implementation of the All-Payer Model. However, the performance eroded in FY 2017. Also, the table shows growing “unregulated” hospital losses. These losses are primarily for subsidies to hospital based physicians and clinicians (e.g., radiologists, anesthesiologists, pathologists, hospitalists, emergency physicians) and for certain other physicians and clinicians performing services or providing coverage at the hospital (e.g., cardiologists, reconstructive surgeons, general surgery, obstetricians).

#### Summary of Financial Performance by Year Anne Arundel Medical Center and Subsidiaries

Year Ended June 30,	Net Operating Income			Net Operating Margin	
	Regulated	Unregulated	Total	Regulated	Total
2010	\$ 22.8	\$ (5.3)	\$ 17.4	6.3%	4.5%
2011	\$ 27.3	\$ (7.3)	\$ 20.0	6.8%	4.7%
2012	\$ 23.0	\$ (13.9)	\$ 9.0	5.2%	1.9%
2013	\$ 16.0	\$ (14.9)	\$ 1.1	3.5%	0.2%
2014	\$ 25.3	\$ (13.2)	\$ 12.1	5.5%	2.5%
2015	\$ 47.1	\$ (22.3)	\$ 24.8	9.7%	4.9%
2016	\$ 52.2	\$ (26.7)	\$ 25.5	10.4%	4.9%
2017	\$ 41.1	\$ (25.7)	\$ 15.4	7.9%	2.9%

Source: AAMC’s HSCRC Annual Filing

In addition to the operations reported in the table above for the regulated hospital entity, HSCRC staff reviewed the financial performance of the health system as reported in the financial statements of Anne Arundel Health System, Inc. and all of its subsidiaries. These financial statements, which include results for entities that are not regulated by HSCRC, showed additional losses from physician enterprises, increasing by \$11.2 million from \$5.5 million in 2010 to \$16.7 million in 2017. The additional physician enterprise losses are for physicians and clinicians practicing in the community.

In total, the net operating margin for the Anne Arundel Health System (“Health System”), which incorporates the AAMC performance (the regulated entity) together with the performance of other entities not reported as part of the Hospital, was as follows:

Summary of Financial Performance by Year  
Anne Arundel Health System, Inc and All Subsidiaries

Year Ended June 30,	Operating Margin
2010	2.3%
2011	2.8%
2012	1.9%
2013	0.5%
2014	2.4%
2015	4.0%
2016	3.8%
2017	0.8%

Source: Audited Financial Statements

The Health System’s financial statements include the operations of AAMC and also of other enterprises. The HSCRC does not regulate or oversee the Health System operations that are not part of AAMC; however, the HSCRC staff reviewed the financial statements to understand the performance of the Health System as a whole.

Losses and subsidies for physician services were a major contributor to declining financial performance. In total, the losses and subsidies from unregulated services reported by AAMC in its regulated entity, together with losses and subsidies for physician services reported in affiliates not included in the regulated entity reported to HSCRC, reached \$42.4 million in 2017.

Unregulated losses* reported in AAMC’s regulated entity	\$25.7 million
Physician losses and subsidies of other entities	<u>16.7 million</u>
Total	\$42.4 million

\*Primarily physician subsidies

There are several factors contributing to margin pressures at AAMC. AAMC sought to increase its market share, including in areas outside its primary service area (Prince Georges County, Calvert County, Eastern Shore), and this contributed to the increase in physician/clinician subsidies and losses, particularly for the community based services where losses increased by \$11.2 million from FY 2010 to FY 2017. As indicated in the table above, the \$20.4 increase from FY 2010 to FY 2017 in unregulated operating losses for AAMC was primarily due to increases in subsidies and losses for hospital based and other physicians and clinicians practicing at the Hospital. These increases funded additional subsidies to the traditional hospital based physicians as well as increased employment expenses for other physicians performing services at the Hospital. Some of the increasing costs might be directed at increasing market share, but subsidies of core hospital based physicians are ongoing expenses of the Hospital in providing hospital services. While HSCRC does not regulate physician costs, we nevertheless have attempted to understand the impact of these costs on AAMC’s operating results.

AAMC notes that as a result of the All-Payer Model, it increased its subsidies of psychiatric care, community based clinics, palliative care, and it also paid higher subsidies to hospital based physicians as

it required increasing care coordination from these clinicians and physicians under the All-Payer Model. AAMC also notes its growth in “population health” investments in support of the All-Payer Model, reaching \$9.0 million in FY 2017. Not all of these investments are reported in AAMC’s regulated entity results, because some of the investments are for activities operated by affiliates included in the Health System’s financial results but not in the regulated entity’s financial results that are reported to HSCRC. Some of these population health activities contributed to declining margins.

The HSCRC staff supports competition based on cost and quality, and AAMC is a relatively efficient hospital. However, HSCRC staff is concerned that the per capita model could be undermined if hospitals can come back to capture volume growth or higher variable cost factors through rate requests after the growth has occurred. In the following section of this analysis, staff will discuss how it has addressed this concern.

The HSCRC has clearly stated that it does not intend to directly or indirectly fund physician losses aimed at capturing market share. At the same time, staff does acknowledge that care coordination activities may increase subsidies that hospitals face, because there are limited payments available for these activities, particularly in the hospital setting. Because of the significant contribution of physician losses and subsidies on AAMC’s financial performance and the potential for practice ownership to undermine the enhanced Total Cost of Care Model goals, the HSCRC staff is recommending that the Hospital be required to evaluate the extent to which its physician contracts might promote volume growth through payments tied to RVU growth and to prepare an action plan to remedy contracts and non-aligned payment approaches to the extent that they exist. (HSCRC staff has reviewed only a small sample of contracts and is not aware of the nature and extent of any contracts that are tied to RVU growth).

## Volume Growth

While there have been modest increases in the population in the primary service area of AAMC, the Hospital has experienced increases in volume beyond population growth. Listed below are the number of ECMAD’s, as calculated by HSCRC staff, for the years ended June 30, 2013 through 2017 for AAMC:

Year Ended	ECMAD’s	Inpatient ECMADs	Outpatient ECMADs
June 30,			
2013	51,400	30,960	20,439
2014	52,216	30,336	21,880
2015	54,443	30,716	23,726
2016	55,048	30,082	24,966
2017	56,136	30,733	25,402

Source: HSCRC ECMAD and Charge Utilization Reports – September Preliminary, includes imputed ECMADs for drugs

As part of the ECMAD growth noted above, AAMC experienced increases in the use of new high cost oncology drugs. Based on the annual cost reports AAMC files with HSCRC, AAMC’s total drug costs increased by \$18.5 million between FY2013 and FY 2017, from \$38.7 million to \$57.2 million. HSCRC staff estimates that \$17.7 million of this increase was for drugs used in the outpatient setting. At 12% of total operating costs in FY 2017, AAMC has one of the highest concentrations of drug costs as a percent of its total regulated operating costs (\$57.2 million drug costs/\$477.7 million in regulated operating costs). As part of the annual update to rates, AAMC received inflation adjustments for drug price

increases. In Rate Year 2017, HSCRC changed the allocation of the inflation adjustment to provide those hospitals with a higher proportion of drugs a larger inflation increase. To ease the strain resulting from the introduction of new drugs, HSCRC also increased the Hospital's allowed revenues for volume increases in high cost outpatient cancer drugs. This increase was accounted for as part of the overall per capita revenue growth allowance. For FY 2018, HSCRC continued the specific allocation of inflation for drug costs and provided for a potential adjustment for increases in the use of outpatient cancer drugs for FY 2017 over FY 2016. HSCRC staff is in the process of collecting data to make this adjustment. The proposed revenue settlement with AAMC already incorporates the 2017 increase and it will not receive additional funding from this calculation. AAMC experienced an increase in outpatient drug costs of approximately \$2.7 million in 2017, based on comparing the drug expenditures reported in the 2017 and 2016 annual cost filings with HSCRC.

## Teaching Costs

In 2016, staff worked with the Maryland Department of Health to study GME with the Innovations in Graduate Medical Education (IGME) workgroup. Although no final conclusions were reached by the IGME workgroup, there were discussions regarding the potential need for more primary care residencies, particularly in medically underserved areas. As reported in staff's recent [ICC recommendation](#), historical Commission policies froze funding of physician residency programs at 2002 levels of residents, unless otherwise approved through a full rate review and needs analysis. AAMC is not in a medically underserved area and Maryland has among the highest physician supply levels in the nation, particularly in central Maryland, which includes Anne Arundel County. In addition, staff believes that even if new GME programs are approved, only the direct costs of GME should be added to revenues with no indirect cost adjustment.

HSCRC staff has not reached a final determination regarding the need for primary care residents, although Anne Arundel County is not a medically underserved area. MHCC is the primary state agency that evaluates physician needs. Any future determination of need would need to be undertaken in connection with the work of MHCC and additional policy direction of the Commission.

## Summary of Findings

The HSCRC staff has been reviewing the financial performance and reviewing the efficiency of AAMC since early in 2017.

AAMC is relatively efficient in charge per case performance and in its per case efficiency under the preliminary ICC tool.

AAMC has experienced volume increases beyond the growth in its population. The increases in volume did not result in negative Medicare Total Cost of Care performance in AAMC's primary service area between 2013 and 2016. AAMC has lower levels of potentially avoidable utilization than other Maryland hospitals, although all providers have significant opportunities for improvement.

AAMC has experienced deterioration in its operating performance in 2017. The deterioration has occurred in both the regulated margin along with increased unregulated losses resulting from increasing physician subsidies.

AAMC has requested a revenue increase to allow it to continue to provide efficient and effective services and to increase its efforts to improve care and reduce avoidable utilization.

The HSCRC staff has concluded that it is likely that AAMC would receive a revenue increase under a full rate application, although the technical specifications are still under review.

## Recommendations

Based on a thorough consideration of all of the analysis performed and staff's findings, staff makes the following recommendations for Commission consideration:

1. A permanent revenue increase of \$14 million be provided effective January 1, 2018, inclusive of all settlements through December 31, 2017 except quality programs and price variances, with \$14 million collected during FY 2018. This amount includes any additional increases in drug costs related to increased use of high cost outpatient oncology drugs for FY 2017 over 2016. This does not include quality adjustments under the QBR, which have not yet been applied or other quality program adjustments that are due to be applied on January 1, 2018 or thereafter.
2. AAMC may not file a full rate application with the Commission for two years from the period beginning January 1, 2018. If a rate application is filed, AAMC would be required to pay back \$14 million per year. A future full rate application would be required for the Commission to approve any funding of medical education costs based on an evaluation of need, under policies of the Commission. There can be no assurance that funding would be approved as part of a future rate base, given the high level of physician supply in the State.
3. Any incremental PAU savings and any rate reductions implemented by the Commission will fully apply.

## Additional Requirements:

4. AAMC believes strongly in managing the total cost of care for all residents in its service area and will continue to invest the necessary infrastructure to truly manage the health of the people it serves – that is its mission. Therefore, it will continue to invest in care transformation and work toward the goals of the enhanced Total Cost of Care Model success. AAMC must submit its plan for reducing avoidable and unnecessary care by July 1, 2018, inclusive of specific targets, approach, its funding of investments, and its measurement and reporting plan.
5. AAMC must submit a report of its physician arrangements and the extent to which physician compensation is tied to volume by July 1, 2018. It shall also submit its plans and timelines to modify contracts that provide compensation for volume growth. This report must be provided in sufficient detail, with attention to protecting confidential information, to ascertain the specific nature of each contract, its reliance on RVUs or volumes as a basis for payment, and the extent to which increases in RVUs affects total compensation under the contract. (The HSCRC is not aware of the extent of these contracts.)

# **Final Recommendations for Updating the Quality-Based Reimbursement Program for Rate Year 2020**

December 13, 2017

Health Services Cost Review Commission  
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This document contains the final staff recommendations approved by the Commission for updating the Quality Based Reimbursement Program for RY 2020.

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This final RY 2020 Quality-Based Reimbursement (QBR) recommendation maintains the quality domains, scoring, and pre-set scale options from RY 2019, and proposes minimal changes to the program except those included in the first two recommendations below, both of which have been previously approved by or discussed with the Commission. The Staff requests the Commissioners to vote on the following recommendations:

### **FINAL RECOMMENDATIONS FOR RY 2020 QBR PROGRAM**

1. Update the Maryland Mortality Measure to include palliative care cases (risk-adjusted for palliative care status) for calculating attainment and improvement scores.
2. Include ED Wait Time measures in the Person and Community Engagement domain.
3. Continue to weight the domains as follows for determining hospitals' overall performance scores: Person and Community Engagement - 50%, Safety - 35%, Clinical Care - 15%.
4. Maintain RY 2019 Pre-set Scaling Options, and continue to hold 2% of inpatient revenue at-risk for the QBR program.

## LIST OF ABBREVIATIONS

ACA	Affordable Care Act
CDC	Centers for Disease Control & Prevention
CY	Calendar year
CAUTI	Catheter-associated urinary tract infection
CLABSI	Central line-associated blood stream infections
CMS	Centers for Medicare & Medicaid Services
DRG	Diagnosis-related group
ED	Emergency department
FFY	Federal fiscal year
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HSCRC	Health Services Cost Review Commission
MRSA	Methicillin-resistant staphylococcus aureus
NHSN	National Health Safety Network
PQI	Prevention quality indicators
QBR	Quality-Based Reimbursement
RY	Maryland HSCRC Rate Year
SIR	Standardized infection ratio
SSI	Surgical site infection
THA/TKA	Total hip and knee arthroplasty
VBP	Value-Based Purchasing

## INTRODUCTION

The Maryland Health Services Cost Review Commission's (HSCRC's or Commission's) quality-based measurement and payment initiatives are important policy tools for providing strong incentives for hospitals to improve their quality performance over time. Under the current All-Payer Model Agreement ("Agreement") between Maryland and the Centers for Medicare & Medicaid Services (CMS), effective January 2014 through December 2018, there are overarching quality performance requirements for reductions in readmissions and hospital acquired conditions as well as ongoing program and performance requirements for all of HSCRC's quality and value based programs.

As long as Maryland makes incremental progress towards the Agreement goals, the State receives automatic exemptions from the CMS Hospital Acquired Conditions program (HAC) and Readmission Reduction program, while the exemption from the CMS Medicare Value-Based Purchasing (VBP) program is requested annually<sup>1</sup>. These exemptions from national quality programs are important because the State of Maryland's all-payer global budget system benefits from having autonomous, quality-based measurement and payment initiatives that set consistent quality incentives across all-payers.

This final report provides recommendations for updates to Maryland's Quality-Based Reimbursement (QBR) program for Rate Year (RY) 2020, which encompasses the performance results from the final year (2018) of the Agreement. QBR is one of three core quality programs and it places 2% of revenue at risk by scoring a hospital's performance relative to national thresholds and benchmarks for its Safety domain and Person and Community Engagement domain, and it utilizes Maryland specific benchmarks for its Clinical Care domain.

Last year, after experiencing difficulties in having the scale for revenue adjustments based on Maryland performance, the Commission approved a QBR scaling system that is tied to national performance. The Commission also set out the need to revise the Clinical Care portion of the program due to increases in the use and coding of palliative care. Likewise, over the last year, the Commission has been discussing the need to improve Emergency Department throughput. This report discusses the results of implementing the national performance pre-scale in RY 2019, proposes changes to address concerns related to the Clinical Care mortality measure, and introduces Emergency Department pay-for-performance incentives.

Except for the changes noted above, staff is recommending that the Commission minimize changes to the QBR for RY 2020. Staff will also recommend minimizing revisions to other existing quality programs, so that it can focus on future policy development to establish quality strategies and performance goals under the Enhanced Total Cost of Care Model ("Enhanced Model"), which will be effective beginning in CY 2019. For example, staff will establish a

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<sup>1</sup> Maryland has received exemptions from the VBP program based upon the reports submitted through FFY 2017, and is awaiting official written exemption notification for FFY 2018. Appendix I provides more QBR program detail, including the timeline for base and performance periods impacting RY 2020.

clinical subgroup to vet available complication measures while transitioning hospitals from wholesale use of Potentially Preventable Complications (PPCs) found in the Maryland Hospital Acquired Conditions (MHAC) program. The future policy changes will be used to make quality-based payment adjustments in RY 2021 and beyond.

## BACKGROUND

The Affordable Care Act (ACA) established the hospital VBP program,<sup>2</sup> which requires CMS to reward hospitals with incentive payments for the quality of care provided to Medicare beneficiaries. The program assesses hospital performance on a set of measures in Clinical Care, Person and Community Engagement, Safety, and Efficiency domains. The incentive payments are funded by reducing the base operating diagnosis-related group (DRG) amounts that determine the Medicare payment for each hospital inpatient discharge.<sup>3</sup> The ACA set the reduction at 2 percent for federal fiscal year (FFY) 2017 and beyond.<sup>4</sup> CMS will calculate FFY 2019 hospital final scores based on measures in the four equally-weighted domains.

### QBR Scoring Methodology

Maryland's Quality-Based Reimbursement (QBR) program, in place since July 2009, employs measures that are similar to those in the federal Medicare Value-Based Purchasing (VBP) program, under which all other states have operated since October 2012. Similar to the VBP program, the QBR program currently measures performance in Clinical Care, Safety, and Person and Community Engagement domains, which comprise 15%, 35%, and 50% of a hospital's total QBR score, respectively. For the Safety and Person and Community Engagement domains, which constitute the largest share of a hospital's overall QBR score (85%), performance standards are the same as those established in the national VBP program. (The Clinical Care Domain, in contrast, uses a Maryland specific mortality measure and benchmarks) In effect, Maryland's QBR program, despite not having a prescribed national goal, reflects Maryland's rankings relative to the nation by using national VBP benchmarks for the majority of the overall QBR score.

In addition to structuring two of the three domains of the QBR program to be similar to the federal VBP program, the Commission has over time placed increasing emphasis on performance relative to the nation through various benchmarking, domain weighting, and scaling decisions. For example, beginning in RY 2015, the QBR program began utilizing national benchmarks to assess performance for the Person and Community Engagement and Safety domains. Subsequently, the RY 2017 QBR policy increased the weighting of the Person and Community Engagement domain, which is measured by the national Hospital Consumer

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<sup>2</sup> For more information on the VBP program, see <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/hospital-value-based-purchasing/index.html?redirect=/Hospital-Value-Based-Purchasing/>

<sup>3</sup> 42 USC § 1395ww(o)(7).

<sup>4</sup> 42 USC § 1395ww(o)(7)(C).

Assessment of Healthcare Providers and Systems (HCAHPS) survey instrument to 50%<sup>5</sup>. The weighting was increased in order to raise incentives for HCAHPS improvement, as Maryland has consistently scored in the lowest decile nationally on these measures.

In the RY 2019 QBR recommendation, the Commission also approved moving to a preset scale based on national performance to ensure that QBR revenue adjustments are linked to Maryland hospital performance relative to the nation. Prior to RY 2019, Maryland hospitals were evaluated by national thresholds and benchmarks, but their scores were then scaled in accordance with Maryland performance, i.e. if the top performing hospital had an overall score of 57%, that was the high end of the scale by which all other Maryland hospitals were judged. This resulted in Maryland hospitals receiving financial rewards despite falling behind the nation in Person and Community Engagement and Safety domain performance. Consequently, the scale is now 0 to 80% regardless of the highest performing hospital’s score, and the cutoff by which a hospital earns rewards is 45%. This reward cutoff was based on an analysis of FFY 2017 data that indicated that the average national score using Maryland domain weights (i.e. without the Efficiency domain) was 41%; thus, the 45% incentivizes performance better than the nation.

While the QBR program has many similarities to the federal Medicare VBP program, it does differ because Maryland’s unique All Payer Model and autonomous position allows the State to be innovative and progressive. For example, the QBR domains are weighted differently than those of the VBP program, as illustrated in Figure 1 below, most notably because QBR does not include an Efficiency domain, and HSCRC has reweighted the Person and Community Engagement domain to encourage improvements. Maryland has implemented an efficiency measure in the Global Budget Revenue (GBR) system, based on a calculation of potentially avoidable utilization (PAU), but it has not made efficiency part of its core quality programs as a domain because the GBR fundamentally incentivizes improved efficiency.<sup>6</sup> Relative to the efficiency domain, as the State moves toward the proposed Total Cost of Care Model, the HSCRC staff plans to expand the PAU definition to incorporate other categories of unnecessary and avoidable utilization, and to incorporate other measures of efficiency based on per beneficiary measures.

**Figure 1. RY 2020 Proposed Measures and Domain Weights for CMS VBP and Maryland QBR Programs<sup>7</sup>**

	<b>Maryland QBR Domains and Measures</b>	<b>CMS VBP Domain Weights and Measure Differences</b>
<b>Clinical Care</b>	15% (1 measure: all cause inpatient Mortality)	25% (4 measures: condition-specific Mortality, THA/TKA Complication)

<sup>5</sup> The HCAHPS increase reduced the Clinical Care domain from 20% to 15%.

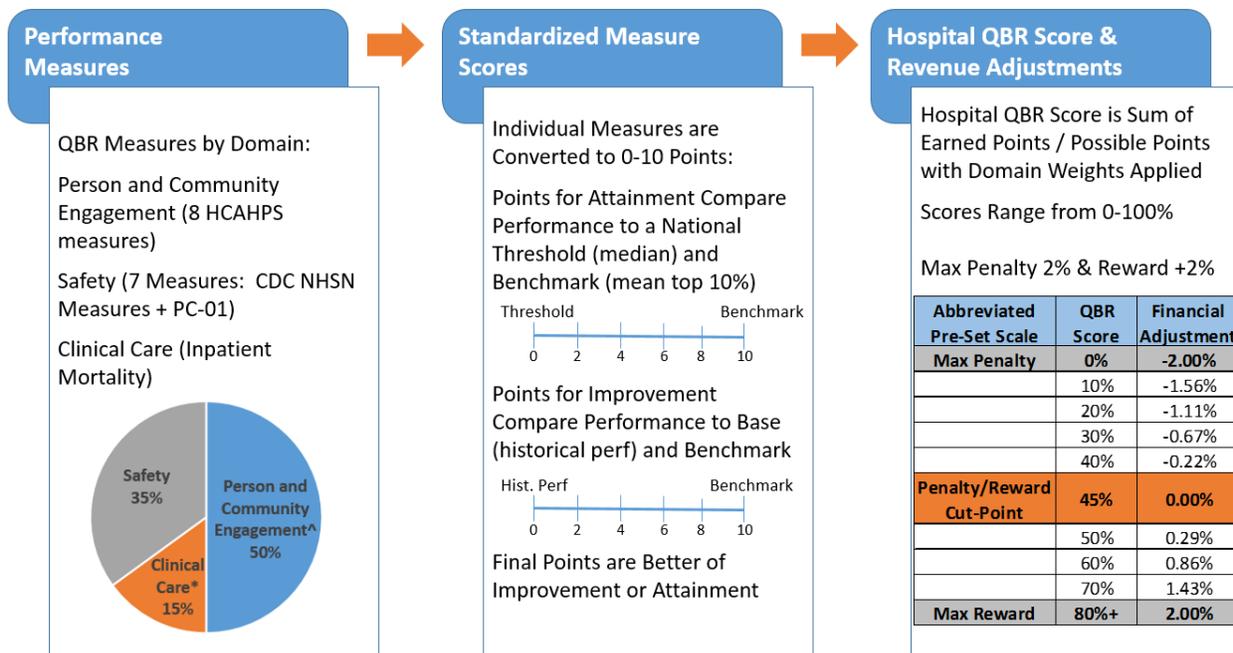
<sup>6</sup> PAU is defined as the costs of readmissions, and of admissions measured by the Agency for Healthcare Research and Quality Prevention Quality Indicators (PQIs).

<sup>7</sup> Details of CMS VBP measures may be found at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>.

	Maryland QBR Domains and Measures	CMS VBP Domain Weights and Measure Differences
<b>Person and Community Engagement</b>	50% (8 HCAHPS measures) With or without 2 ED wait time measures (see below)	25% Same HCAHPS measures, no ED wait time measures
<b>Safety</b>	35% (7 measures: CDC NHSN, PC-01)	25% (8 measures: CDC NHSN, PC-01, PSI-90)
<b>Efficiency</b>	N/A	25% (Medicare Spending Per Beneficiary measure)

Calculating hospital QBR scores and associated inpatient revenue adjustments involves: 1) assessing performance on each measure in the domain; 2) standardizing measure scores relative to performance standards; 3) calculating the total points a hospital earned divided by the total possible points for each domain; 4) finalizing the total hospital QBR score (0-100%) by weighting the domains based on the overall percentage or importance the Commission has placed on each domain; and 5) converting the total hospital QBR scores into revenue adjustments using the preset scale that ranges from 0 to 80%, as aforementioned. The process for how scores are calculated in the QBR program is listed in Figure 2 below and is described in further detail in Appendix I:

**Figure 2. Process for Calculating RY 2019 QBR Scores**



## Mortality and Palliative Care

One principal area where Maryland differs from the nation is its Clinical Care or Mortality domain. The federal VBP program evaluates three 30 day condition specific mortality measures, while Maryland utilizes an all-payer, all-cause in-hospital mortality measure. While staff monitors and reports Maryland performance on the condition specific Medicare mortality measures to CMS, the all-payer, all-cause inpatient mortality measure is emblematic of the Commission's commitment and belief that all-payer pay-for-performance incentives can more effectively incentivize hospital improvement.

In the RY 2019 recommendation, staff recommended that its Mortality measure should include palliative care patients in order to comprehensively assess survival rates in Maryland hospitals. As noted by Commissioners last year, the exclusion of palliative care discharges, rather than risk-adjusting for palliative care status and calculating performance standards to account for higher mortality rates among palliative care discharges, allowed hospitals to receive spurious credit for improvement as palliative care use increased over time. This is evidenced by the fact that improvement in survival rates more than doubled when palliative care was excluded.<sup>8</sup>

For this measure for RY 2019, HSCRC calculated scores for improvement that included palliative care patients, and attainment that excluded palliative care patients. The combined measure was put forward as an interim policy so that hospitals could gain familiarity with the mortality measure that includes palliative care patients with risk-adjustment.

## ED Wait Time Measures

Over the past year due to longstanding concerns of staff and other stakeholders regarding high ED wait times, and more recently from emergency room physicians, the Maryland Institute of Emergency Medical Services Systems (MIEMSS), and the Maryland General Assembly, staff has researched and analyzed data associated with ED throughput. Specifically, staff has evaluated hospital red and yellow alert data, where hospitals self-identify potential ED back up or lack of availability of beds, and ambulances may be diverted to another hospital. Staff has also evaluated CMS reported data on ED wait times, based on National Quality Forum-endorsed definitions. Through engagement with an ED subgroup, consisting of ED physicians, hospital quality professionals, payers' representatives and consumer advocates, staff concluded that Maryland has an ED throughput problem.

While alert status data has improved in recent quarters (see quarter 2 of CY 2017 in Appendix II), CMS ED wait time data is a national indicator of hospital performance that can be used to set performance objectives relative to national performance. Admittedly, the CMS ED wait time data has a reporting lag of nine months, whereas alert data is updated in real-time and has

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<sup>8</sup> The improvement in the survival rate of patients within a hospital 30 days after admissions from FY 2015 to CY 2016 when excluding Palliative care was 0.62%; when included, it was 0.29%.

showed improvement; however, historical analysis of CMS ED wait time data indicates that Maryland has consistently lagged behind the nation.

## ASSESSMENT

The purpose of this section is to assess Maryland's performance on current and potential QBR measures and to make recommendations for the RY 2020 QBR program.

Staff analysis indicates that despite strategic decisions to weight more heavily the Person and Community Engagement domain and to implement a preset scale based on national performance, Maryland has experienced stalled or reduced quality improvements compared to the nation. Specifically, Maryland hospitals continue to lag behind the nation in Person and Community Engagement domain measures with little to no improvement statewide since CY 2014, and rebased national measures now indicate that Maryland hospitals have not experienced as significant an improvement in its Safety domain measures as previously believed.

Consequently, in its recommendation for RY 2020, staff is requesting Commissioners to continue utilizing the 0-80% full score distribution scale with a 45% cut off point. Staff acknowledges that retaining the 0-80% scale with a 45% cutoff point may result in higher statewide penalties; however, because a guiding principle of the current and Total Cost of Care Model is to have aggressive and progressive targets staff maintains that this cutoff point should be retained.

Staff has also identified that while the State is comparable to the nation for the three condition specific mortality measures, the exclusion of palliative care in the QBR Clinical Care domain has not comprehensively reflected survival rates in a hospital, as evidenced by the differential in survival improvement rates when palliative care is included versus excluded.

In the recommendation for RY 2020, staff is including palliative care both for improvement and attainment. Finally, due to concerns regarding ED throughput and ambulance diversions, staff has also performed analyses that indicate that approximately 80% of Maryland hospitals perform worse than the national median in ED wait times.<sup>9</sup> Staff acknowledge that there are difficulties with the behavioral health system in the State that are exacerbating throughput problems in EDs. Staff also believes that poor ED wait times are contributing to less favorable hospital HCAHPS scores based on staff analysis of statistical correlation.

Staff, therefore, is requesting the addition of new ED wait time measures, which will increase projected statewide penalties slightly because ED wait time measures indicate the State performs less favorably than national benchmarks.

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<sup>9</sup> 85.7% of Maryland hospitals perform worse than the nation in ED-1b, which is median time from emergency department arrival to emergency department departure for admitted emergency department patients, and 78.6% perform worse than the nation in ED-2b, which is admit decision time to emergency department departure time for admitted patient. The median wait times are adjusted based upon ED volume.

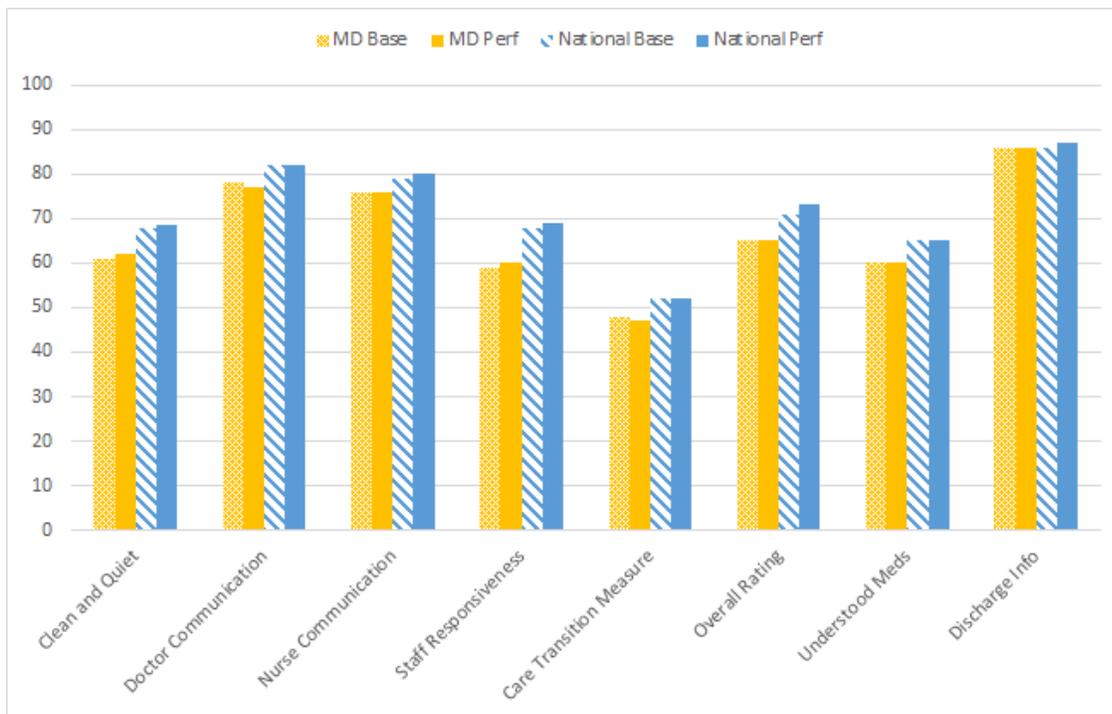
The following section summarizes Maryland hospital performance using base and performance scores for the RY 2018 time period and highlights the status of additional or proposed new measures for the QBR program.

### Performance Results on Existing QBR Measures

To conduct this assessment, HSCRC staff evaluated RY 2020 QBR measures (mostly equivalent to the FFY 2020 VBP measures) with the RY 2018 performance period data.

The **Person and Community Engagement** domain measures performance using the HCAHPS patient survey. For this domain, Maryland continues to perform below the nation for both the base and performance periods, with the exception of the discharge information composite question, as illustrated in Figure 3 below.

**Figure 3. HCAHPS Results: Maryland Compared to the Nation for RY 2018**



**\*Time period CY 2014 (Base); 10/2015 to 9/2016 (Performance)**

While the statewide data suggests that Maryland continues to lag behind the nation on HCAHPS measures, there is variability in performance across individual hospitals, with some performing better than the national average on each measure. Furthermore, while the statewide improvements were modest, there were individual hospitals with significant improvements on each measure. The box plots in Appendix III illustrate HCAHPS performance and HCAHPS improvement by hospital for Maryland and for non-Maryland. This variation in performance is

important, because it illustrates that Maryland hospitals can improve or perform better than the nation.

Based on the analysis of the Person and Community Engagement domain, HSCRC staff recommends continuing to weight this domain at 50% of the QBR score.

The **Safety** domain consists of six National Health Safety Network (NHSN) measures and one measure of perinatal care. Staff does not recommend any changes to this domain in RY 2020. Maryland has steadily been improving on four of the six NHSN measures (See Figure 4; scores less than 1 indicate lower rates of infection relative to the national baseline). Maryland did not improve upon its scores for the Catheter-associated urinary tract infection (CAUTI) and Central line-associated blood stream infections (CLABSI) measures; however, Maryland was already well below the national Standardized Infection Ratio (SIR) of 1. A score lower than 1 means that Maryland out-performed the nation on these measures.

**Figure 4. Maryland NHSN Safety Measures, RY 2018**

Measure	Maryland Base Score (CY 2014)	Maryland Performance Score (Oct 2015 – Sep 2016)	Difference (Maryland Base to Performance)	National SIR CY 2013
CLABSI	0.492	<b>0.67</b>	<b>+0.178</b>	
CAUTI	0.681	<b>0.70</b>	<b>+0.019</b>	
SSI-Colon	1.088	<b>0.97</b>	<b>-0.118</b>	
SSI-Hysterectomy	1.203	<b>0.75</b>	<b>-0.453</b>	
MRSA	1.269	<b>1.18</b>	<b>-0.089</b>	
C.Diff	1.18	<b>0.96</b>	<b>-0.220</b>	

In calendar year (CY) 2015, CMS re-based the national standard for the six NHSN measures, moving the national SIRs of 1 to reflect nationwide improvement since their previous baseline in CY 2013. Under these new, re-based measures, Maryland has additional room to improve on three of the four measures, where Maryland’s SIR is greater than the national standard of 1 (See Figure 5). For example, the re-based SIR for Methicillin resistant Staphylococcus aureus (MRSA) is 1.30 indicating that Maryland is performing 30% worse than the nation in 2015, while previously for the same time period it was reported that the MRSA SIR was 1.18, indicating that Maryland was 18% worse than the nation in 2013.

**Figure 5. Re-based NHSN Safety Measures, October 2015-September 2016**

<b>Measure*</b>	<b>Maryland Performance Score (Oct 2015 – Sep 2016)**</b>	<b>National SIR (Rebased CY 15)</b>
SSI-Colon	<b>1.068</b>	
SSI-Hysterectomy	<b>0.943</b>	
MRSA	<b>1.303</b>	
C.Diff.	<b>1.133</b>	

\*Re-based measures for CLABSI and CAUTI were released for CY 2015 with an error, and were recently corrected by NHSN; however, at the present time, not all Maryland hospital data is available NHSN for HSCRC use.

\*\* This does not affect actual QBR scores for RY18, but does indicate that our standing relative to the more recent national standards is worse.

The QBR **Safety** domain does not include the Patient Safety Index Composite (PSI-90) measure that is included in VBP. Currently, the Agency for Healthcare Research and Quality (AHRQ) has yet to release a PSI-90 risk-adjustment methodology under ICD-10. The HSCRC plans to re-adopt the PSI-90 composite measure on an all-payer basis as soon as the risk-adjustment is available. Further, it should be noted that staff intends to have the subgroup of clinical experts vet the PSI measures as part of its review of complication measures to use under the TCOC model starting in RY 2021.

The **Clinical Care or Mortality** domain consists of one all-payer, all-cause inpatient mortality measure in the QBR program, while the federal Medicare VBP program measures only three 30-day condition-specific Mortality measures for Heart Attack, Heart Failure, and Pneumonia, as well as a Total Hip and Knee Arthroplasty (THA/TKA) Risk Standardized Complication measure. Staff still has not been able to obtain data from CMS for the THA/TKA Risk Standardized Complication rate, which measures complications, readmissions, or death during the index hospital admission or during a readmission following the specified procedures. Thus, staff will not include this measure in RY 2020.<sup>10</sup> Using the most current data available on Hospital Compare, Maryland Medicare performs on par with the nation for all three condition-specific measures of 30-day Mortality for the performance period of July 1, 2013 to June 30, 2016.

For RY 2018 time periods, staff has calculated improvement on the Maryland mortality measure

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<sup>10</sup> Staff notes that on an all-payer basis, patients receiving total hip or knee arthroplasty procedures are included in the MHAC program, Readmission Reduction Incentive Program, and the QBR mortality measure.

with and without palliative care patients. Figure 6 shows that overall Maryland improved on all-payer, all-cause inpatient mortality; however, the improvement is 50% lower when palliative care patients are included. The Commission discussed this issue at length last year, and determined that the MD mortality measure should include palliative care patients in order to comprehensively assess improvement on mortality/survival in Maryland and to avoid hospitals receiving spurious credit for improvement due to increases in palliative care use or coding.

For this measure for RY 2019, HSCRC calculated scores for improvement that included palliative care patients, and attainment that excluded palliative care patients. The combined measure was put forward as an interim policy so that hospitals could gain familiarity with the mortality measure that includes palliative care patients with risk-adjustment. For RY 2020, staff recommends using the same measure of in-hospital mortality (survival) with palliative care patients included for calculating both attainment and improvement scores. The updated measure risk-adjusts for palliative care status and adjusts benchmarks to ensure that hospitals are not unduly penalized for the higher mortality among palliative care patients. The staff is including this change as a specific RY 2020 recommendation for Commission approval, as well as the recommendation to continue to weigh the Clinical Care domain at 15%.

**Figure 6. Inpatient Mortality Improvement With and Without Palliative Care, RY 2018**

<b>RY 2018 Statewide Unadjusted Survival Rates</b>	<b>FY 2015</b>	<b>CY 2016</b>	<b>Percent Change</b>
w/o Palliative Care	97.68%	98.28%	0.62%
w Palliative Care	95.05%	95.33%	0.29%

## Performance Results on Newly Proposed QBR Measures

### Emergency Department (ED) Wait Times

As part of the strategic plan to examine performance measures, staff continues to evaluate other measures available in public reporting. In the RY 2019 recommendation, staff noted that Maryland has a sustained trend of performing poorly on the ED wait time measures compared to the nation. These measures have been publicly reported nationally on Hospital Compare since CY 2012 (for ED-1b and ED-2b), and since quarter 1 of 2014 (for OP-18b). Under the RY 2019 policy, HSCRC committed to “active” monitoring of the ED wait times measures with consideration as to the feasibility of adding these measures to the QBR program in future years.

Staff has also reviewed trends in ED diversion, measured as the amount of time that hospitals have voluntarily placed themselves on Yellow or Red Alert status, or involuntarily been placed on Re-Route Alert status. Hospital use of Yellow and Red Alerts and time on Re-Route status have declined rapidly in 2017, following a significant increase between 2013 and 2016. Staff continues to monitor Alert status data, but notes that the Alert Status measures are inappropriate

for pay-for-performance programs, as there is significant divergence in understanding of the measures' definition, use, and applicability.<sup>11</sup>

Throughout 2017, staff has presented trends in emergency department throughput to the Commission, met with concerned stakeholders, held work group meetings, and modeled different incentives with contractor Mathematica Policy Research. Following this work, staff modeled two CMS Hospital Compare measures of ED wait times for potential inclusion in the RY 2020 QBR policy. Given the concern about this issue from stakeholders, the HSCRC has begun requesting analysis and Efficiency Improvement Action Plans from hospitals that are outliers in ED efficiency. Staff is recommending that the Commission also include the ED wait time measures in the QBR program as a longer-term incentive to improve and sustain quality in this area of hospital care.

The two measures modeled were ED-1b and ED-2b. A description of these measures is below in Figure 7:<sup>12</sup>

**Figure 7. ED Wait Time Measures**

<b>Measure ID</b>	<b>Measure Title</b>
ED-1b	Median time from emergency department arrival to emergency department departure for admitted emergency department patients
ED-2b	Admit decision time to emergency department departure time for admitted patient
OP-18*	Emergency department arrival time to departure time for discharged patients.

\*OP-18 is not recommended to be a measure in the RY 2020 Program

The inclusion of ED wait times would focus on incentivizing hospitals to improve their ED wait times to be closer to the national medians for their respective volume categories. The volume categories, and performance by Maryland hospitals and nationwide, are provided in Figure 8 below.

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<sup>11</sup> Certain EMS providers do not pay attention to the Alert status of hospitals in determining to which hospital they should transport their patient; certain hospitals do not use the Alert system as a matter of hospital-specific policy; and \*Maryland Institute for Emergency Medical Services Systems (MIEMSS) acknowledges that hospitals define the Yellow Alert definition in different ways, and thus have different thresholds for deciding whether to go on Yellow Alert.

<sup>12</sup> Found at: <https://www.medicare.gov/HospitalCompare/data/Data-Updated.html#MG3> . Last accessed 10/27/2017.

Figure 8. ED Volume Categories<sup>13</sup>

Volume Category	# of Annual Visits	# of Maryland Hospitals in each volume category <sup>14</sup>	ED-1b			ED-2b		
			Nation	MD	% of MD hospitals above National Median	Nation	MD	% of MD hospitals above National Median
LOW	0-19,999 visits	3	214	291	33.3%	58	84	33.3%
MEDIUM	20,000-39,999 visits	9	258	428	88.9%	89	168	88.9%
HIGH	40,000-59,999 visits	16	296	365	93.8%	119	150	81.3%
VERY HIGH	60,000 + visits	17	334	433	88.2%	136	186	70.6%

As shown in the Figure above, 85.7% of Maryland hospitals perform worse than the nation in ED-1b, which is median time from emergency department arrival to emergency department departure for admitted emergency department patients, and 78.6% perform worse than the nation in ED-2b, which is admit decision time to emergency department departure time for admitted patients. Of note, some outlier hospitals have ED-1b median wait times in excess of ten hours (see Appendix IV).

Staff in conjunction with its contractor, Mathematica Policy Research, also examined the rank order correlation of ED measures with HCAHPS measures to determine the degree to which shorter ED wait times are correlated with better HCAHPS ratings. For all ED volume categories,

<sup>13</sup> Scores reflect most recent data, which is CY 2016 (CMS Hospital Compare measures typically have a 9-month delay).

<sup>14</sup> This Volume Category is based on ED visits in CY 2014 (the base period under the modeling).

Mathematica found that ED-1b and ED-2b measures were significantly correlated with HCAHPS measures, and shorter wait times are associated with better HCAHPS ratings.

Staff, therefore, recommends inclusion of ED-1b and 2b measures for the QBR program, which focus on ED visits that ultimately result in an inpatient admission. These measures would be included in the Person and Community Engagement domain. Staff acknowledges the importance of the ED wait time measure in the outpatient setting (OP-18b), as approximately 85% of emergency department visits do not result in an admission. However, staff is reluctant to include this measure at this time, given that the incentives of the Global Budget Revenue system are largely to enhance care management and reduce unnecessary and avoidable utilization, which may not align with reduced outpatient time. In addition, the patients to whom the OP-18b measure applies are not eligible to complete the HCAHPS survey since they are treated in the outpatient setting and not included in the sample frame, because HCAHPS is only administered to a random sample of adult inpatients admitted in the medical, surgical and maternity care service lines between 48 hours and six weeks after discharge.

The staff modeled rewarding hospitals for improving their performance relative to the national median (on a scale of 0-9 possible points). Hospitals at or below the national median (i.e., more efficient) in the performance period would receive a full 10 points on the measure. Additionally, recognizing the multi-faceted challenges to improving ED throughput, staff has modeled built in protections for hospitals making measurable improvement. To that end, in the modeling, hospitals that are below the national median but improve enough to receive at least 1 point on each of the measures modeled receive the better of their QBR scores, with or without the ED wait times included in the Person and Community Engagement domain.

Including ED wait times (using RY 2018 data) would have the following impact on hospitals:

- ▶ 26 hospitals would have a lower QBR score (average -.017 lower);
- ▶ 1 hospital would have the same score (protected);
- ▶ 17 hospitals would have a higher score (average .028 higher).

To see the modeling results by-hospital, please refer to Appendix IV.

## **RY 2020 Domain Weighting**

HSCRC staff is proposing to add two ED wait time measures to the Person and Community Engagement domain, but is proposing no changes to the domain weights for RY 2020, as displayed in Figure 9 below. By definition, this means that the ED wait times would effectively reduce the weight of individual HCAHPS measures in the Person and Community Engagement domain (from 10 points out of 100 to 10 points out of 120). Staff feels comfortable with this weight distribution given that the HCAHPS measures and the ED wait time performance are correlated with one another. Appendix I details the available published performance standards for each measure by domain.

**Figure 9. Proposed Measure Domain Weights for the CMS Hospital VBP Program and Proposed Domain Weights for the QBR Program, RY 2020**

	<b>Clinical Care</b>	<b>Person and Community Engagement</b>	<b>Safety</b>	<b>Efficiency</b>
<b>QBR RY 2020</b>	15% (1 measure - Mortality)	50% (8 measures - 8 HCAHPS)	35% (7 measures - Infection + PC-01)	PAU
<b>QBR RY 2020 (w/ ED Wait Times)</b>	15% (1 measure - Mortality)	50% (10 measures - 8 HCAHPS + 2 ED Wait Times)	35% (7 measures - Infection + PC-01)	PAU
<b>CMS FFY 2020 VBP</b>	25% (4 measures - condition-specific Mortality; THA/TKA)	25% (8 measures - HCAHPS )	25% (7 measures - Infection, PC-01, PSI-90)	25%

### RY 2020 Modeling

HSCRC staff modeled hospital QBR scores and revenue adjustments consistent with the preset scaling approach approved for RY 2019. With the exception of the HSCRC-derived measures, the thresholds and benchmarks for the QBR scoring methodology are based on the national average (threshold) and the top performance (benchmark) values for all measures. A score of 0 means that performance on all measures are below the national average or not improved, while a score of 1 means all measures are at or better than the top 5 percent best performing rates. Although hospital scores reflect performance relative to the national thresholds and benchmarks, the previous use of a statewide distribution to set the scaling for financial incentive payment adjustments created a disconnect between Maryland and national performance. The problem resulting from using Maryland scores for scaling was evident in the initial results for RY 2017, which provided significant reward payments despite the State’s unfavorable collective performance. Thus, the Commission moved to a preset scale that reflects a full distribution and raised the reward potential to 2% of inpatient revenue for RY 2019. Given continued poor performance for Maryland relative to the nation, staff believes that the more aggressive scaling is warranted and proposes to continue this scale for RY 2020 QBR program.

This preset scale uses a modified full score distribution ranging from 0% to 80%, and sets the reward/penalty cut-point at 45%. The 45% cutoff was established by estimating the national average VBP scores for FFY2017 without the efficiency domain and with RY 2017 Maryland QBR-specific weights applied, which was 41%. Therefore, HSCRC staff recommended 45% as the cut-point for RY 2019 in order to establish an aggressive bar for receiving rewards. Currently FFY2018 VBP scores have not yet been released and thus we have not updated this analysis.

Staff modeled hospital scores for RY 2020 QBR using the aforementioned preset scale with a cutoff point of 45% and RY 2018 data (the most current data at the time of the modeling). Staff also incorporated two changes into its modelling between RY 2019 and RY 2020 that were discussed in detail earlier in the policy recommendation. They are as follows:

- The Maryland Mortality measure includes palliative care cases (risk-adjusted for palliative care status) for both improvement and attainment
- (Optional) The addition of ED-1b and ED-2b, two measures of ED Throughput efficiency.

The inclusion of ED wait times is listed as optional, because it was not previously approved by Commissioners, unlike the inclusion of palliative care for both improvement and attainment. As such, staff modelled QBR with and without ED measures to provide an immediate choice to Commissioners, but staff nevertheless still advocates for inclusion of the ED measures in the QBR program.

Hospital-specific scores, modeling RY 2018 data with RY 2020 measures, are included in Appendix V.<sup>15</sup>

The modeled hospital-specific and statewide revenue impacts (with or without ED modeling) are found in Appendix VI. With ED measures excluded, 2 hospitals receive rewards totaling \$2.4M and the remaining hospitals receive penalties totaling \$49.2M. With the ED measures included, 3 hospitals receive rewards totaling \$2.2M, and the remaining hospitals receive penalties totaling \$53.1M.

## **FUTURE TOTAL COST OF CARE MODEL DIRECTION**

To date, Maryland hospitals have met all of the Agreement goals laid out in the current contract with CMS. For the Total Cost of Care Model, which will begin in January 2019, current contract terms do not define specific quality performance targets. The HSCRC, in consultation with staff and industry, has begun laying the framework for establishing specific quality performance targets in the Total Cost of Care Model. Specifically, performance targets must be aggressive and progressive, must align with other HSCRC programs, must be comparable to federal programs, and must consider rankings relative to the nation. But beyond guiding principles, nothing definitive has yet been established.

For the RY 2020 final recommendations, staff considered the Commission discussions regarding the overall strategy for the quality programs under the new Total Cost of Care (TCOC) Model – most notably, meeting contractually obligated Quality goals while making as few changes as possible to the final year of the current model in light of the additional work required to develop new targets and to better align measures with total cost of care.

Work will begin shortly to develop new policy targets, as this is a straightforward exercise, but aligning measures will require more time, because this requires more than adding hospital quality

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<sup>15</sup> Johns Hopkins Hospital data was suppressed in Quarter 3 of 2016; therefore, all RY 2020 modeling includes Hospital Compare scores for Johns Hopkins Hospital from one quarter back (July 2015-June 2016).

measures or assessing performance relative to the nation. Rather, it requires bundling outcomes across quality programs, evaluating opportunities for performance standards outside the hospital walls, ensuring that GBR financial incentives are compatible, and developing reporting measures that are more holistic and patient-centered. To meet these requirements, various exercises will be needed, including: convening a clinical subgroup to evaluate the universe of measures of complications that Maryland should include in its pay for performance regimen; evaluating external data sources to determine if the Commission can utilize them to incentivize improvement outside the hospital; revisiting financial methodologies and cultivating new ones, such as Inter-Hospital Cost Comparison, to ensure resources are being disseminated in accordance with TCOC model goals; and potentially even establishing an overarching service line approach to the Hospital Quality programs so as to break down silos and promulgate a more holistic and patient-centered environment. Staff acknowledges this will require a lot of work in concert with industry and stakeholders, but the success of the TCOC model depends on reducing cost on a per capita basis without compromising quality of care.

## **STAKEHOLDER COMMENTS AND RESPONSES**

HSCRC received written comments from the Maryland Hospital Association (MHA), Johns Hopkins Hospital (JHH), and Anne Arundel Medical Center (AAMC). Comments were with regard to the VBP program (upon which the QBR program is primarily based), and related specifically to the aggressive payment scale and to concerns about including ED wait times measures in the QBR program. Staff offers the following responses to the comments.

### **Program is modeled after VBP, which is burdensome and flawed (MHA)–**

#### *Staff responses:*

- *Maryland must meet or exceed performance levels in quality and cost under our Model agreement with CMS. Specifically, each year Maryland must submit to CMS our outcomes on VBP and other quality measures to receive an annual exemption for the CMS VBP program; Maryland could lose exemption from VBP and still maintain other elements of the model.*
- *Under the VBP program, all US hospitals are held accountable to performance levels on the HCAHPS and NHSN measures.*
- *Further, these measures are part of the CMS Star ratings program, and the NHSN infection measures are also part of the federal HAC Reduction Program, to which industry has recently indicated that they would like to move.*
- *In addition to providing for national comparisons on our performance for the CMS-administered programs, both of these measure domains are part of the healthcare purchaser sponsored Leapfrog Group's Safety Grade reporting program.*

### **Payment scale is very Aggressive (MHA) –**

- MHA notes that approximately two thirds of hospitals in the nation would have been penalized in federal fiscal year 2017 if Maryland payment scale were applied nationally.

*Staff analysis confirms this attestation but notes that 50% of national hospitals are penalized under the VBP program and that Maryland purposely raised scale to drive greater improvement. In addition, the previous relatively ranked scale, set using the statewide average, resulted in a lower cut point for rewards, and in effect rewarded poor hospital performance relative to the nation.*

**ED wait time measures: lack of national experience, distraction, unintended consequences, concerns about measures recommended and data lag (MHA, JHH, AAMC)–**

- MHA notes that Maryland hospitals are revolutionizing patient admission, discharge, and overall patient navigation processes with early successes.
  - JHH notes that it has recently launched its Capacity Command Center, which employs systems engineering, predictive analytics, and innovative problem-solving to better manage patients.
  - AAMC also notes that they have dramatically improved performance in FY 2018 compared with FY 2017 in performance on ED-1b, OP-18b and in lowering ED diversion time; they add that the data are 9 months old and not reflective of the improvements.

*Staff notes that the implementation of these early successes are not yet showing measurable results in the modeling, as Maryland performed among the poorest in the nation on standardized measures in CY2014-2016, and adds that targeted incentives have potential to support all hospitals in identifying and remedying root causes of issues of concern. Staff lauds AAMC's efforts and measured improvements and notes that including the measures in QBR would likely benefit them and similarly performing hospitals when comparing a base period of CY 2016 against data through quarter 3 of 2017, albeit with a 9 month delay in the data. Staff further notes that other measures such as the federal 30-day mortality measures use data with a much longer lag time. Further, staff agrees with AAMC's assertions that improvement in this area requires a culture change with sustained efforts.*

- AAMC supports using ED-1b, OP-18b, and ED diversion data collected by MIEMSS. *Staff supports an initial focus on admitted patients, and believes that use of ED-2b also addresses the concerns raised by physician stakeholders. Staff notes the voluntary nature and inconsistency of the diversion data collection and reporting, and does not believe that the diversion data is sufficiently reliable at this time for use in the QBR program.*
- AAMC supports giving hospitals credit for attainment as well as improvement, and supports stratification by hospital ED volume category. *Staff notes that the scoring methodology recommends awarding a full 10 points to hospitals at or below (more efficient) the national medians (attainment level) for their respective volume categories in the performance period.*
- JHH supports collaboration between HSCRC, MIEMSS, MHA, MDH, and the physician community to identify the factors leading to higher ED wait times.

*Staff agrees that there are multiple factors leading to increased wait times that are likely to vary across hospitals and supports initiatives that engage multiple stakeholders to further research the root causes of this problem. However, staff asserts that merely identifying factors leading to higher wait times, factors like insufficient behavioral healthcare, which are endemic to most other states, does not address how Maryland will improve its poor performance relative the nation. Therefore, staff continues to support its recommendation to include ED wait time measures in the Commission pay for performance policies. Given stakeholder concerns, the Commission can vote to approve this policy with or without this specific recommendation.*

- MHA indicates that State efforts should instead target care network/system adequacy, with particular emphasis on behavioral health services, and availability of 24/7 non-emergent care.  
*Staff agrees these outputs should be addressed in order to improve the outcome of improved ED wait times, and staff believes hospital pay-for-performance incentives have the potential to bolster hospitals' efforts toward supporting these improvements. Staff notes the successes in improving ED.*

## **RECOMMENDATIONS FOR RY 2020 QBR PROGRAM**

1. Update the Maryland Mortality Measure to include palliative care cases (risk-adjusted for palliative care status) for calculating both attainment and improvement scores.
2. Include ED Wait Times measures (ED-1b and ED-2b) in the Person and Community Engagement domain; HSCRC staff will work with industry and MIEMSS to determine if there is appropriate risk adjustment for the measures by 7/1/18.
3. Weight the domains as follows for determining hospitals' overall performance scores: Person and Community Engagement - 50%, Safety - 35%, Clinical Care - 15%.
4. Maintain RY 2019 Pre-set Scaling Options, and continue to hold 2% of inpatient revenue at-risk for the QBR program.

## APPENDIX I. HSCRC QBR PROGRAM DETAILS

### Domain Weights and Revenue at-Risk

As illustrated in the body of the report, for the RY 2018 QBR program, the HSCRC will weight the clinical care domain at 15 percent of the final score, the Safety domain at 35 percent, and the Person and Community Engagement domain at 50 percent.

The HSCRC sets aside a percentage of hospital inpatient revenue to be held “at risk” based on each hospital’s QBR program performance. Hospital performance scores are translated into rewards and penalties in a process that is referred to as scaling.<sup>16</sup> Rewards (referred to as positive scaled amounts) or penalties (referred to as negative scaled amounts) are then applied to each hospital’s update factor for the rate year. The rewards or penalties are applied on a one-time basis and are not considered permanent revenue. The Commission previously approved scaling a maximum reward of one percent and a penalty of two percent of total approved base inpatient revenue across all hospitals for RY 2019.

HSCRC staff has worked with stakeholders over the last several years to align the QBR measures, thresholds, benchmark values, time lag periods, and amount of revenue at risk with those used by the CMS VBP program where feasible,<sup>17</sup> allowing the HSCRC to use data submitted directly to CMS. As alluded to in the body of the report, Maryland implemented an efficiency measure in relation to global budgets based on potentially avoidable utilization outside of the QBR program. The potentially avoidable utilization (PAU) savings adjustment to hospital rates is based on costs related to potentially avoidable admissions, as measured by the Agency for Healthcare Research and Quality Prevention Quality Indicators (PQIs) and avoidable readmissions. HSCRC staff will continue to work with key stakeholders to complete development of an efficiency measure that incorporates population-based cost outcomes.

### QBR Score Calculation

QBR Scores are evaluated by comparing a hospital’s performance rate to its base period rate, as well as the threshold (which is the median, or 50<sup>th</sup> percentile, of all hospitals’ performance during the baseline period), and the benchmark, (which is the mean of the top decile, or approximately the 95<sup>th</sup> percentile, during the baseline period).<sup>18</sup>

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<sup>16</sup> Scaling refers to the differential allocation of a pre-determined portion of base-regulated hospital inpatient revenue based on assessment of the quality of hospital performance.

<sup>17</sup> HSCRC has used data for some of the QBR measures (e.g., CMS core measures, CDC NHSN CLABSI, CAUTI) submitted to the Maryland Health Care Commission (MHCC) and applied state-based benchmarks and thresholds for these measures to calculate hospitals’ QBR scores up to the period used for RY 2017.

<sup>18</sup> If included in RY 2020 QBR, the ED wait time measures will not have a benchmark, but will calculate hospital improvement relative to the national threshold, which is the national median for each respective volume category.

**Attainment Points:** During the performance period, attainment points are awarded by comparing an individual hospital's rates with the threshold and the benchmark. With the exception of the MD Mortality measure applied to all payers, the benchmarks and thresholds are the same as those used by CMS for the VBP program measures.<sup>19</sup> For each measure, a hospital that has a rate at or above benchmark receives 10 attainment points. A hospital that has a rate below the attainment threshold receives 0 attainment points. A hospital that has a rate at or above the attainment threshold and below the benchmark receives 1-9 attainment points

**Improvement Points:** The improvement points are awarded by comparing a hospital's rates during the performance period to the hospital's rates from the baseline period. A hospital that has a rate at or above the attainment benchmark receives 9 improvement points. A hospital that has a rate at or below baseline period rate receives 0 improvement points. A hospital that has a rate between the baseline period rate and the attainment benchmark receives 0-9 improvement points.

**Consistency Points:** The consistency points relate only to the experience of care domain. The purpose of these points is to reward hospitals that have scores above the national 50<sup>th</sup> percentile in all of the eight HCAHPS dimensions. If they do, they receive the full 20 points. If they do not, the dimension for which the hospital received the lowest score is compared to the range between the national 0 percentile (floor) and the 50<sup>th</sup> percentile (threshold) and is awarded points proportionately.

**Domain Denominator Adjustments:** In particular instances, QBR measures will be excluded from the QBR program for individual hospitals. In the Person and Community Engagement domain, ED wait time measures (if included in the RY 2020 program) will be excluded for protected hospitals. As described in the body of the report, a hospital may exclude one or both of the ED wait time measures if it has earned at least one improvement point and if its improvement score would reduce its overall QBR score. If a measure is excluded, the Person and Community Engagement domain will reduce from 120 total points to 110 points.

Similarly, hospitals are exempt from measurement for any of the NHSN Safety measures for which there is less than 1 predicted case in the performance period. If a hospital is exempt from an NHSN measure, its Safety domain score denominator reduces from 60 to 50 points. If it is exempt from two measures, the Safety domain score denominator would be 40 total possible points. Hospitals must have at least 3 of 6 Safety measures in order to be included in the Safety domain.

**Domain Scores:** Composite scores are then calculated for each domain by adding up all of the measure scores in a given domain divided by the total possible points x 100. The better of attainment and improvement for experience of care scores is also added together to arrive at the

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<sup>19</sup> If included in RY 2020 QBR, the ED wait times would not calculate attainment points, but would instead award a full 10 points to hospitals at or below (more efficient) than the national medians for their respective volume categories in the performance period.

experience of care base points. Base points and the consistency score are added together to determine the experience of care domain score.

***Total Performance Score:*** The total Performance Score is computed by multiplying the domain scores by their specified weights, then adding those totals and dividing them by the highest total possible score. The Total Performance Score is then translated into a reward/ penalty that is applied to hospital revenue.

## RY 2020 Proposed Timeline (Base and Performance Periods; Financial Impact)

Calendar Year	Q116	Q216	Q316	Q416	Q117	Q217	Q317	Q417	Q118	Q218	Q318	Q418	Q119	Q219	Q319	Q419	Q120	Q220	
<b>Quality Programs that Impact Rate Year 2020</b>																			
<b>QBR</b>	Hospital Compare Base Period* (Proposed)																Rate Year Impacted by QBR Results (Missing are THA/TKA, ED Wait Times)		
							Hospital Compare Performance Period* (Proposed)												
		Maryland Mortality Base Period (Proposed)																	
								QBR Maryland Mortality Performance Period (Proposed)											

## RY 2020 QBR Performance Standards

### Person and Community Engagement Domain

Dimension	Benchmark	Achievement Threshold	Floor
Communication with Nurses	87.12%	79.08%	51.80%
Communication with Doctors	88.44	80.41%	50.67%
Responsiveness of Hospital Staff	80.14%	65.07%	35.74%
Communication about Medicines	73.86%	63.30%	26.16%
Cleanliness and Quietness of Hospital Environment	79.42%	65.72%	41.92%
Discharge Information	92.11%	87.44%	66.72%
3-Item Care Transition	62.50%	51.14%	20.33%
Overall Rating of Hospital	85.12%	71.59%	32.47%

### Safety Domain

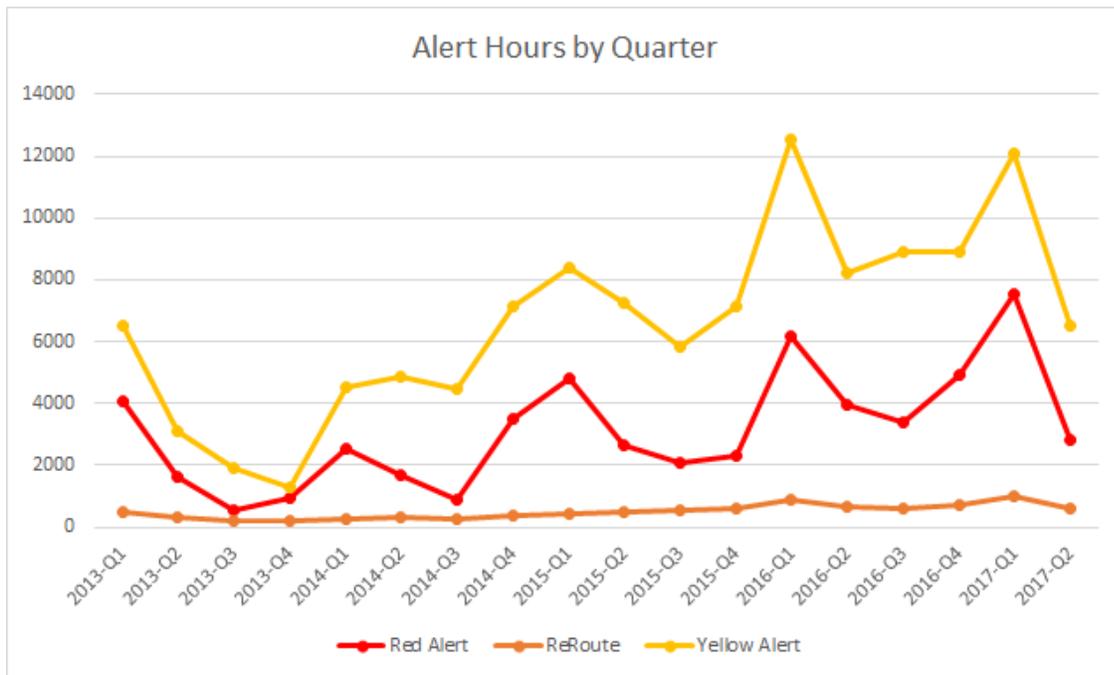
Measure ID*	Measure Description	Benchmark	Achievement Threshold
CAUTI	Catheter-Associated Urinary Tract Infection	0	0.828
CDI	Clostridium <i>difficile</i> Infection	0.091	0.852
CLABSI	Central Line-Associated Blood Stream Infection	0	0.784
MRSA	Methicillin-Resistant Staphylococcus <i>aureus</i>	0	0.815
PC-01	Elective Delivery Prior to 39 Completed Weeks Gestation	0	0
SSI	SSI - Abdominal Hysterectomy	0	0.722
	SSI - Colon Surgery	0	0.781

### Mortality Domain

Measure ID*	Measure Description	Benchmark	Achievement Threshold
Mortality	All Condition Inpatient Mortality	96.7046	94.8918

## APPENDIX II. MARYLAND EMERGENCY DEPARTMENT DIVERSION

Maryland Emergency Department Diversion (by Alert Type, By Quarter) is presented below. **Yellow Alerts** are voluntary, and indicate that a hospital's emergency department temporarily requests that it receive absolutely no patients in need of urgent medical care.<sup>20</sup> **Red Alerts** are also voluntary, and indicate that a hospital has no ECG monitored beds available.<sup>21</sup> **Reroute Alerts** are involuntary, and indicate that an advanced life support/basic life support unit is being held in the emergency department due to lack of an available bed.<sup>22</sup> For all three alert types, statewide alert hours have decreased in the second quarter of 2017, when compared to the same time period in 2016.



<sup>20</sup> Full **Yellow Alert** Definition, per MIEMSS: The emergency department temporarily requests that it receive absolutely no patients in need of urgent medical care. Yellow alert is initiated because the Emergency dept is experiencing a temporary overwhelming overload such that priority II and III patients may not be managed safely. Prior to diverting pediatric patients, medical consultation is advised for pediatric patient transports when emergency departments are on yellow alert.

<sup>21</sup> Full **Red Alert** Definition, per MIEMSS: The hospital has no ECG monitored beds available. These ECG monitored beds will include all in-patient critical care areas and telemetry beds.

<sup>22</sup> Full **ReRoute** Alert Definition, per MIEMSS: An ALS/BLS unit is being held in the emergency department of a hospital due to lack of an available bed. (This does not replace Yellow Alert.)

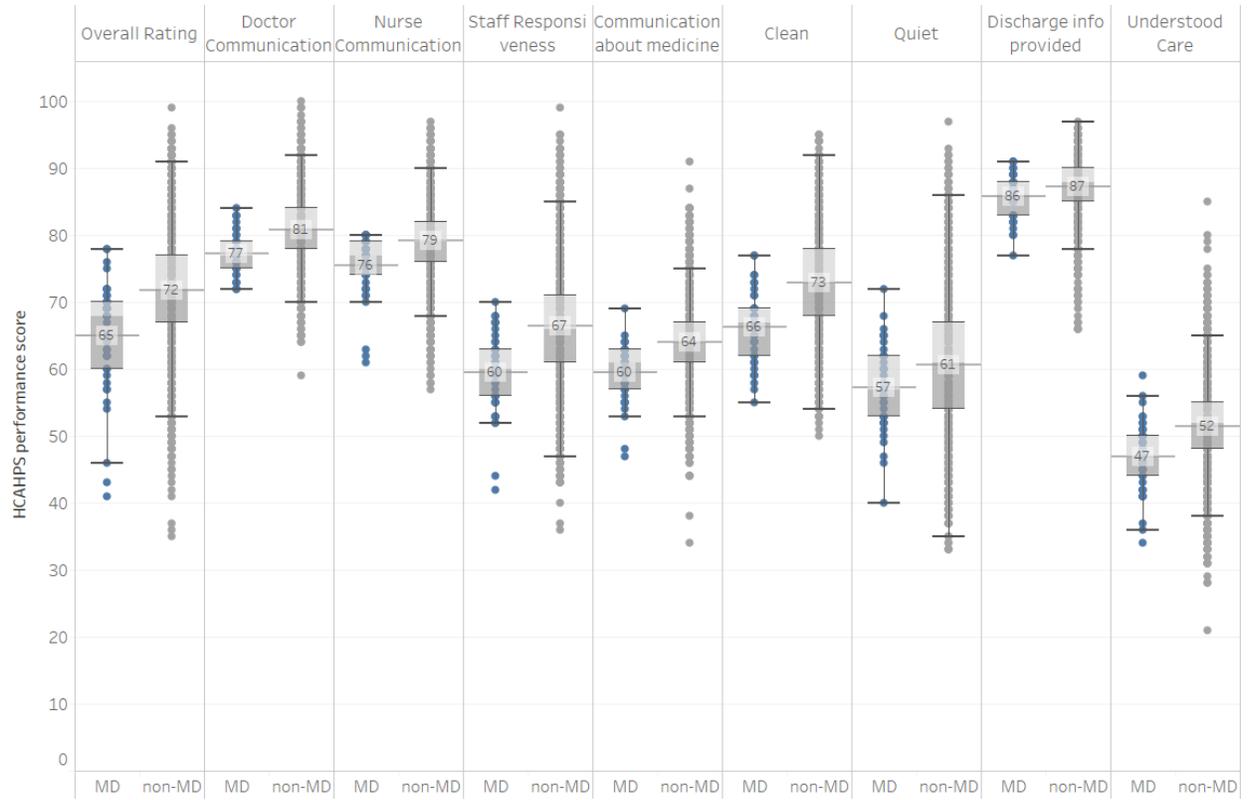
### **APPENDIX III. HCAHPS HOSPITAL-LEVEL ATTAINMENT AND IMPROVEMENT, MARYLAND COMPARED TO THE NATION**

As illustrated in the box plot graphs below, HSCRC staff analyzed the range of hospital performance for both Maryland (blue dots) and the nation (gray dots) in order to understand the distribution of attainment (Figure 1) and improvement (Figure 2) on HCAHPS survey results for Maryland compared to the nation. For each box plot, the center shaded region represents the values in the interquartile range (between 25th and 75th percentile of scores), with the median of the scores located at the center of the region. The top and bottom of the shaded region indicate the 75th and 25th percentile, respectively. Outliers are indicated by any values outside of the whiskers (the lines extending above and below the shaded region). The range of Maryland hospital scores reflects that some Maryland hospitals, while not necessarily performing above the 75th percentile, are able to perform above the national average.

While the statewide data suggests that Maryland continues to lag behind the nation, there is variability in hospital performance, with some hospitals performing better than the national average on each measure. Furthermore, while the statewide improvements were modest, there were individual hospitals with significant improvements on each measure. The figures below illustrate HCAHPS performance and HCAHPS improvement by hospital for Maryland and for non-Maryland.

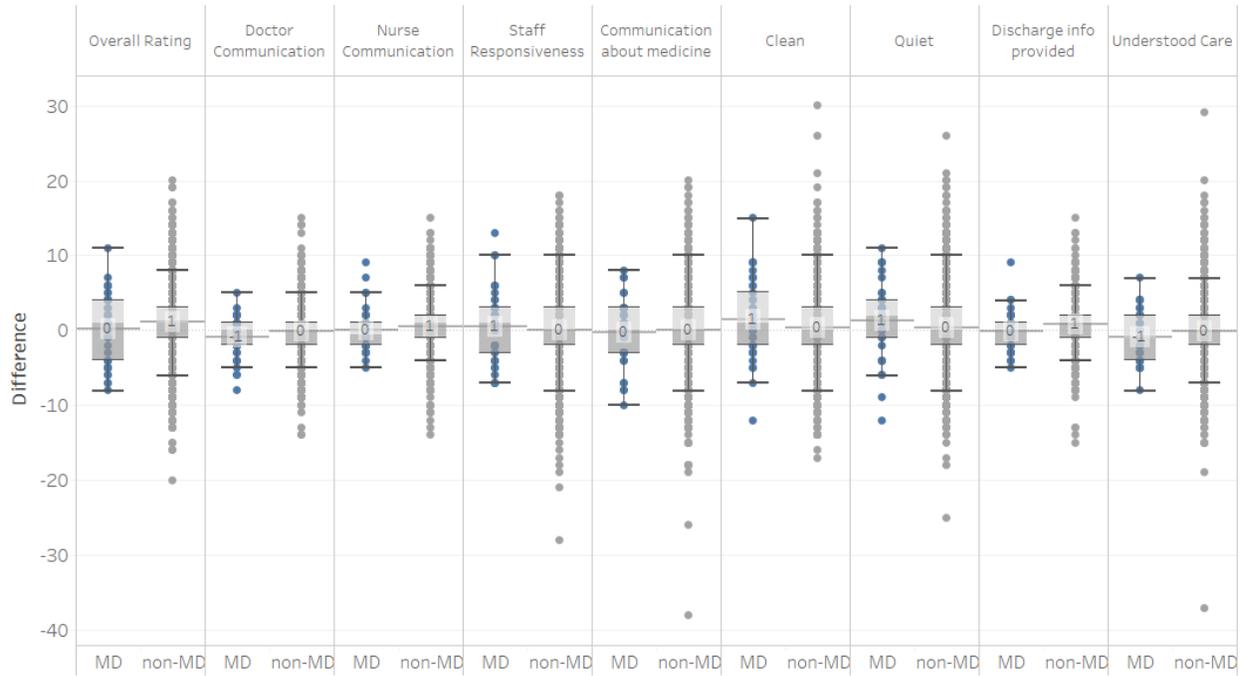
**Figure 1. HCAHPS Hospital Performance Distribution, Maryland Compared to the Nation**

HCAHPS top box results



**Figure 2. HCAHPS Hospital Improvement, Maryland Compared to the Nation**

HCAHPS difference between base and performance



## APPENDIX IV. MODELING OF ED WAIT TIME – IMPACT ON HCAHPS DOMAIN

CMS ID	Hospital Name	Volume Indicator	ED-1b				ED-2b				HCAHPS Domain	
			National Benchmark (in Minutes)	Base (in Min)	Performance (in Min)	Improvement Points	National Benchmark (in Minutes)	Base (in Min)	Performance (in Min)	Improvement Points	Without ED	With ED
210001	Meritus	VERY HIGH	332	358	374	0	130	190	185	0	0.22	0.1833
210002	UMMC	VERY HIGH	332	662	662	0	130	394	326	2	0.22	0.2000
210003	PG Hospital	HIGH	295	580	587	0	111	326	303	1	0.02	0.0250
210004	Holy Cross	VERY HIGH	332	406	463	0	130	160	210	0	0.14	0.1167
210005	Frederick	VERY HIGH	332	320	335	0	130	110	108	10	0.29	0.3250
210006	UM-Harford	MEDIUM	259	327	335	0	88	105	112	0	0.09	0.0750
210008	Mercy	VERY HIGH	332	326	362	0	130	89	130	0	0.38	0.3167
210009*	Johns Hopkins	VERY HIGH	332	525	597	0	130	210	251	0	0.38	0.3667
210010	UM-Dorchester	MEDIUM	259	394	359	2	88	134	120	3	0.13	0.1500
210011	St. Agnes	VERY HIGH	332	360	370	0	130	124	128	10	0.14	0.2000
210012	Sinai	VERY HIGH	332	460	610	0	130	165	239	0	0.23	0.1917
210013	Bon Secours	MEDIUM	259	448	366	4	88	204	169	3	0.05	0.1000
210015	MedStar Fr Square	VERY HIGH	332	430	463	0	130	160	175	0	0.13	0.1083
210016+	Washington Adventist	HIGH	295	488	434	2	111	254	226	1	0.19	0.1900
210017	Garrett	LOW	216	199	206	10	60	49	60	0	0.34	0.3667
210018	MedStar Montgomery	MEDIUM	259	309	332	0	88	142	157	0	0.17	0.1417
210019	Peninsula	VERY HIGH	332	317	310	10	130	146	152	0	0.42	0.4333
210022	Suburban	HIGH	295	422	353	5	111	225	182	3	0.37	0.3750
210023	Anne Arundel	VERY HIGH	332	524	525	0	130	308	298	0	0.37	0.3083
210024	MedStar Union Mem	VERY HIGH	332	348	368	0	130	137	154	0	0.35	0.2917
210027	Western Maryland	HIGH	295	298	309	0	111	113	98	10	0.28	0.3167
210028	MedStar St. Mary's	HIGH	295	375	448	0	111	160	210	0	0.29	0.2417
210029	JH Bayview	HIGH	295	437	486	0	111	180	197	0	0.13	0.1083

CMS ID	Hospital Name	Volume Indicator	ED-1b				ED-2b				HCAHPS Domain	
			National Benchmark (in Minutes)	Base (in Min)	Performance (in Min)	Improvement Points	National Benchmark (in Minutes)	Base (in Min)	Performance (in Min)	Improvement Points	Without ED	With ED
210030	UM-Chestertown	LOW	216	329	352	0	60	92	98	0	0.1	0.0833
210032	Union of Cecil	MEDIUM	259	289	323	0	88	84	90	0	0.25	0.2083
210033	Carroll	HIGH	295	336	353	0	111	93	158	0	0.12	0.1000
210034	MedStar Harbor	HIGH	295	309	357	0	111	121	151	0	0.16	0.1333
210035	UM-Charles Regional	VERY HIGH	332	293	327	10	130	94	91	10	0.11	0.2583
210037	UM-Easton	MEDIUM	259	394	359	2	88	134	120	3	0.13	0.1500
210038	UMMC Midtown	MEDIUM	259	361	445	0	88	155	161	0	0.13	0.1083
210039	Calvert	HIGH	295	386	413	0	111	160	175	0	0.2	0.1667
210040	Northwest	HIGH	295	464	362	6	111	188	110	10	0.45	0.5083
210043●	UM-BWMC	VERY HIGH	332	427	431	0	130	215	202	1	0.19	0.1727
210044	GBMC	HIGH	295	311	368	0	111	110	134	0	0.23	0.1917
210048	Howard County	VERY HIGH	332	439	462	0	130	198	205	0	0.18	0.1500
210049	UM-Upper Chesapeake	VERY HIGH	332	346	341	3	130	114	114	10	0.2	0.2750
210051	Doctors	HIGH	295	396	410	0	111	142	176	0	0.13	0.1083
210055	Laurel Regional	MEDIUM	259	390	499	0	88	169	252	0	0.06	0.0500
210056	MedStar Good Sam	HIGH	295	392	397	0	111	141	141	0	0.13	0.1083
210057	Shady Grove	VERY HIGH	332	369	380	0	130	144	166	0	0.22	0.1833
210060	Ft. Washington	HIGH	295	273	278	10	111	72	86	10	0.17	0.3083
210061	Atlantic General	MEDIUM	259	236	222	10	88	79	74	10	0.21	0.3417
210062	MedStar Southern MD	HIGH	295	403	379	2	111	170	140	5	0.11	0.1500
210063	UM-St. Joe	HIGH	295	355	396	0	111	113	129	0	0.52	0.4333

In this figure, base period is CY 2014 and performance period is Oct 2015 to Sept 2016.

\*Data for Johns Hopkins Hospital has changed significantly from the draft QBR policy for two reasons: 1. An error was identified in the ED wait time measures modeling for JHH and, 2. HSCRC received the hospitals' data for the correct time period that had been previously suppressed.

♦ QBR Score for 210016 – Washington Adventist Hospital “with ED” is protected, as the hospital improved on both ED wait time measures between base and performance; model returned better of QBR scores.

● QBR Score for 210043 – UM-Baltimore Washington “with ED” includes ED-1b only, as the hospital improved between base and performance for ED-2b; model took better of QBR scores with or without ED-2b.

## APPENDIX V. MODELING OF SCORES BY DOMAIN: RY 2018 QBR DATA WITH RY 2020 MEASURES

This appendix includes the HCAHPS domain *without* the ED measure inclusion.

Hospital ID	Hospital Name	HCAHPS Final Points	HCAHPS Denom.	HCAHPS Final Score	Mortality Final Points - Modeled	Mortality Final Score - Modeled	Safety Total Points	Safety Denom.	Safety Final Score	Total Score
210001	Meritus	22	100	0.22	5	0.5	14	60	0.2333	0.2667
210002	UMMC	22	100	0.22	4	0.4	14	60	0.2333	0.2517
210003	PG Hospital	2	100	0.02	1	0.1	29	60	0.4833	0.1942
210004	Holy Cross	14	100	0.14	9	0.9	19	60	0.3167	0.3158
210005	Frederick	29	100	0.29	10	1	14	60	0.2333	0.3767
210006	UM-Harford	9	100	0.09	6	0.6	9	30	0.3000	0.2400
210008	Mercy	38	100	0.38	0	0	35	60	0.5833	0.3942
210009	Johns Hopkins*	38	100	0.38	7	0.7	19	60	0.3167	0.4058
210010	UM-Dorchester	13	100	0.13	3	0.3	20	60	0.3333	0.2267
210011	St. Agnes	14	100	0.14	4	0.4	16	60	0.2667	0.2233
210012	Sinai	23	100	0.23	7	0.7	17	60	0.2833	0.3192
210013	Bon Secours	5	100	0.05	0	0	8	40	0.2000	0.0950
210015	MedStar Fr Square	13	100	0.13	10	1	26	60	0.4333	0.3667
210016	Washington Adventist	19	100	0.19	3	0.3	27	60	0.4500	0.2975
210017	Garrett	34	100	0.34	5	0.5	.	.	.	0.3768
210018	MedStar Montgomery	17	100	0.17	6	0.6	44	60	0.7333	0.4317
210019	Peninsula	42	100	0.42	5	0.5	24	60	0.4000	0.4250
210022	Suburban	37	100	0.37	7	0.7	22	50	0.4400	0.4440
210023	Anne Arundel	37	100	0.37	1	0.1	21	60	0.3500	0.3225

Hospital ID	Hospital Name	HCAHPS Final Points	HCAHPS Denom.	HCAHPS Final Score	Mortality Final Points - Modeled	Mortality Final Score - Modeled	Safety Total Points	Safety Denom.	Safety Final Score	Total Score
210024	MedStar Union Mem	35	100	0.35	7	0.7	11	50	0.2200	0.3570
210027	Western Maryland	28	100	0.28	4	0.4	8	60	0.1333	0.2467
210028	MedStar St. Mary's	29	100	0.29	4	0.4	10	30	0.3333	0.3217
210029	JH Bayview	13	100	0.13	4	0.4	23	60	0.3833	0.2592
210030	UM-Chestertown	10	100	0.1	0	0	.	.	.	0.0770
210032	Union of Cecil	25	100	0.25	10	1	21	60	0.3500	0.3975
210033	Carroll	12	100	0.12	10	1	30	60	0.5000	0.3850
210034	MedStar Harbor	16	100	0.16	7	0.7	32	60	0.5333	0.3717
210035	UM-Charles Regional	11	100	0.11	5	0.5	28	60	0.4667	0.2933
210037	UM-Easton	13	100	0.13	0	0	20	60	0.3333	0.1817
210038	UMMC Midtown	13	100	0.13	8	0.8	17	40	0.4250	0.3338
210039	Calvert	20	100	0.2	10	1	20	40	0.5000	0.4250
210040	Northwest	45	100	0.45	10	1	19	50	0.3800	0.5080
210043	UM-BWMC	19	100	0.19	3	0.3	18	60	0.3000	0.2450
210044	GBMC	23	100	0.23	10	1	16	60	0.2667	0.3583
210048	Howard County	18	100	0.18	10	1	29	60	0.4833	0.4092
210049	UM-Upper Chesapeake	20	100	0.2	5	0.5	13	60	0.2167	0.2508
210051	Doctors	13	100	0.13	4	0.4	35	50	0.7000	0.3700
210055	Laurel Regional	6	100	0.06	2	0.2	6	40	0.1500	0.1125
210056	MedStar Good Sam	13	100	0.13	5	0.5	14	50	0.2800	0.2380
210057	Shady Grove	22	100	0.22	1	0.1	26	60	0.4333	0.2767

Hospital ID	Hospital Name	HCAHPS Final Points	HCAHPS Denom.	HCAHPS Final Score	Mortality Final Points - Modeled	Mortality Final Score - Modeled	Safety Total Points	Safety Denom.	Safety Final Score	Total Score
210060	Ft. Washington	17	100	0.17	6	0.6	.	.	.	0.2689
210061	Atlantic General	21	100	0.21	10	1	23	40	0.5750	0.4563
210062	MedStar Southern MD	11	100	0.11	0	0	14	60	0.2333	0.1367
210063	UM-St. Joe	52	100	0.52	10	1	32	60	0.5333	0.5967
210065	HC-Germantown	10	100	0.1	10	1	10	30	0.3333	0.3167

\*Data for Johns Hopkins Hospital has changed significantly from the draft QBR policy for two reasons: 1. An error was identified in the ED wait time measures modeling for JHH and, 2. HSCRC received the hospitals' data for the correct time period that had been previously suppressed.

## APPENDIX VI. MODELING OF QBR PROGRAM FINANCIAL IMPACT

RY 2020 QBR SCALING - Modeled with RY 2018 prelim final data and RY 2020 Measures			Without ED Wait Times Measures			With ED Wait Times Measures		
HOSPID	HOSPITAL NAME	RY17 Permanent Inpatient Revenue	RY 2018 QBR Prelim Score	% Revenue Impact	\$ Revenue Impact	RY 2018 QBR Prelim Score	% Revenue Impact	\$ Revenue Impact
210001	MERITUS	\$ 185,173,878	27%	-0.81%	-\$1,508,920	25%	-0.90%	-\$1,659,981
210002	UNIVERSITY OF MARYLAND	\$ 874,727,573	25%	-0.88%	-\$7,711,015	24%	-0.93%	-\$8,098,033
210003	PRINCE GEORGE	\$ 215,010,869	19%	-1.14%	-\$2,444,865	20%	-1.13%	-\$2,420,545
210004	HOLY CROSS	\$ 339,593,506	32%	-0.60%	-\$2,024,807	30%	-0.65%	-\$2,200,566
210005	FREDERICK MEMORIAL	\$ 178,853,951	38%	-0.33%	-\$583,024	39%	-0.25%	-\$443,558
210006	HARFORD	\$ 46,975,749	24%	-0.93%	-\$438,440	23%	-0.97%	-\$454,099
210008	MERCY	\$ 216,281,427	39%	-0.25%	-\$536,811	36%	-0.39%	-\$841,094
210009	JOHNS HOPKINS*	\$ 1,357,164,899	41%	-0.20%	-\$2,666,075	37%	-0.34%	-\$4,572,138
210010	DORCHESTER	\$ 24,256,573	23%	-0.99%	-\$240,782	24%	-0.95%	-\$229,952
210011	ST. AGNES	\$ 233,151,492	22%	-1.01%	-\$2,348,665	25%	-0.87%	-\$2,038,262
210012	SINAI	\$ 397,073,246	32%	-0.58%	-\$2,309,113	30%	-0.67%	-\$2,647,155
210013	BON SECOURS	\$ 62,008,295	10%	-1.58%	-\$978,353	12%	-1.47%	-\$909,455
210015	FRANKLIN SQUARE	\$ 287,510,180	37%	-0.37%	-\$1,065,002	36%	-0.42%	-\$1,203,709
210016	WASHINGTON ADVENTIST	\$ 150,097,509	30%	-0.68%	-\$1,017,328	30%	-0.68%	-\$1,017,328
210017	GARRETT COUNTY	\$ 21,836,267	38%	-0.33%	-\$71,041	40%	-0.23%	-\$51,145
210018	MONTGOMERY GENERAL	\$ 79,298,762	43%	-0.08%	-\$64,655	42%	-0.14%	-\$114,543
210019	PENINSULA REGIONAL	\$ 235,729,906	43%	-0.11%	-\$261,922	43%	-0.08%	-\$191,727
210022	SUBURBAN	\$ 189,851,798	44%	-0.03%	-\$50,627	45%	-0.02%	-\$29,533
210023	ANNE ARUNDEL	\$ 296,168,973	32%	-0.57%	-\$1,678,291	29%	-0.70%	-\$2,083,713
210024	UNION MEMORIAL	\$ 231,121,787	36%	-0.41%	-\$955,303	33%	-0.54%	-\$1,255,248
210027	WESTERN	\$ 171,858,929	25%	-0.90%	-\$1,553,185	27%	-0.82%	-\$1,413,062

**RY 2020 QBR SCALING - Modeled with RY 2018 prelim final data and RY 2020 Measures**

			Without ED Wait Times Measures			With ED Wait Times Measures		
HOSPID	HOSPITAL NAME	RY17 Permanent Inpatient Revenue	RY 2018 QBR Prelim Score	% Revenue Impact	\$ Revenue Impact	RY 2018 QBR Prelim Score	% Revenue Impact	\$ Revenue Impact
	MARYLAND							
210028	ST. MARY	\$ 77,346,008	32%	-0.57%	-\$441,199	30%	-0.68%	-\$524,234
210029	HOPKINS BAYVIEW MED CTR	\$ 348,529,477	26%	-0.85%	-\$2,956,227	25%	-0.90%	-\$3,124,373
210030	CHESTERTOWN	\$ 18,989,104	8%	-1.66%	-\$314,797	6%	-1.71%	-\$325,600
210032	UNION HOSPITAL OF CECIL	\$ 68,179,037	40%	-0.23%	-\$159,084	38%	-0.33%	-\$222,112
210033	CARROLL COUNTY	\$ 116,510,378	39%	-0.29%	-\$336,586	38%	-0.33%	-\$388,368
210034	HARBOR	\$ 107,761,881	37%	-0.35%	-\$375,227	36%	-0.41%	-\$439,190
210035	CHARLES REGIONAL	\$ 68,387,041	29%	-0.70%	-\$476,141	37%	-0.37%	-\$250,752
210037	EASTON	\$ 100,000,562	18%	-1.19%	-\$1,192,651	19%	-1.15%	-\$1,148,006
210038	UMMC MIDTOWN	\$ 114,950,934	33%	-0.52%	-\$593,913	32%	-0.56%	-\$649,345
210039	CALVERT	\$ 63,319,998	43%	-0.11%	-\$70,356	41%	-0.19%	-\$117,353
210040	NORTHWEST	\$ 125,696,184	51%	0.33%	\$416,593	54%	0.50%	\$626,326
210043	BALTIMORE WASHINGTON	\$ 227,399,457	25%	-0.91%	-\$2,071,862	24%	-0.95%	-\$2,158,779
210044	G.B.M.C.	\$ 216,554,825	36%	-0.41%	-\$882,148	34%	-0.49%	-\$1,066,412
210048	HOWARD COUNTY	\$ 176,085,796	41%	-0.18%	-\$319,654	39%	-0.25%	-\$436,693
210049	UPPER CHESAPEAKE HEALTH	\$ 133,152,736	25%	-0.89%	-\$1,178,579	29%	-0.72%	-\$956,924
210051	DOCTORS COMMUNITY	\$ 132,931,890	37%	-0.36%	-\$472,647	36%	-0.40%	-\$536,454
210055	LAUREL REGIONAL	\$ 59,724,224	11%	-1.50%	-\$895,863	11%	-1.52%	-\$909,135
210056	GOOD SAMARITAN	\$ 158,579,215	24%	-0.94%	-\$1,494,169	23%	-0.99%	-\$1,570,287
210057	SHADY GROVE	\$ 219,319,153	28%	-0.77%	-\$1,689,683	26%	-0.85%	-\$1,868,599
210060	FT. WASHINGTON	\$ 19,371,986	27%	-0.80%	-\$155,923	38%	-0.33%	-\$64,229

**RY 2020 QBR SCALING - Modeled with RY 2018 prelim final data and RY 2020 Measures**

			Without ED Wait Times Measures			With ED Wait Times Measures		
HOSPID	HOSPITAL NAME	RY17 Permanent Inpatient Revenue	RY 2018 QBR Prelim Score	% Revenue Impact	\$ Revenue Impact	RY 2018 QBR Prelim Score	% Revenue Impact	\$ Revenue Impact
210061	ATLANTIC GENERAL	\$ 38,966,012	46%	0.04%	\$13,916	52%	0.41%	\$160,540
210062	SOUTHERN MARYLAND	\$ 163,339,853	14%	-1.39%	-\$2,274,743	16%	-1.30%	-\$2,129,226
210063	UM ST. JOSEPH	\$ 234,995,507	60%	0.84%	\$1,969,329	55%	0.59%	\$1,387,145
210065	HC-GERMANTOWN	\$ 62,086,212	32%	-0.59%	-\$367,950	32%	-0.59%	-\$367,950

\*Revenue adjustments for Johns Hopkins Hospital have changed significantly from the draft QBR policy for two reasons: 1. An error was identified in the ED wait time measures modeling for JHH and, 2. HSCRC received the hospitals' data for the correct time period that had been previously suppressed.

Statewide Impact	Without ED Wait Times	With ED Wait Times
<b>Total Penalties</b>	-49,227,626	-53,128,868
<b>% Inpatient Revenue</b>	-0.56%	-0.60%
<b>Total rewards</b>	2,399,839	2,174,011
<b>% Inpatient revenue</b>	0.03%	0.02%



# Quality Based Reimbursement Program RY 2020 Final Recommendations

12/13/2017

# Proposed Commission Action

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- ▶ This is a final recommendation requiring the Commission to vote.
- ▶ Staff proposes minimal changes for RY 2020
  - ▶ Maintain RY 2019 QBR methodology
  - ▶ Include Palliative Care cases for Mortality Attainment
  - ▶ Include ED Wait Times measures

# Draft Recommendation: Comments and Responses on **ED Wait Time Measures**

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- ▶ **Comments:** lack of national P4P experience, need to establish attainment goal, distraction, unintended consequences, concerns about measures recommended, and data lag
  - ▶ Hospitals indicate they are focusing on these measures to improve operations.
  - ▶ One hospital wrote they support using more current ED-1b, OP-18-b and ED diversion data
- ▶ **Responses:**
  - ▶ ED-1b and ED-2b measures reported on Hospital Compare since 2012 with 9 month lag, same as other measures used in QBR.
  - ▶ Staff supports an initial focus on admitted patients (ED 1-b and ED 2-b) using statewide median times by ED volume category as attainment goal.
  - ▶ HCAHPS results are correlated with ED measures collected on inpatients (ED-1b and ED-2b).
  - ▶ Diversion data (reported to MIEMSS) is not consistently captured and reported.
  - ▶ Action plan reports from hospitals will have diversion data and more current data.

# Draft Recommendation: Comments and Responses on **VBP** and **Payment Scale**

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## ▶ **VBP Program:**

- ▶ **Comment:** Program is modeled after VBP, which is burdensome and flawed
- ▶ **Response:** Measures provide for national comparisons and used in other programs, for example: CMS Star Ratings, Leapfrog Group Safety Scores
  - ▶ Industry has requested the Commission to focus on nationally evaluated measures, including the national HAC measures

## ▶ **Payment Scale**

- ▶ **Comment:** Payment scale is very aggressive
- ▶ **Response:** Previous scale based on relative ranking within the state rewarded some hospitals for poor (relative to national) performance

# QBR RY 2020 Final Recommendations for Vote

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Staff recommends minimal changes for final year of current All-Payer Model

- ▶ Update the Maryland Mortality Measure to include palliative care cases (risk-adjusted for palliative care status) for calculating attainment and improvement scores.
- ▶ Include ED Wait Times measures in the Person and Community Engagement domain.
- ▶ Continue to weight the domains as follows for determining hospitals' overall performance scores: Person and Community Engagement - 50%, Safety - 35%, Clinical Care - 15%.
- ▶ Maintain RY 2019 Pre-set scaling options, and continue to hold 2% of inpatient revenue at-risk for the QBR program.



Maryland  
Hospital Association

November 29, 2017

Dianne Feeney  
Associate Director, Quality Initiatives  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Dianne:

On behalf of the Maryland Hospital Association's 64 member hospitals and health systems, we appreciate the opportunity to comment on the Health Services Cost Review Commission's *Draft Recommendations for Updating the Quality-Based Reimbursement Program for Rate Year 2020*.

Last year, commissioners approved the staff's recommendation to set a very aggressive payment scale for the rate year 2019 Quality-Based Reimbursement (QBR) policy. The Maryland scale requires a hospital to score above 45 percent to avoid a penalty and begin earning a reward, as compared to the national performance expectation that tends to result in scores above 36-40 percent earning rewards. If the Maryland payment scale were applied nationally, about two-thirds of hospitals in the nation would have been penalized in federal fiscal year 2017.

Commissioners' rationale for the aggressive payment scale was to create an incentive that would result in better performance compared to the nation. However, in their discussion, they recognized that more heavily weighting the Patient Experience of Care Measures had little impact on statewide performance; they also referenced the slow pace of change in national scores. Because the final data for rate year 2019 will not be available for at least another nine months, we cannot yet know whether the more aggressive payment scale is having an impact on performance.

The Maryland QBR program mirrors the Centers for Medicare & Medicaid Services (CMS) Value-Based Purchasing program more closely than the Maryland programs on readmissions and complications align with their national counterparts. National Value-Based Purchasing has been widely criticized in recent years as overly burdensome while doing little to improve outcomes that matter to patients. In October, CMS Administrator Seema Verma announced *Meaningful Measures*, an initiative to streamline quality measurement across all programs and reduce the burden of reporting measures that have little impact on outcomes. In her remarks, she acknowledged that the financial and opportunity costs of reporting the current measures may outweigh their intended purpose of providing high-quality care and improving patient outcomes.

Respectfully, we suggest that if the heavier weighting on Patient Experience of Care Measures and the more aggressive payment scale do not produce the intended performance outcomes,

Dianne Feeney  
November 29, 2017  
Page 2

perhaps the measures or the policy are flawed. As Maryland's hospitals focus on reducing unnecessary care, addressing patients' needs in lower cost settings when appropriate, and meeting the aims of the all-payer demonstration, hospitals may have already determined that the QBR measures, and the convoluted mechanisms required to track and score performance, have too high an opportunity cost.

We appreciate the commission's consideration of our feedback. Should you have any questions, please call me at 410-540-5087.

Sincerely,



Traci La Valle, Vice President

cc: Nelson J. Sabatini, Chairman  
Joseph Antos, Ph.D., Vice Chairman  
Victoria W. Bayless  
George H. Bone, M.D.  
John M. Colmers  
Adam Kane  
Jack C. Keane  
Donna Kinzer, Executive Director



Maryland  
Hospital Association

November 30, 2017

Dianne S. Feeney  
Associate Director, Quality Initiative  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Dianne:

On behalf of the Maryland Hospital Association's 64 member hospitals and health systems, we appreciate the opportunity to comment on the policies and activities that the Health Services Cost Review Commission is considering in response to emergency department wait times.

While we agree that emergency department wait times must be addressed, we continue to be concerned about adding emergency department wait time measures to the Quality Based Reporting Program. Because these measures are not currently used in national payment policy programs, such a policy is likely to bring unintended consequences, including penalizing hospitals that need support to address more systemic drivers of emergency department crowding, and potentially distracting from the work needed to fix the problem. In addition, Mathematica's recent findings that emergency department wait times correlate significantly with patient satisfaction, imply that the existing payment policy could be used to gauge hospital wait-time performance without implementing a new, potentially harmful policy that would be unlikely to solve the problem.

It is important to remember that Maryland's hospitals have already begun to see positive results from their efforts to reduce emergency department overcrowding and improve hospital throughput. Throughput is being improved by revolutionizing admission and discharge processes, as well as how patients are moved through the system. Admission interventions implemented by hospitals with early success include, to name just a few:

- Redirecting patients with non-urgent health care needs
- Using bed management systems for advance notification of overcrowding
- Streamlining admission processes, which includes continuing tests and labs after discharge from the emergency department to move patients to beds faster
- Staffing and equipping general inpatient units to accommodate any patient
- Scheduling rounds earlier in the morning to identify and prepare patients for discharge
- Placing discharged patients in lounges to accommodate those awaiting pickup

Some of the key causes of emergency department overcrowding are outside of hospitals' control. Among them are the dramatic increase in visits by people with behavioral health conditions, and

more patients with Medicaid coverage going to the emergency department for care. We need the state's assistance to assess and address areas that are lacking adequate community behavioral health resources and access to adequate non-emergent care. Without time to properly analyze these circumstances, incorporating emergency department wait times into a payment policy could penalize hospitals and communities that need these resources most. MHA respectfully requests HSCRC's support of statewide efforts to:

- strengthen a fragmented behavioral health care system by addressing a strained workforce and inadequate community treatment capacity
- identify and influence plans for 24/7 access to health care that is not emergent
- enforce network adequacy requirements
- support transparency in deployment of Maryland's emergency medical system

We appreciate the commission's consideration of our feedback and the opportunity to continue working with commission staff on these issues. Should you have any questions, please call me at 410-796-6245.

Sincerely,



Nora E. Hoban, Senior Vice President

cc: Nelson J. Sabatini, Chairman  
Joseph Antos, Ph.D., Vice Chairman  
Victoria W. Bayless  
George H. Bone, M.D.

John M. Colmers  
Adam Kane  
Jack C. Keane  
Donna Kinzer, Executive Director



**JOHNS HOPKINS**  
M E D I C I N E

November 20, 2017

Mr. Nelson J. Sabatini, Chairman  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Chairman Sabatini,

Johns Hopkins Health System shares the concerns expressed by HSCRC staff and Commissioners regarding the need to address emergency department wait times. Representatives from our emergency departments first shared issues associated with the increasing volume of psychiatric patients in emergency departments with the Maryland General Assembly during the 2016 legislative session. Addressing emergency department wait times and ensuring that patients are appropriately triaged is a major priority for each of our hospital emergency departments, as such, JHHS has invested significant time and resources to maximize both emergency department efficiency and patient experience.

We agree that strategies must be explored to address emergency department wait times, and welcome the opportunity to join a collaborative effort to better understand and address wait times. However, we strongly believe that including emergency department wait times as a measure within the Quality Based Reporting Program is premature and could result in unintended negative consequences. Before any QBR measures are implemented, the HSCRC, MEIMMS, MHA, MDH, and the physician community must work together to identify the factors leading to higher wait times, determine potential solutions, and craft a measure reflective of factors that lead to higher wait times.

In an effort to improve efficiency in the emergency department and throughout the hospital, The Johns Hopkins Hospital recently launched the Capacity Command Center. The Command Center combines the latest in systems engineering, predictive analytics, and innovative problem-solving to better manage patient safety, experience, volume, and the movement of patients in and out of the hospital, enabling greater access to Johns Hopkins' lifesaving services.

We would be honored to host you for a visit to the JHH Command Center. An in person meeting presents a great opportunity for us to share the improvements we have implemented through the Command Center as well offer a front line perspective on some of the challenges we face. A better

Mr. Nelson J. Sabatini  
Emergency Department Wait Times  
November 20, 2017  
Page 2

understanding of the emergency department challenges facing Maryland's entire health system will produce better solutions to these challenges. Please feel free to contact Nicki McCann, Director of Health Policy, at 443-248-4989 or nmccann4@jhu.edu, if you have any questions or would like additional information.

Sincerely,



Peter Hill, M.D., Senior Vice President, Medical Affairs  
Johns Hopkins Health System



Jim Scheulen, P.A., M.B.A., Chief Administrative Officer  
Emergency Medicine, Johns Hopkins School of Medicine

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December 4, 2017

Dianne Feeney  
Associate Director, Quality Initiatives  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Ms. Feeney:

On behalf of Anne Arundel Medical Center (AAMC), thank you for the opportunity to comment on the proposed inclusion of Emergency Department (ED) measures in the RY2020 Quality-Based Reimbursement (QBR) policy. In recent years, AAMC has taken great strides to revolutionize care delivery in our ED, resulting in:

- ED-1b (median time from ED arrival to ED departure for admitted ED patients) time of 398 minutes for the 1QFY18,
- OP-18b (median ED arrival time to departure time for discharged patients) time of 181 minutes for the 1QFY18,
- and an average diversion time of 1.4% for 1QFY18.

These significant improvements of up to 30% from the prior fiscal year required major investments of time and resources and had a significant lag time to yield results. ED transformation requires a cultural change. However, as others have noted, there are multiple factors outside of a hospital's control affecting ED measures, such as mental health, substance use, and uninsured individuals. These factors are significant and need to be considered if this proposal moves forward.

If ED measures are to be included in the RY2020 QBR policy, we strongly recommend the Commissioners adopt the following:

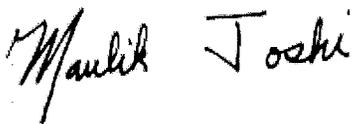
- 1) **Include only the following 3 measures: ED-1b, OP-18b, and Diversion.** These measures are emblematic of the care processes in any institution. We support the HSCRC Staff's recommendation to include ED-1b. The ED-1b measure indicates a hospital's ability to manage both the inpatient and ED flow, ensuring that the right patient is in the right bed at the right time. The HSCRC Staff expressed concern about tracking OP-18b; however, we consider this measure a key indicator of ED performance since

approximately 85% of ED visits result in no admission. Diversion time is also a key indicator, as it signals the hospital's ability to provide critical access to its community. This measure will require some standardization, since EMS regulations vary by county and each has varying degrees of latitude regarding when hospitals are put on re-route. We urge the HSCRC to work with EMS to refine the diversion metric. ED-2b's time is already included in ED1b and thus not needed.

- 2) **Compare each hospital to a national peer group of similar volume.** The HSCRC Staff proposes scoring each hospital by comparing to its respective national volume category. We fully support the stratification of hospitals by ED admission volumes. This is the most rational way to create a true comparison of Maryland's performance against the nation.
- 3) **Score ED measures on both improvement and attainment.** The current proposal includes an improvement measurement compared to the national threshold but does not include an attainment benchmark. We recommend the HSCRC include an attainment benchmark as well to appropriately reward high-performing hospitals and to further encourage the state to outperform the nation.
- 4) **Utilize current measure data.** The CMS ED wait time data has a reporting lag time of 9 months. This outdated data is not reliable or actionable, and it fails to recognize hospitals' efforts to date. Hospitals have access to more timely data and should assist in providing this data to the HSCRC.

Thank you again for the opportunity to provide comments. We look forward to continuing to work with you and the HSCRC Staff. Please let us know how we can be of further assistance to you.

Sincerely,



Maulik Joshi, DrPH  
Executive Vice President of Integrated Care Delivery &  
Chief Operating Officer



Mitch Schwartz, MD  
Chief Medical Officer

**Cc: Victoria Bayless, President & Chief Executive Officer, AAMC  
Bob Reilly, Chief Financial Officer, AAMC  
Barbara Jacobs, Chief Nursing Officer, AAMC  
Nelson J. Sabatini, Chairman, HSCRC  
Donna Kinzer, Executive Director, HSCRC**

**Peter M. Hill, M.D., MSc, FACEP**  
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December 12, 2017

Dianne S. Feeney  
Associate Director, Quality Initiative  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Ms. Feeney,

On behalf of the Johns Hopkins Health System, thank you for the opportunity to provide input on the policies the Health Services Cost Review Commission is considering in response to emergency department wait times.

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While we agree that emergency department wait times and appropriate triaging of patients should be a priority at each hospital, we have serious concerns that adding emergency department wait time measures to the Quality Based Reporting Program is premature. Before hospitals are penalized at an individual level, there must be thoughtful consideration as to the factors contributing to emergency department wait times as well as an evaluation of potential solutions.

There are several factors that contribute to extensive emergency department wait times that are beyond the control of individual hospitals, such as surges in patients brought in under emergency petition and an ongoing lack of placements for psychiatric patients. Over the past decade, there has been an increasing demand for behavioral health services, while the funding for and availability of state run behavioral health services has decreased dramatically. This has put stress on Maryland emergency departments as they struggle to find the appropriate placements for patients with complex behavioral health needs, resulting in patients languishing in emergency departments, often in a medical bed, well beyond what is medically necessary and contributing to overall increases in emergency department wait times. The increased focus on emergency department wait times presents an opportunity for collaboration between Maryland hospitals and the State to identify the resources and services necessary to bolster Maryland's behavioral health system. Hospitals alone cannot meet the complex behavioral health needs of Maryland's citizens. Imposing wait time measures on hospitals without first identifying improvements to Maryland's behavioral health systems could have the unintended consequence of diverting resources away from hospitals when those resources are greatly needed to address the patient safety measures required to bring additional stability to emergency departments that are routinely overwhelmed with complex psychiatric patients.

Additionally, the Commissioners recently expressed a desire to bring Maryland Quality Based Reporting Programs into greater alignment with national payment policy programs. Because emergency department wait times are not used in national payment policy programs, including them in the Maryland QBR program will create more disparities between Maryland and national measures, as well increased complexity. We also have concerns that there will be a lack of standardization in calculating wait times across all hospitals. Currently, there are disparities across hospital emergency departments that significantly impact wait times. For example, wait times are often measured differently for hospitals using employed physicians in the emergency department where the employed physician model “starts the clock” sooner than hospitals using attending physicians, hospitals with a high volume of pediatric patients often have lower wait times, hospitals with a high volume of Medicaid patients have higher wait times, hospitals with inpatient psychiatric beds often receive a disproportionate share of emergency petitions, and hospitals with high inpatient occupancy rates often experience increased wait times since overall hospital capacity directly impacts emergency department throughput. The proposed methodology has no mechanism to account for these disparities across hospitals.

As you hopefully noticed when you and other HSCRC staff visited with our health system experts at The Johns Hopkins Hospital Command Center on October 9, we are passionately engaged in improving the patient experience and maximizing capacity and efficiency at each of our emergency departments. We stand ready to collaborate with the HSCRC staff and other stakeholders to improve and develop policies that will improve the emergency department experience for all hospitals and the communities they serve. Without thoughtful consideration as to both the factors contributing to wait times and potential solutions across all Maryland health care stakeholders, including emergency department wait times in payment policy measures could take resources away from the hospitals and communities who need them most.

Sincerely,



Peter Hill, MD

Senior Vice President, Medical Affairs, Johns Hopkins Health System  
Associate Professor of Emergency Medicine

cc: Nelson J. Sabatini, Chairman  
Joseph Antos, Ph.D., Vice Chairman  
Victoria W. Bayless  
George H. Bone, M.D.

John M. Colmers  
Adam Kane  
Jack C. Keane  
Donna Kinzer, Executive Director

**Staff Recommendation on the  
University of Maryland School of Medicine (“UM”) Baltimore’s  
National Study Center (NSC) for Trauma and EMS  
Request for Continued Access to HSCRC Confidential Patient Level Datasets**

**Health Services Cost Review Commission  
4160 Patterson Avenue, Baltimore, MD 21215**

**December 13, 2017**

This is a final recommendation for Commission consideration at the December 13, 2017 Public Commission Meeting.

## **SUMMARY STATEMENT**

The University of Maryland, School of Medicine (“UM”) - Baltimore’s National Study Center for Trauma and EMS (“NSC”) is requesting continued access to the HSCRC Confidential Inpatient and Outpatient Data. This request was originally approved by the Commission at the public meeting on September 2, 2009.

## **BACKGROUND**

The confidential patient-level data has been used as part of the Crash Outcome Data Evaluation System (CODES). The CODES project is funded by the Maryland Department of Transportation’s Highway Safety Office (MDOT/HSO) to make traffic safety and injury-related data available for analysis. The data has been used to analyze injuries to persons treated at Maryland hospitals. Additionally, to fulfill a key component of the CODES effort, this data has been linked (where possible) to police crash report data for further analysis.

Studies of injuries resulting from motor vehicle crashes have been a major focus of the NSC since its creation in 1986. The NSC’s role was further defined in 1993, when the State of Maryland enacted legislation directing the NSC to “serve as the primary research center for the State Emergency Medical Services Systems.” The NSC’s first database-linking capabilities were initiated more than 20 years ago with a comprehensive study of all motorcycle crashes in Maryland between July 1987 and June 1988. All available medical and cost data were linked with police crash reports. Findings from this study helped to bring about the passage of the motorcycle helmet law in Maryland. Since then, multiple studies have been performed using CODES data on a variety of highway safety topics resulting in numerous publications.

## **REQUEST FOR CONTINUED ACCESS TO THE CONFIDENTIAL PATIENT-LEVEL DATA**

This data will not be used to identify individual hospitals or patients, as all personal identifiers are removed prior to any release of data, reports, or analysis. All data elements considered sensitive by the data owners are also removed from any analysis released.

The CODES Board of Directors includes representatives from each agency providing data to the project. The HSCRC has been represented on the CODES Board since its inception in 1996. Currently, Oscar Ibarra is the HSCRC representative. Additionally, the applicant filed annual progress reports to the Commission, detailing any changes in goals or design of project, or any changes in data handling procedures, work progress, and unanticipated events related to the confidentiality of the data. Furthermore, the requester submits copies of the final reports to HSCRC for review prior to public release.

## **STAFF RECOMMENDATIONS**

1. HSCRC staff recommends that CODES continue to receive access for the inpatient and outpatient confidential data files on an annual basis, upon request.
2. Access to HSCRC data will be limited to the current objective of the research study. If the objective of the study changes, CODES would be required to receive Commission approval for the new use case.



# **Joint Chairmen's Report on Emergency Department Overcrowding**

**Maryland Institute for Emergency Medical Services Systems  
Health Services Cost Review Commission**

*December 2017*



# 2017 Joint Chairmen's Report Requirement

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- ▶ Directed MIEMSS to work with HSCRC to evaluate the impact of hospital overcrowding on EMS response times and patients in Maryland
- ▶ Concern that ED overcrowding has increased in fiscal 2016, based on increase in alert diversion
- ▶ Required to study and report strategies to address overcrowding
- ▶ Report required by December 2015

# Key Findings

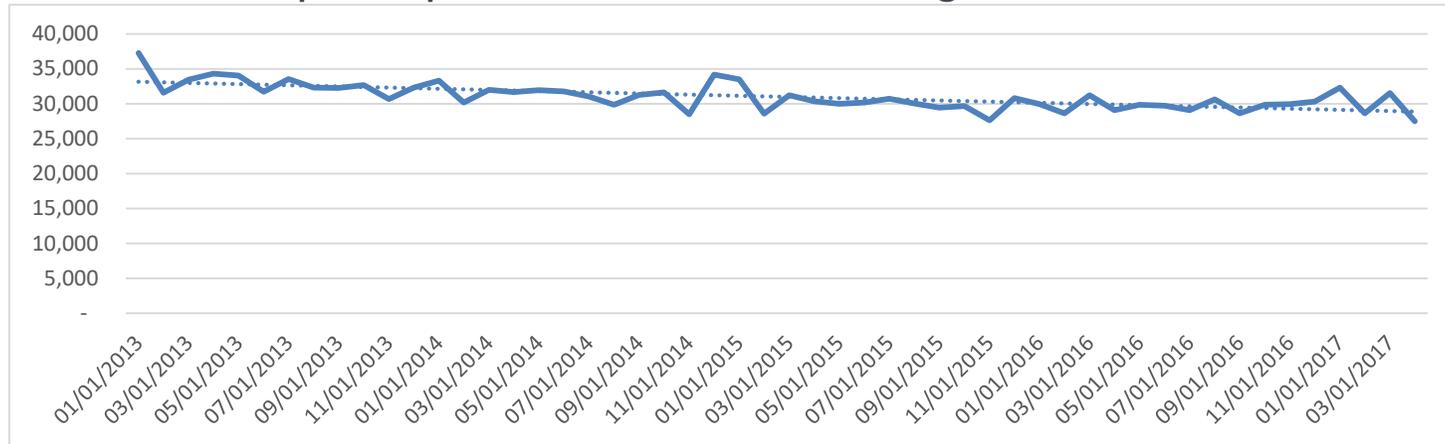
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- ▶ Excessive ED wait times and ambulance diversion from one hospital to another has been a long-standing challenge for the Maryland health care system and is a multifaceted problem that will require comprehensive system adjustments.
- ▶ ED overcrowding is exacerbated by a number of factors:
  - ▶ Increase in behavioral health patients
  - ▶ Nurse/workforce shortage
  - ▶ Increased care coordination in ED
  - ▶ Increasing number of EMS transports, coupled with limited options for alternative modes of transportation and destination
  - ▶ Misaligned reimbursement between hospital and EMS system
- ▶ Use of Ambulance Diversion Alerts (Yellow Alerts) has mixed reliability

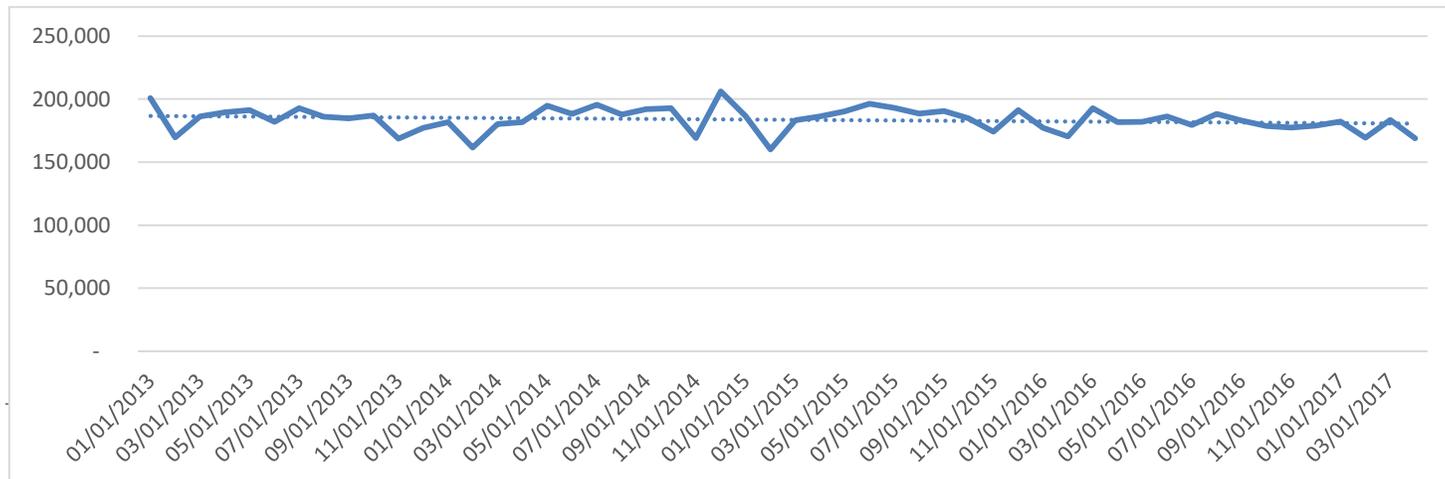
# Maryland Data

▶ Since 2013:

- ▶ The number of hospital inpatient admissions resulting from an ED visit has decreased slightly



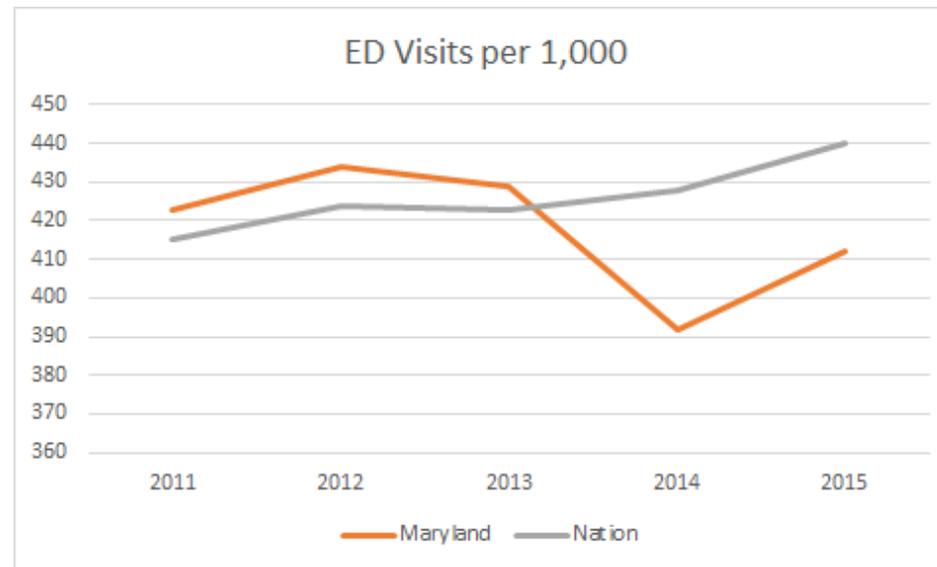
- ▶ The number of ED outpatient visits has remained stable



# Maryland vs. Nation

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- ▶ Compared to the nation, the number of ED visits per 1,000 has decreased since 2013 and is now below the national average



Source: Kaiser Family Foundation, 2015

# Maryland Hospital ED Top 10 Primary Diagnosis Categories (2016)

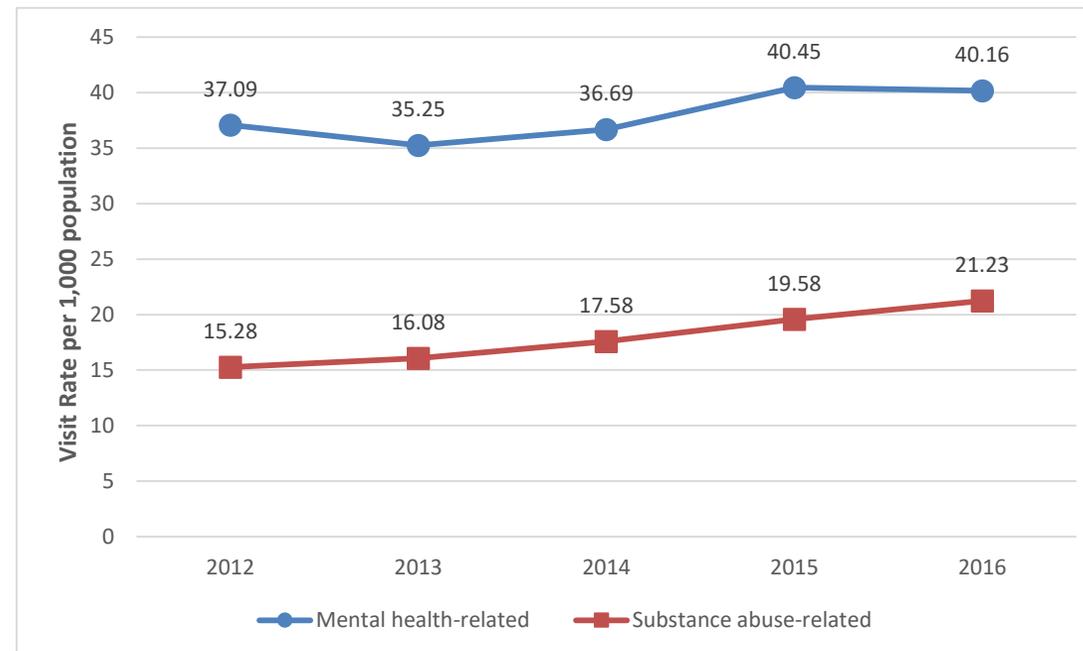
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1	CHEST PAIN UNSPECIFIED	57,646	2.74%
2	OTHER CHEST PAIN	45,172	2.15%
3	ACUTE UP RESPIRATORY INF	41,067	1.95%
4	UNSPECIFIED ABDOMINAL PA	37,404	1.78%
5	HEADACHE	32,953	1.57%
6	UTI SITE NOT SPECIFIED	31,489	1.50%
7	LOW BACK PAIN	24,436	1.16%
8	SYNCOPE AND COLLAPSE	24,259	1.15%
9	VIRAL INFECTION UNSPECIF	21,753	1.03%
10	UNS ASTHMA W/ACUTE EXACE	21,719	1.03%



# Behavioral Health Related ED Visits

- ▶ While behavioral health diagnoses are not a top primary reason for an ED visit, the number of mental health and substance abuse-related ED visits is increasing

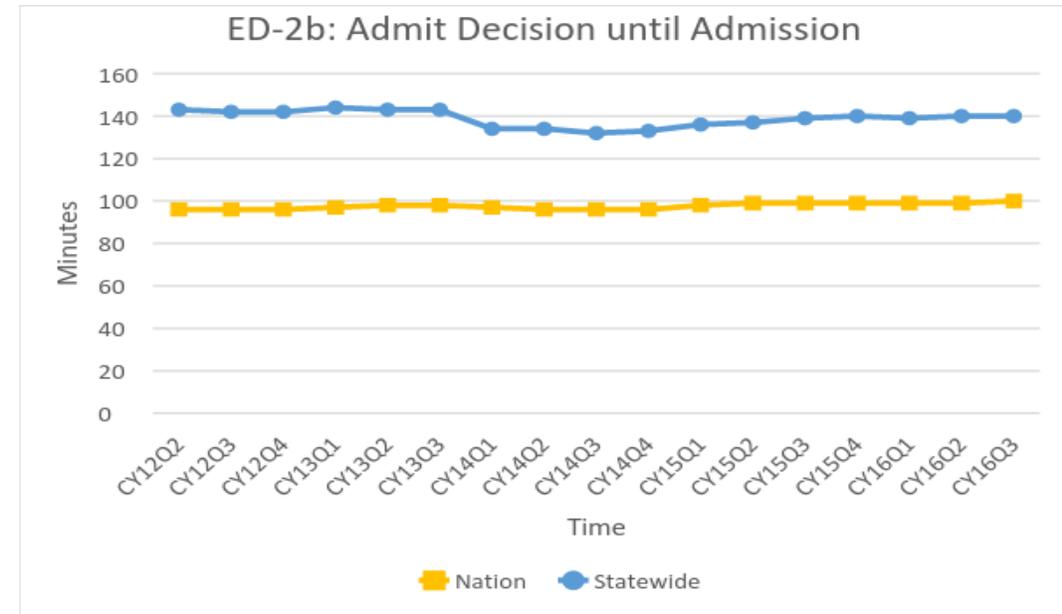
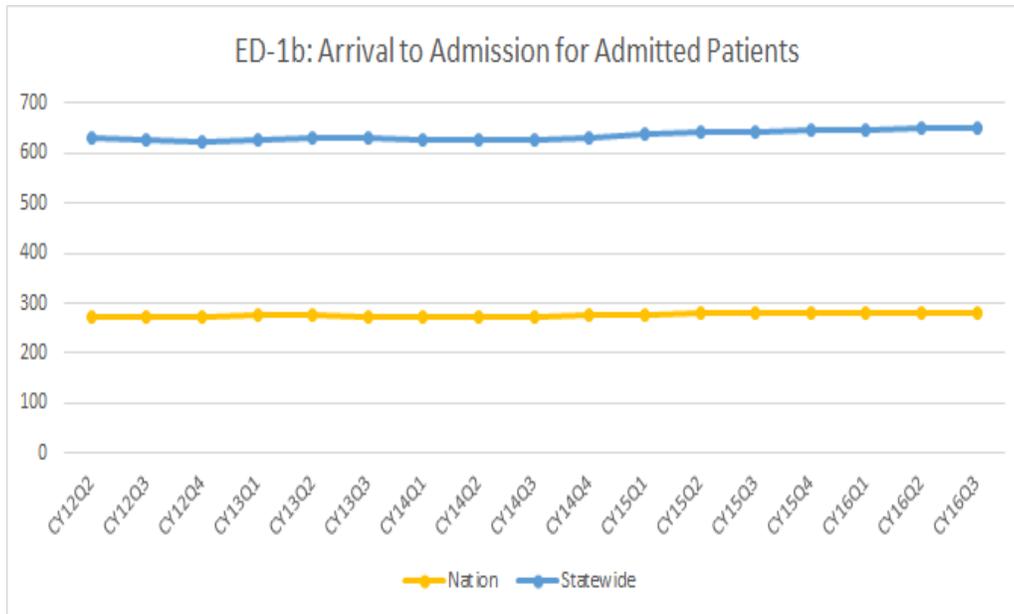


## Despite volume decrease, ED wait time still a problem

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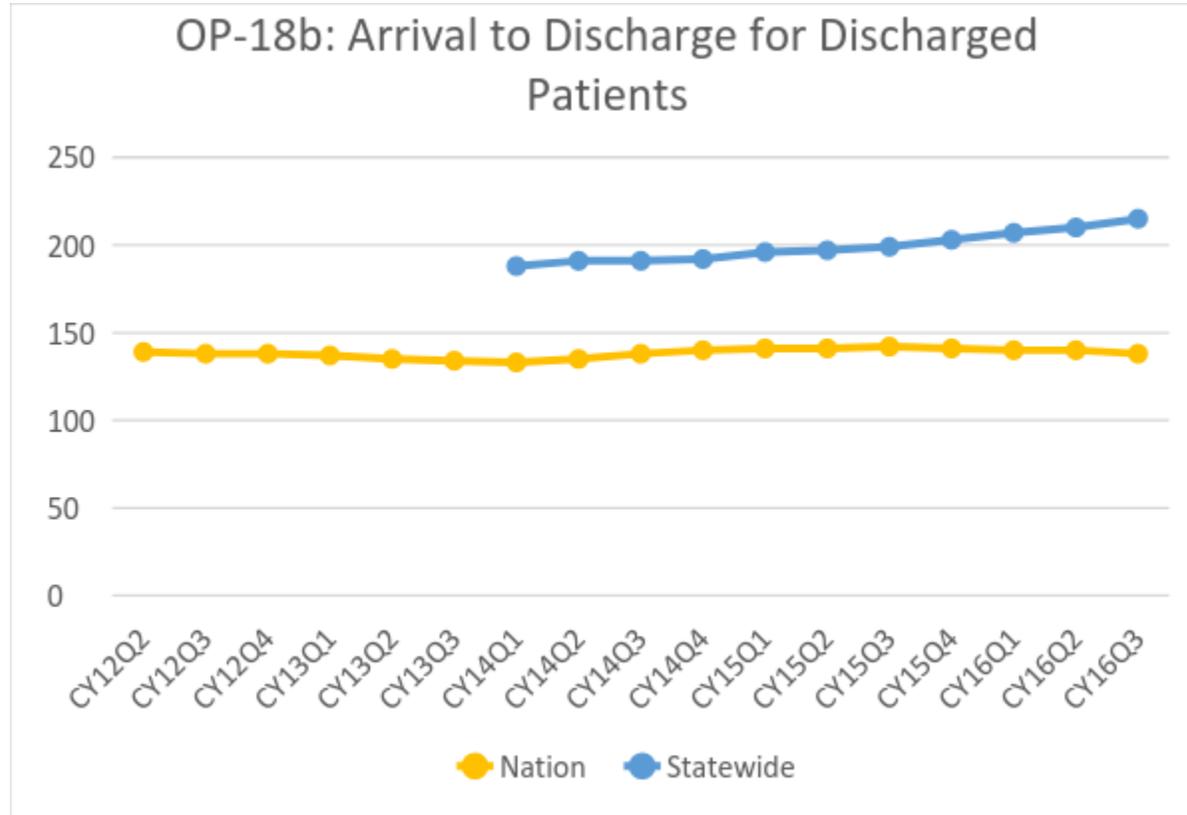
- ▶ CMS collects inpatient and outpatient quality reporting measures across the hospital system. The Emergency Department measures that were studied for this report include:
  - ▶ ED\_1b: Median Time from ED Arrival to ED Departure for Admitted ED Patients
  - ▶ ED\_2b: Admit Decision Time to ED Departure Time for Admitted Patients
  - ▶ OP\_18b: Median Time from ED Arrival to ED Departure for Discharged ED Patients

# Despite volume decrease, ED wait time still a problem



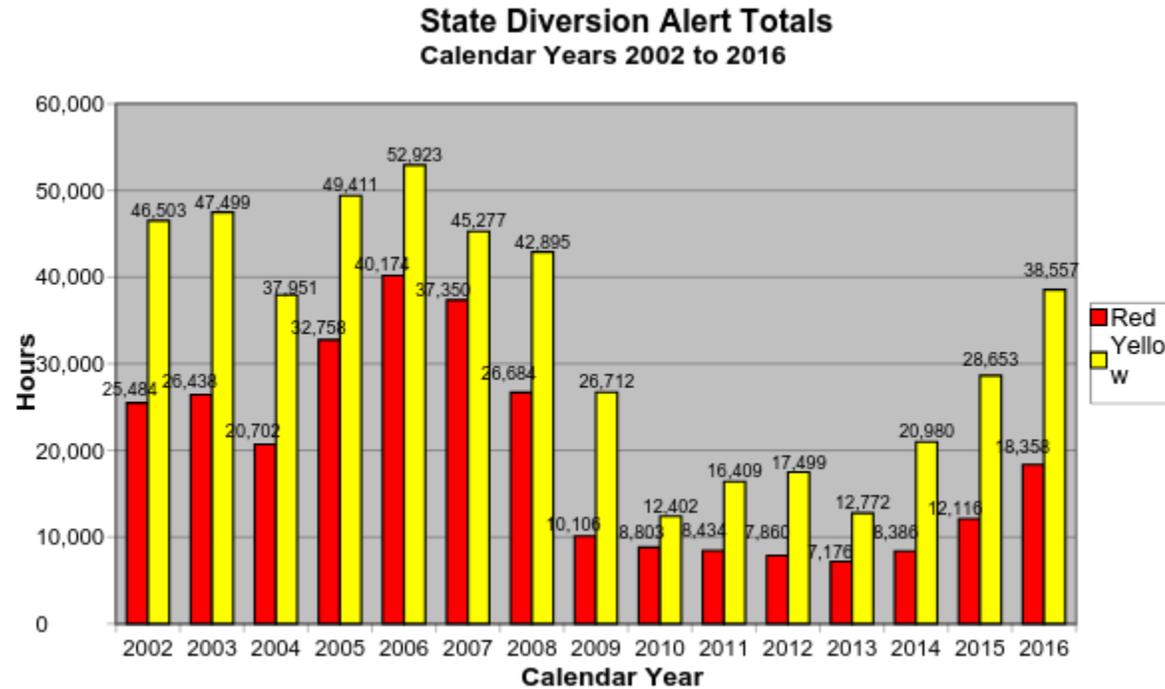
# ED Wait Times Continued

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# Red and Yellow Alerts

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# Strategies to Address ED Overcrowding

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## ▶ HSCRC

- ▶ Maryland QBR program recommendation
- ▶ Hospital Efficiency Improvement Action Plan

## ▶ EMS Delivery System

- ▶ Evaluation of Alert System
- ▶ New Models of EMS Care Delivery
  - ▶ Mobile Integrated Health
  - ▶ Alternative Destinations
- ▶ Standard for Expected Ambulance Off-Load Time

# **Joint Chairman's Report on Emergency Department Overcrowding**

December 2017

Maryland Institute for Emergency Medical Services Systems  
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Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215  
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## EXECUTIVE SUMMARY

The 2017 Joint Chairmen's Report directed the Maryland Institute for EMS Systems (MIEMSS) to work with the Health Services Cost Review Commission (HSCRC) to evaluate the impact of hospital overcrowding on EMS response times and Maryland's patient population and to develop a plan to address the overcrowding issue. As discussed herein, the Report includes the following information:

- Excessive ED wait times and ambulance diversion from one hospital to another has been a long-standing challenge for the Maryland health care system and is a multifaceted problem that will require comprehensive system adjustments.
- ED overcrowding has been exacerbated by the following factors:
  - An increase in behavioral health patients treated at EDs, including overdose patients
  - Continuing staff shortages affecting hospital EDs
  - Increased patient care requirements in emergency departments
  - Increasing numbers of EMS transports in some EMS jurisdictions coupled with limited options for alternative modes of treatment
  - A misalignment of hospital reimbursement and EMS reimbursement policies
- Efforts undertaken to date, including utilization of Ambulance Yellow Alerts, have not resolved the problem and do not address underlying factors.
- The HSCRC has identified two strategies to incentivize hospitals to continue to improve ED efficiency and patient throughput: 1) adding an ED performance measure in the Quality-based Reimbursement program; and 2) requesting hospital efficiency improvement action plans from hospitals that have poor ED performance measures coupled with reduced patient days.
- MIEMSS and EMS jurisdictions will continue to develop new models of EMS care delivery and assess their utility in reducing ambulance transport of low acuity patients to hospital EDs.
- MIEMSS will work with the HSCRC to incorporate/engage EMS for participation in new care delivery programs under the State's Enhanced Total Cost of Care All-Payer Model, including the possibility of shared savings. MIEMSS will work with the Maryland Department of Health to identify potential opportunities for changes in the Medicaid program to reimburse EMS for new models of service delivery.
- MIEMSS will assess and determine whether the use of Yellow Alerts should be discontinued.
- MIEMSS will work with EMS jurisdictions to identify a reasonable standard time for ambulance off-load (the time between the arrival of an ambulance-transported patient and the time that the patient is moved off the EMS stretcher).

## INTRODUCTION & POLICY CONTEXT FOR THE STUDY

The 2017 Joint Chairmen's Report contained the following language:

**Evaluating the Impact of Emergency Department Overcrowding:** emergency department (ED) overcrowding increased significantly in fiscal 2016. This has a direct impact on emergency medical services (EMS) availability and response times, as well as patient care. Data is not currently available to evaluate the specific impact overcrowding has on Maryland patients. The budget committees direct the Maryland Institute for Emergency Medical Services Systems (MIEMSS) to work with the Health Services Cost Review Commission (HSCRC) to evaluate the impact of hospital overcrowding on EMS response times and Maryland's patient population and to develop a plan to address the overcrowding issue. The report is due to the budget committees no later than December 15, 2017.

In response to this request, MIEMSS and the HSCRC developed the report over the course of seven (7) meetings held during 2017. As part of this effort, MIEMSS and the HSCRC also solicited input from the Maryland Hospital Association, emergency physicians practicing in Maryland emergency departments, and representatives from EMS public safety jurisdictions.

Hospital ED overcrowding occurs when the identified need for emergency services outstrips available hospital resources such that there are more ED patients than there are beds available in either the ED or on an inpatient unit. Some of the potential reasons that patients may have a prolonged stay in the ED is because additional observation is needed to determine whether an inpatient admission is warranted. Additionally, if admitted, the inpatient unit where the patient is scheduled to be transferred may not have space or staffed beds available, known as hospital through-put. Ambulance diversion is linked to ED overcrowding and often serves as a proxy for ED overcrowding.

Excessive ED wait times and patient diversion from one hospital to another has been a long-standing challenge for the Maryland health care system and is a multifaceted problem that will require comprehensive system adjustments. ED overcrowding raises significant concerns about hospitals' ability to routinely accommodate patients needing urgent medical care, as well as critically ill patients, and to respond effectively during a mass casualty incident or epidemic. The limited ability of hospitals to receive emergency patient transports seriously concerns hospitals, healthcare providers, EMS providers, and Maryland health regulatory agencies.

In 2002, the Maryland Health Care Commission (MHCC) and the HSCRC jointly issued a report that reviewed state and national trends in ED utilization, identified factors influencing ED utilization, and included recommendations to help address ED overcrowding.<sup>1</sup> Baltimore City convened a Task Force on Emergency Department Crowding in 2006 that brought together the City's hospitals, Health Department and Fire Department to review available evidence and make recommendations to reduce ED crowding.<sup>2</sup> In 2007, the MHCC issued an update to its 2002 report that provided information on innovations that had occurred since the original report and identified new recommendations that identified nine (9) strategies to address crowding that focused on input/demand for ED services and on ED throughput.<sup>3</sup>

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<sup>1</sup> Maryland Health Care Commission and Health Services Cost Review Commission. Trends in Maryland Hospital Emergency Department Utilization: An Analysis of Issues and Recommended Strategies to Address Crowding. April 2002.

<sup>2</sup> Baltimore City Task Force on Emergency Department Crowding: Findings and Recommendations. June 2006.

<sup>3</sup> Maryland Health Care Commission. Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Crowding. January 1, 2007.

Additional challenges have emerged in the intervening decade that have complicated and made more complex the strategies to deal with ED overcrowding. These include the following:

#### *Increase in behavioral health patients seeking treatment in EDs*

The Maryland Hospital Association's (MHA) analysis of available data indicates that the number of ED visits by individuals with behavior health diagnoses rose by 18% between 2013 and 2015<sup>4</sup>. These patients can present major challenges and may require isolated space and ongoing supervision for protracted periods while ED personnel pursue placement and therapy. Patients who are violent present the potential of disrupting ED operations or harming staff or other patients. Behavioral health patients seen in the ED who require admission often wait in EDs for an available inpatient bed, either at the treating ED facility or another facility. Several state facilities have closed while others primarily serve patients in the court system, and available acute care hospital inpatient psychiatric bed capacity has declined. The current opioid crisis, with increasing numbers of patients being transported to the ED has further complicated the situation, as EDs are called upon to provide not only immediate treatment, but also to provide other necessary screenings, and arrange for referrals and follow-up treatment post ED discharge. Patients with dual diagnoses of substance dependency and psychiatric disease present further challenges to placement and treatment.

#### *Misaligned Reimbursement Policies*

Reimbursement policies for hospitals and Emergency Medical Services (EMS) are misaligned with hospital reimbursement initiatives. Although many hospital ED patients are self-transported walk-in patients, a significant number of true emergency patients are transported to EDs by Emergency Medical Services (EMS). Because EMS is viewed as a transportation benefit, EMS is not reimbursed unless a transport actually occurs. Medicare limits EMS reimbursement to patient transports to and from: 1) hospitals; 2) patient homes; 3) critical access hospitals; 4) dialysis facilities for End-Stage Renal Disease patients; 5) skilled nursing facilities; and 6) physician's offices, but even then only when the ambulance is en-route to a Medicare-covered destination, the patient is in dire need of professional attention, and the ambulance continues to the covered destination immediately thereafter. As a practical matter, public safety EMS, which responds to 9-1-1 calls, generally is limited in terms of transport destination to hospital emergency departments, while commercial services, which do not respond to 9-1-1 calls, transport patients to destinations that include patient homes, dialysis facilities and skilled nursing facilities. Other payers, e.g., Medicaid and private insurers, similarly tie reimbursement to the requirement that the patient must be transported to the identified destinations. This model makes EMS reimbursement dependent upon transport of patients to hospital emergency departments – a high cost environment for delivery of health care services. There is no ability for EMS to be reimbursed for providing services for low-acuity patients at the patient's home or obtaining services for patients in other less costly environments.

In contrast, a goal of current hospital reimbursement policies is to reduce the 30-day hospital re-admission rate, reduce unnecessary utilization and limit the per capita growth in healthcare spending by providing care in the most appropriate setting. The ED is a high cost setting that also serves as a gateway for patient admissions and re-admissions. Many hospitals are focusing

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<sup>4</sup> Maryland Hospital Association. Emergency Department Diversions, Wait Times: Understanding the Causes. 2016-2017.

on community partnerships so that non-urgent patients can obtain needed services in other, less-costly environments.

#### *Increased patient care requirements in EDs*

Hospital efforts to reduce re-admissions include a focus on patients who are high utilizers of ED services and, therefore, likely candidates for re-admission. Hospitals have implemented initiatives, e.g., care management / care coordination plans, which identify high utilizers of the ED, provide information on the patient's history and prior results from tests and work-ups and recommend courses of action. ED staff efforts are focused on providing the immediate and necessary patient care in the ED (as opposed to admitting the patient to receive such care) and also on identifying and linking patients to needed follow-up care from other healthcare resources in the community, e.g., primary care physician, health clinic, so that a future re-admission may be avoided. Thus, the ED staff performs multiple roles including patient treatment provider and patient transition facilitator in the health care system, increasing ED workload.

Currently, emergency physicians are reimbursed on a fee-for-service basis, meaning that the amount of financial compensation increases as they see more patients in the ED. For emergency physicians, an efficiently run ED means moving those patients that need admission out of the ED and into an appropriate inpatient bed in another unit of the hospital to allow for more patients to be seen and managed in the ED. In contrast, under the global budget system, hospitals work to determine whether an inpatient admission is needed or if the patient can be appropriately discharged and treated in a lower cost setting. The hospitals' motivation centers on having the emergency physician/ emergency department comprehensively evaluate, diagnosis, and discharge patients that do not require an inpatient admission. The clear conflict between the emergency physician and hospital incentives generates mixed messages to patients and staff and contributes to the longer ED wait times and hospital throughput inefficiency.

#### *Increasing numbers of EMS patients seeking treatment at EDs*

Some EMS jurisdictions in Maryland are grappling with an increasing volume of 9-1-1 calls for EMS services. For example, between FY2015 and FY2016, EMS transports in Baltimore City increased by nearly 5,918 patients, and the City saw an additional 2,972 patient transports between FY2016 and FY2017. Total EMS transports for Baltimore City were at an all-time high in FY 2017 of 100,984. Because of the strictures of reimbursement policies, nearly all of these patients are transported to hospital emergency departments, with the exception of patient refusals. An increase in EMS calls has also been reported in Montgomery County and Prince George's County.

At the same time, there are many patients who call 9-1-1 and are transported by EMS to hospital emergency departments have conditions that could be treated in a health care environment other than a hospital emergency department. Statewide EMS data indicates that a significant number of EMS patients are classified as "Priority 3." Priority 3 patients are those whom EMS has determined have "non-emergent conditions, requiring medical attention, but not on an emergency basis"<sup>5</sup>. Priority 3 Medical patients, as well as Priority 4 Medical and

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<sup>5</sup> Priority 1 — Critically ill or injured person requiring immediate attention; unstable patients with life-threatening injury or illness. Priority 2 — Less serious condition yet potentially life-threatening injury or illness, requiring emergency medical attention but not immediately endangering the patient's life. Priority 3 — Non-emergent condition, requiring medical attention

Injury patients, i.e., those who do not require medical attention, appear to be potential candidates for treatment in an environment other than the ED.

<u>FY 2017</u>	<u>Priority 1</u>	<u>Priority 2</u>	<u>Priority 3</u>	<u>Priority 4</u>
Medical	21,822	170,723	<b>306,959</b>	<b>14,189</b>
Injury	3,285	26,516	89,519	<b>2,318</b>

Source: eMEDS Data

### *Staff shortages*

Hospitals report an ongoing shortage of registered nurses across the state that contributes to reduced inpatient capacity and ED overcrowding. The availability of inpatient beds can be decreased if nurses are unavailable to staff those beds. Alternatively, ED nurses can be pulled into the hospital to staff inpatient beds, decreasing the number of available personnel to treat ED patients.

## **ED OVERCROWDING RESEARCH**

There is a substantial volume of research that indicates that ED overcrowding is driven by the boarding of admitted patients in the ED, suggesting that ED overcrowding is a result of hospital-wide overcrowding<sup>6, 7, 8</sup>. The ED depends upon resources being available throughout the rest of the hospital. The number of available staffed hospital beds, especially critical care and specialty beds, the level of surgical activity, the average patient length of stay, nursing staffing levels, and the capabilities and capacity of diagnostic services (e.g., labs and radiology) all impact the ED. As a result, hospital operations are an important key to resolving ED overcrowding and ambulance diversions. Improved hospital through-put, i.e., the movement of patients through hospital admission, treatment and discharge, has been cited as a significant factor in reducing ED crowding and alerts.<sup>9 10 11</sup>

There is also substantial research that ED overcrowding can have significant, detrimental impact on patients. Complication rates of ED patients with acute coronary syndrome were found to be significantly increased during periods of ED overcrowding in terms of increases in incidence of death, cardiac arrest, heart failure, late detection of myocardial infarction, arrhythmias, stroke or

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but not on an emergency basis. Priority 4 — Does not require medical attention. Source: Maryland Medical protocols for EMS providers, page 31 II. GENERAL PATIENT CARE (GPC) -> D. INITIAL ASSESSMENT -> 7. Assign Clinical Priority -> (a) through (d). See [https://www.miemss.org/home/Portals/0/Docs/Guidelines\\_Protocols/2017-MD-Medical-Protocols-WEB.pdf?ver=2017-04-04-143321-600](https://www.miemss.org/home/Portals/0/Docs/Guidelines_Protocols/2017-MD-Medical-Protocols-WEB.pdf?ver=2017-04-04-143321-600).

<sup>6</sup> Salway RJ, Valenzuela R, Schoenberger JM, et al: Emergency Department Overcrowding: Evidence-Based Answers to Frequently Answered Questions: Rev Med. Clin. Condes 2017; 28(2) 213-219.

<sup>7</sup> Institute of Medicine of the National Academies. The Future of Emergency Care: Hospital-Based Emergency Care at the Breaking Point. The National Academies Press, Washington, DC. 2007.

<sup>8</sup> GAO. (Government Accountability Office). 2003. Hospital Emergency Departments: Crowded Conditions Vary Among Hospitals and Communities. Washington, DC.

<sup>9</sup> Rathlev NK, Chessare j, Olshaker J, et al. Time series analysis of variables associated iwht daily mean emergency department length of stay. Ann Emerg Med 49 (3), 2007, 265-71.

<sup>10</sup> Powell ES, Khare RK, Venkatesh AK et al. The Relationship between inpatient discharge timing and emergency department boarding. J Emerg Med 42 (2), 2012, 186-196.

<sup>11</sup> Chang AM, Cohen DJ, Lin A, et al. Hospital Strategies for Reducing emergency Department Crowding: A Mixed-Methods Study. Ann Emerg Med, 2017, In press.

hypertension<sup>12</sup>. A study of 90,000 patients admitted through a suburban, university-based academic ED over a 35-month period showed that increased ED boarding time was associated with increased mortality, increased ICU admissions, and increased hospital lengths of stay<sup>13</sup>. Periods of high ED overcrowding have also been shown to be associated with increased hospital length of stay and costs for admitted patients.<sup>14</sup> Another review of nearly 700,000 ED patient records in Quebec concluded that a 10% increase in ED occupancy was associated with a 3% increase in mortality and hospital readmission at a return visit<sup>15</sup>. Another article published the results of a literature review that concluded that ED crowding was associated with negative effects on mortality, time to treatment, quality of care, and patient satisfaction<sup>16</sup>. Several studies have documented that the total length of hospital inpatient stay is increased by as much as a full day longer for patients who were boarded in the ED, as opposed to those with similar illnesses who were promptly placed in inpatient units.<sup>17</sup> Increased medical errors, reduced quality of care, and increases in medication errors have all been shown to be associated with ED overcrowding.<sup>18 19 20</sup> ED Overcrowding also causes ambulance diversion.

## Maryland – Past & Current Data

According to the Department of Legislative Services, since 2010, the percentage of uninsured Marylanders has declined from 11.3% to 6.6%. The largest gains in coverage have occurred through the expansion of Medicaid, with nearly 281,000 additional individuals qualifying for Medicaid coverage as of October 2016. Additionally, more than 136,000 individuals have received coverage through the State's Health Benefit Exchange. Preliminary data indicates that access to health care has improved in Maryland with the expansion of coverage. Furthermore, hospital uncompensated care has declined, moderating growth in hospital rates.

Despite an expansion in the Medicaid population and a reduction in the number of uninsured individuals since the passage of the Affordable Care Act in 2010, hospital volumes have decreased in the Emergency Department. As shown below, the trend for both inpatient visits (individuals that come to the Emergency Department and were ultimately admitted to an inpatient bed) and outpatient visits (individuals that received services in the Emergency Department, but were ultimately not admitted to the hospital) show a decline in the total volume between calendar year (CY) 2013 and 2016.

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<sup>12</sup> Pines JM, Pollack CV, Diercks DB et al. The Association Between emergency Department Overcrowding and Adverse Cardiovascular Outcomes in Patients with Chest Pain. *Acad Em Med* 16 (7), July 2009, 617-625.

<sup>13</sup> Singer AJ, Thode HC, Viccellio P, & Pines, JM. The Association Between Length of Emergency Department Board and Mortality. *Acad Em Med* 18 (12), December 2011, 1324-1329.

<sup>14</sup> Sun BC, Hsia RY, Weiss RE, et al. Effects of Emergency Department Crowding on Admitted Patients. *Ann Emerg Med* 61 (6) June 2016, 605-611, e6.

<sup>15</sup> McCusker J, Vadeboncoeur A, Levesque JF, et al. Increases in emergency department occupancy are associated with adverse 30-day outcomes. *Acad Emerg Med* 21 (10), October 2014, 1092.

<sup>16</sup> Salway RJ, Valenzuela R, Shoenberger JM et al. Emergency Department (ED) Overcrowding: Evidence-Based Answers to Frequently Asked Questions. *Rev Med Clin Condes*, 28 (2), 213-219, 2017.

<sup>17</sup> Liew D, Liew D, Kennedy MP. Emergency Department length of stay independently predicts excess patient length of stay. *Med J Aust* 179 (10), 2003, 524-526.

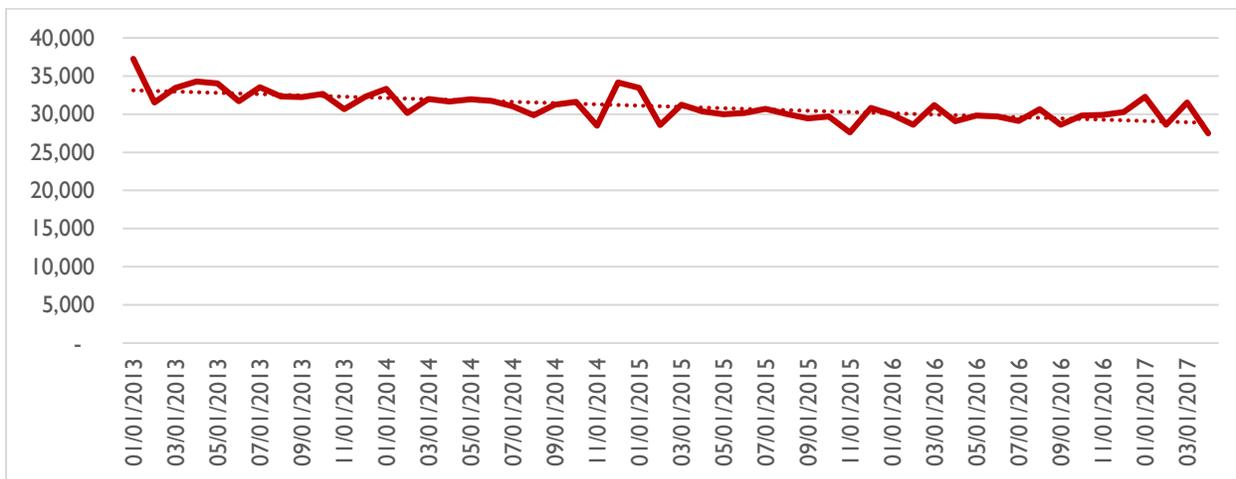
<sup>18</sup> Weissman JS, Rothschild jr, Bendavid E, et al. Hospital workload and adverse events. *Med Care* 45 (5), 2007, 448-455.

<sup>19</sup> Cowan RM, Trzeciak S. Clinical review: emergency department overcrowding and the potential impact on the critically ill. *Crit Care* 9 (3), 2005, 291-295.

<sup>20</sup> Kulstad EB, Sikka R, Sweis RT. Overcrowding is associated with an increased frequency of medication errors. *Am j Emerg med* 28 (3), 2010, 304-309.

HSCRC data shows that inpatient visits (inpatients who are admitted from the ED) have declined by 9.9 percent from CY 2013 to CY 2016. See Figure 1 below.

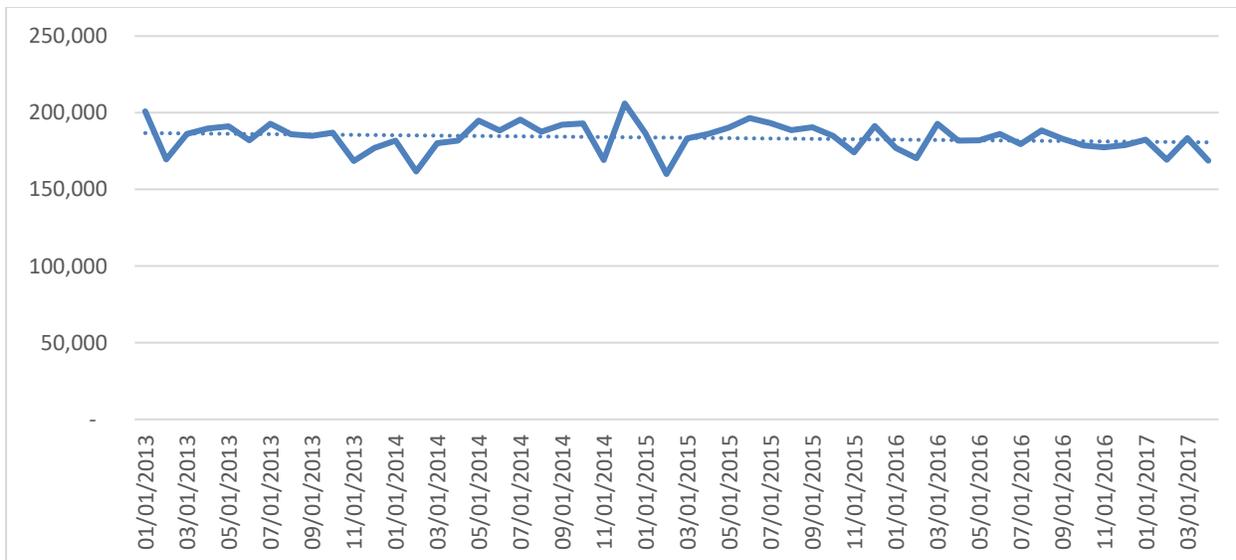
**Figure 1. Hospital Inpatient Visits (inpatients who were admitted from the ED - Jan 2013 to Mar 2017)**



Source: HSCRC data January 2013 to March 2017

Similarly, outpatient visits have declined 1.8 percent between CY 2013 and CY 2016. See Figure 2 below.

**Figure 2. Maryland Hospital Outpatient Visits (ED patients not admitted - Jan 2013 – Mar 2017)**

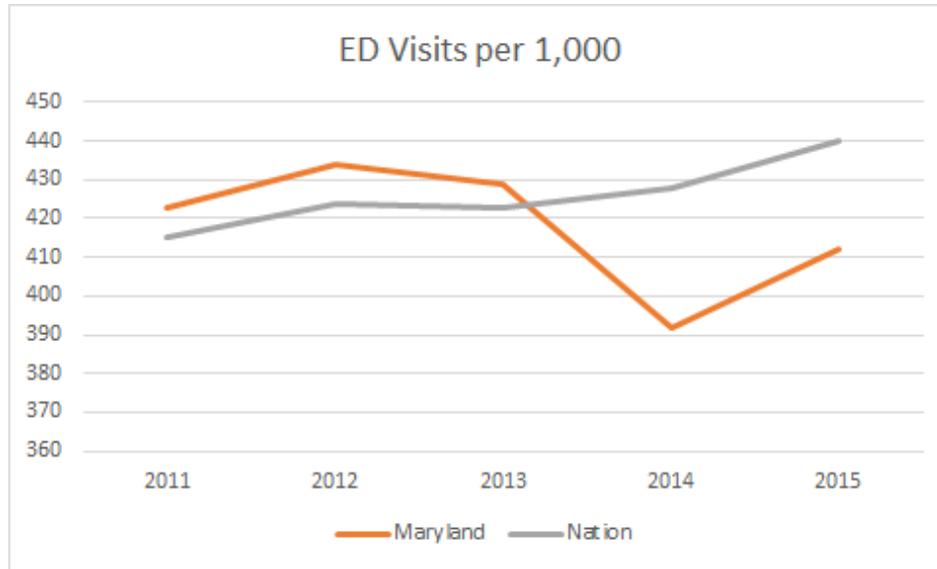


Source: HSCRC data January 2013 to March 2017

Although the State does not have access to the same level of data on inpatient and outpatient ED visits to compare nationally, the Kaiser Family Foundation has compiled data on hospital Emergency Room visits that shows Maryland ED visits are lower than the national average. Figure X below shows that Maryland has been able to reduce the rate of ED visits since the start of the All-Payer Model. According to KFF, the data compiled is limited to community hospitals only and excludes federal hospitals, long

term care hospitals, psychiatric hospitals, institutions for the intellectually disabled, and alcoholism and other chemical dependency hospitals.

**Figure 3. Hospital Emergency Room Visits per 1,000 population**



Source: Kaiser Family Foundation, 2015

To get a sense for the types of cases presenting to the ED in Maryland, Table 1 below shows the top 10 primary diagnoses of Emergency Department visits in CY 2016 statewide.

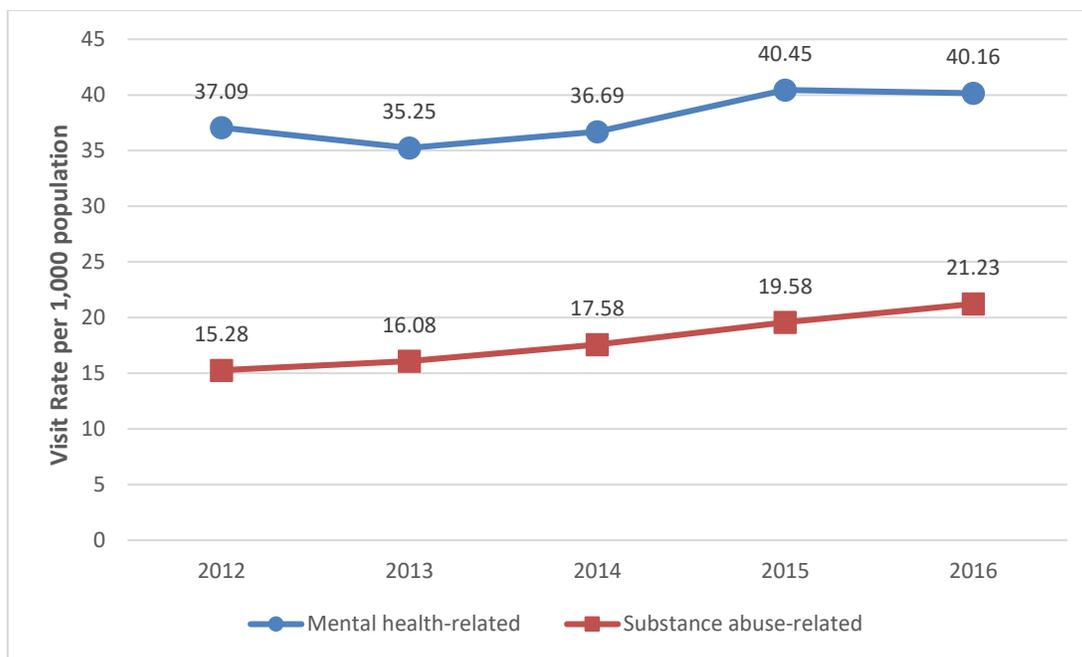
**Table 1. Maryland Hospital ED Top 10 Diagnosis Categories (2016)**

1	CHEST PAIN UNSPECIFIED	57,646	2.74%
2	OTHER CHEST PAIN	45,172	2.15%
3	ACUTE UP RESPIRATORY INF	41,067	1.95%
4	UNSPECIFIED ABDOMINAL PA	37,404	1.78%
5	HEADACHE	32,953	1.57%
6	UTI SITE NOT SPECIFIED	31,489	1.50%
7	LOW BACK PAIN	24,436	1.16%
8	SYNCOPE AND COLLAPSE	24,259	1.15%
9	VIRAL INFECTION UNSPECIF	21,753	1.03%
10	UNS ASTHMA W/ACUTE EXACE	21,719	1.03%

Source: HSCRC Data, 2016

Behavioral health plays a role in emergency department volume as well. The chart below shows an increase in both mental health and substance-abuse related visits to the Emergency Department. While behavioral health diagnoses are not included in the top 10 primary diagnoses resulting in ED visits, the number of patients presenting to the ED with a behavioral health need has steadily increased over the last few years. Figure 3 below shows the number of mental health and substance abuse related ED visits statewide between CY 2012 and 2016.

**Figure 4. Mental Health & Substance Abuse-related ED Visits (2012-2016)**



Source: HSCRC Data, 2012-2016

## ED Wait Times

Despite the decrease in volume, Maryland hospitals continue to experience a varying degree of inefficiency associated with patients entering the hospital through the Emergency Department, as measured by wait times and ambulance diversion (yellow alert hours). Hospitals have made some progress in reducing the number of yellow alert hours, as discussed below. Emergency Department patient throughput initiatives at hospitals are attempting to improve patient wait times, quality, and patient satisfaction.

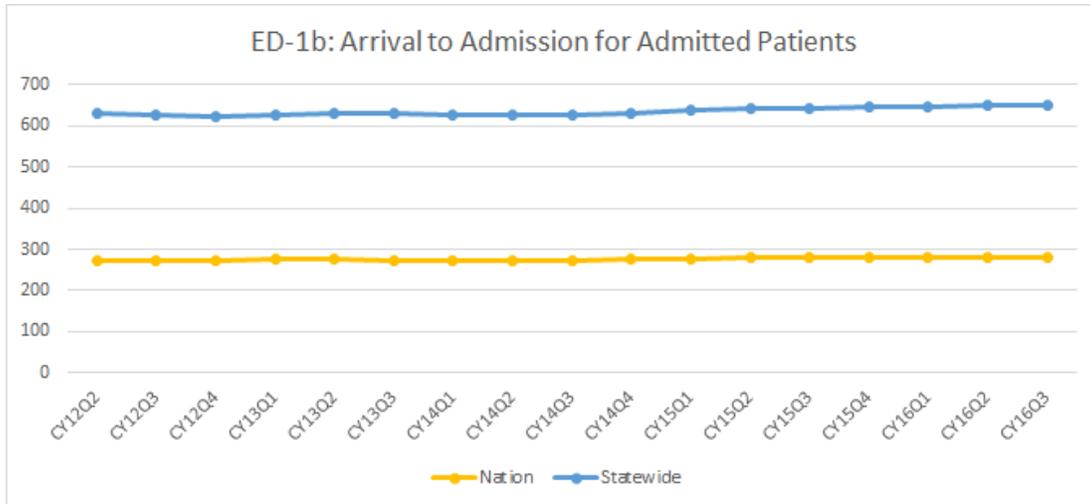
CMS collects inpatient and outpatient quality reporting measures across the hospital system. The Emergency Department measures that were studied for this report include:

- ▶ ED\_1b: Median Time from ED Arrival to ED Departure for Admitted ED Patients\*
- ▶ ED\_2b: Admit Decision Time to ED Departure Time for Admitted Patients\*
- ▶ OP\_18b: Median Time from ED Arrival to ED Departure for Discharged ED Patients\*

Note: Asterisk (\*) indicates that these measures are endorsed by the National Quality Forum.

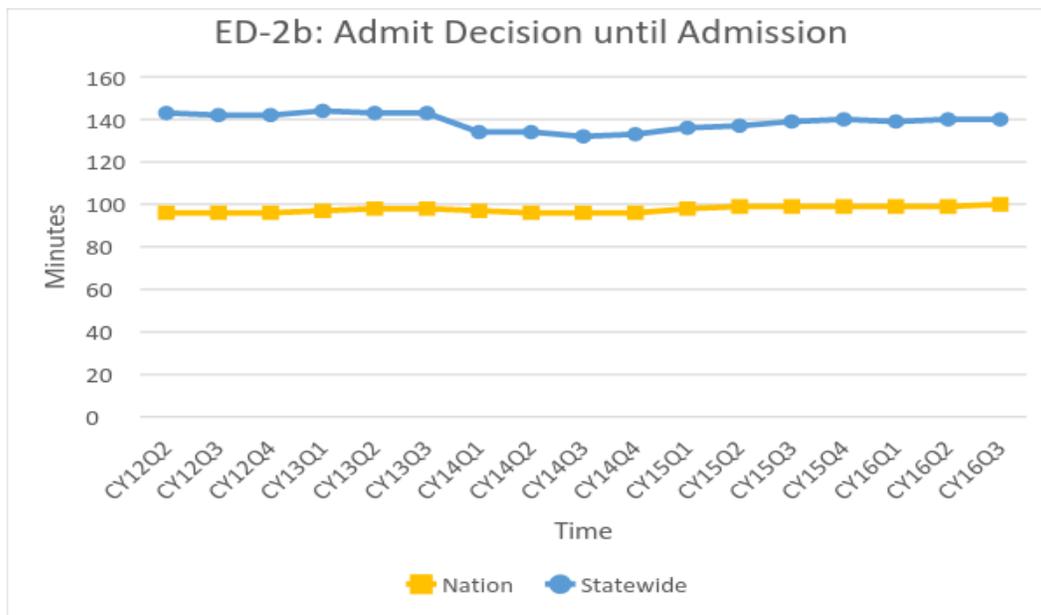
Maryland hospitals perform far worse than the national average on both ED measures; a problem that has existed for Maryland for a number of years prior to the ACA or the All-Payer Model.

**Figure 5. Time from ED Arrival to Inpatient Admission for Admitted Patients– Maryland vs. National**



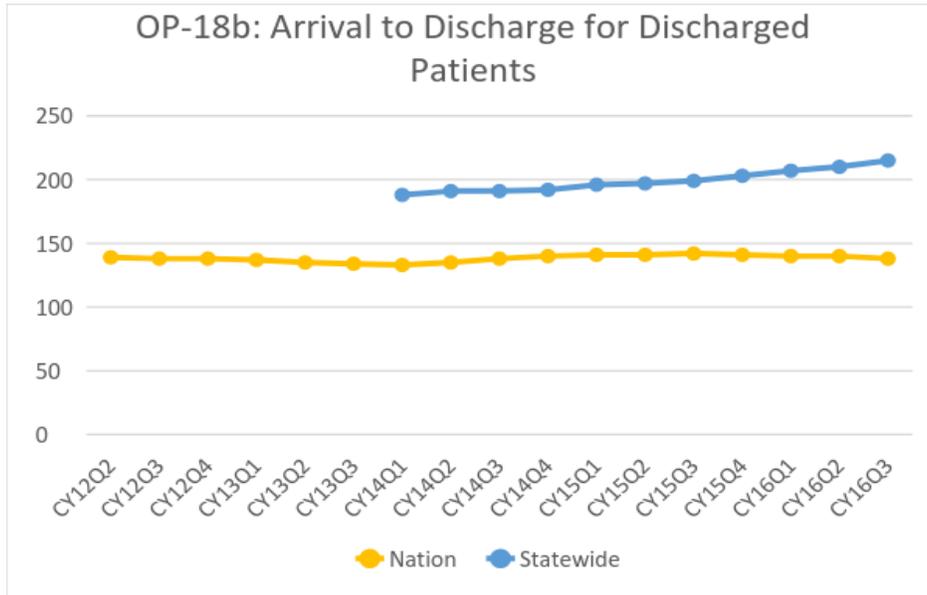
Source: CMS Hospital Compare Data

**Figure 6. Time from ED Decision to Admit to Inpatient Admission – Maryland vs. National**



Source: CMS Hospital Compare Data

**Figure 7. Time from ED Arrival to ED Discharge – Maryland vs. National**



Source: CMS Hospital Compare Data

### Alerts / Ambulance Diversion

Another measure of ED inefficiency is the number of times a hospital temporarily requests a diversion of patients in need of urgent medical care. Ambulance diversion is linked to ED overcrowding and often serves as a proxy for ED overcrowding. A “Yellow Alert” diversion is initiated because the ED is experiencing a temporary overwhelming overload such that priority II and III patients may not be managed safely<sup>21</sup>. Priority I patients require immediate attention or are unstable with life-threatening injury or illness are never subject to Yellow Alert diversion. Prior to diverting pediatric patients, medical consultation is advised for pediatric patient transports when EDs are on yellow alert. As shown below, the number of yellow and red alert hours has fluctuated between CY 2002 and 2016<sup>22</sup>. However, there has been an increasing trend since CY 2013 in the use of Yellow Alert hours. Hospitals have been working to decrease the use of Yellow and Red Alerts (when a hospital does not have any monitored beds), and the most recent quarterly trends reflect a decrease in the total number of alert hours. A decrease in alerts, however, does not necessarily indicate decreased ED overcrowding. There is no universally accepted indicator of when a hospital should go on diversionary status; as a result, hospitals make their own determinations about whether and when to go on diversion. Further, some hospitals do not

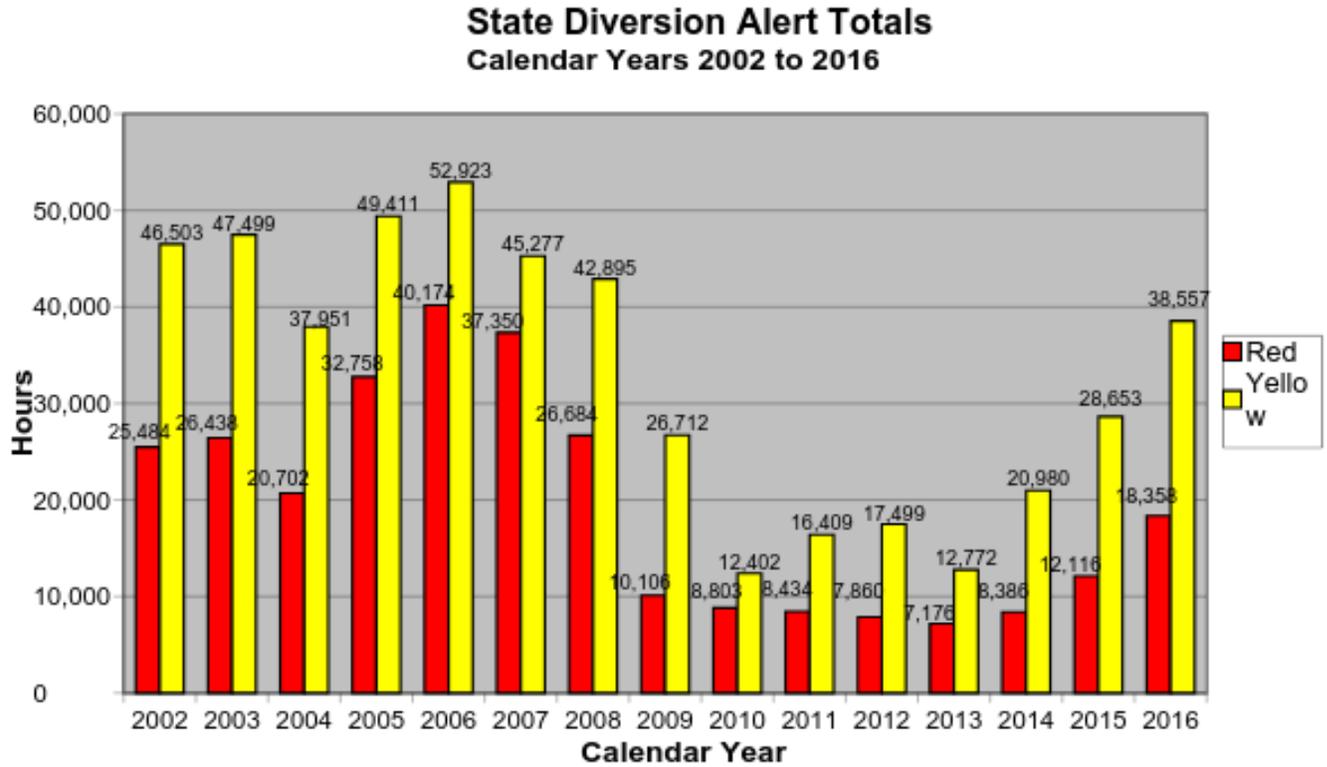
<sup>21</sup> Priority II patients are less serious, with potentially life-threatening conditions and require treatment, but are not immediately endangering the patient’s life; Priority III patients have non-urgent conditions that require medical attention, but not on an immediate basis.

<sup>22</sup> Historically, alert utilization peaks during the Influenza and winter illness season and then comes down for the remainder of the year. The 2012-2013 flu season started early and was severe compared to the previous years. Vaccines in 2014-2015 were not as effective in previous years in controlling the spread of the viruses due to a mismatch in the strains experienced with those predicted and resulted in a “somewhat severe” season. The 2015-2016 was a moderate season, but the alert activity did spike higher than previous years during and immediately following the holidays. This seasonal influenza is not the only factor affecting diversion, as the activity throughout the year has drastically increased since 2013.

go on diversionary status at all, even when their EDs are overcrowded and unable to receive and treat patients in a timely manner.

Figure 4:

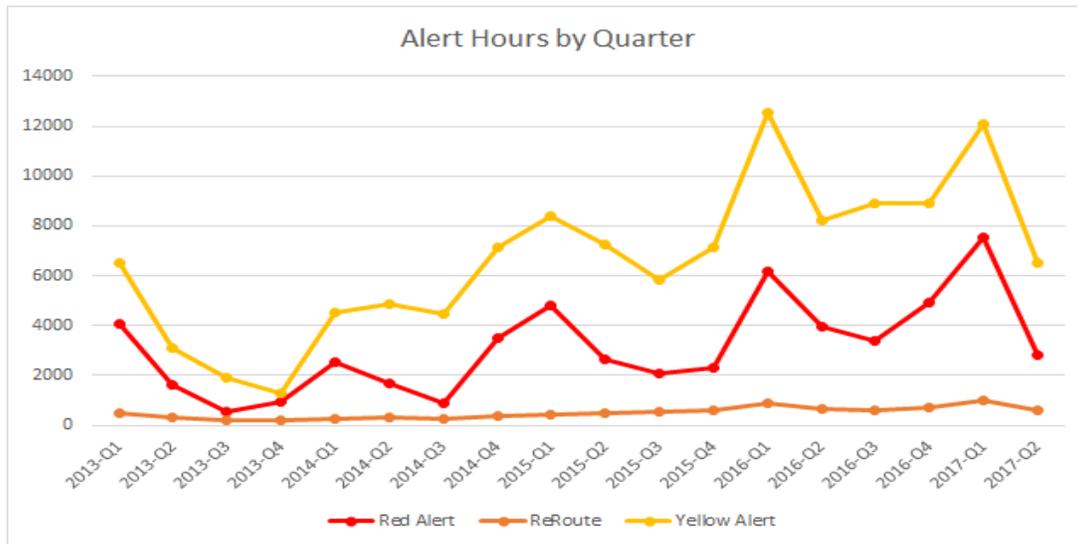
Figure 8. Statewide Yellow & Red Alerts (2002 – 2016)



Source: Department of Legislative Services, 2016

As noted above, there has been some improvement in the use of alert hours across Maryland in 2017. The graph below shows alert hours by type (yellow, red, and reroute) between CY 2013 and the second quarter of CY 2017. When comparing CY 2016 Q2 performance to CY 2017 Q2 performance, hospitals have shown a reduction in the number of yellow and red alert hours. Again, however, a reduction in alerts does not necessarily indicate a reduction in overcrowding.

**Figure 9. Yellow & Red Alerts by Quarter (2013 – 2017)**



Source: MIEMSS County/Hospital Alert Tracking System

Given the lack of uniformity in hospital use of alert status, it is not a reliable indicator of ED status, particularly for EMS units transporting patients. Hospitals that have not declared an alert may still be unable to timely receive patients, with the result that ambulances are unable to timely off-load their patients in the ED. These ambulances are essentially “held” at the hospital until such time as the hospital accepts the patient who can then be offloaded from the ambulance stretcher to a hospital bed. Because of this, an additional alert status, “re-route” was developed whereby EMS units may declare that a particular hospital ED is unable to accept ambulance-transported patients. Through re-route, EMS – not the hospital – diverts ambulances that otherwise would have gone to the overcrowded ED and send the ambulance instead to another hospital ED.

## EMS REAL-TIME OPERATIONAL AND PERFORMANCE MONITORING

Some EMS jurisdictions have implemented systems that monitor certain performance measures and operational efficiencies, including how long their ambulances are being held in EDs. Prince George’s County Fire/EMS Department (PGCF) has implemented FirstWatch, a web-based, real-time dashboard and data analysis software system that analyzes ambulance data in real-time and provides situational awareness regarding ambulance off-load wait times and ED overcrowding at the hospitals to which PGCF transports patients. PGCF monitors ED performance based upon how long a unit is at the hospital ED from EMS unit arrival until unit back-in-service time. The performance standard is based on a 30-minute turnaround time, a generally accepted national standard. The expectation is that the ambulance is able to offload the patient and complete the patient care report, and return to service within 30 minutes. PGCF reports that this standard is met approximately 32% of the time for their units. All hospitals in Prince George’s County also have real-time access to the FirstWatch data for their individual hospitals and can assess their performance.

In addition, PGFC has developed strategies to help manage extensive ED delays. PGFC has periodic meetings with ED staff at to discuss issues. They also have a Limited EMS Resource Plan with two levels that is put into effect in times of stress.

- Level 1 goes into effect when 40% of all transport units are consumed. The EMS Supervisor is able to review the hospital information on FirstWatch and may direct ambulances to specific hospitals to minimize or avoid delay. Once at the ED, EMS providers complete a shortened patient care report (a full report to be completed at a later time) and offload the patient. While other units return to service, one ambulance unit may remain at the hospital in order to observe the (sometimes multiple) transported Basic Life Support patients waiting on stretchers for an ED bed.
- Level 2 goes into effect when 60% of all transport units are consumed. In addition to the actions taken in Level 1, when operations reach Level 2, the county's dispatch policy changes so that response to lower acuity calls can be held for up to 45 minutes in order to ensure that higher acuity calls receive a priority response. Units that are out of service for training or other reasons (other than mechanical) must return to provide service. EMS Supervisors and Battalion Chiefs will go to area hospitals to assess the delays on-sight, determine what actions are needed to clear the delay and discuss with hospital administration.

PGFC reports that the Limited EMS Resource Plan is used more and more frequently as ED overcrowding has increased, indicating that it is not unusual for PGFC to be in Limited EMS Resource Plan status twice a day for about 45 minutes – 1 hour at each occurrence. PGFC also reports that they do not encounter lengthy wait times at Inova Health System hospitals, in Northern Virginia, just across the state border. Inova Health Systems hospitals post their average ED wait times on an ongoing basis; times are “refreshed” every 30 minutes. See: <https://www.inova.org/emergency-room-wait-times/>

Baltimore City Fire Department (BCFD) reported that in 2004-2005, problems of ED overcrowding increased significantly, initially at hospitals near the City's periphery which also receive ambulance transports from surrounding jurisdictions. During that time, it was not uncommon for units to be backed-up at hospitals for 3 or more hours: BCFD units would be queued up to off-load patients at hospital EDs along with other jurisdictions that had transported patients to that hospital ED. In response, a process (Baltimore Medical Resource Center or “BMRC”) was put in place whereby a BCFD communications person contacted City EMS units and those in surrounding jurisdictions for situational awareness, e.g., how many units were being held at specific hospitals so that the ambulance could avoid that hospital.

Other approaches that BCFD tried included sending Battalion Chiefs to EDs where ambulances were backed up for the purpose of monitoring BCFD personnel to ensure that they were moving as quickly as possible to offload patients, complete required paperwork and other tasks, and return to service. Additional personnel were called-in as needed, resulting in increased overtime costs, and surge ambulances could be put into service. After one year of intense efforts, BCFD's response times improved by only 12 seconds. BCFD also explored the possibility of BCFD and surrounding jurisdictions mutually sharing dispatch information so that each jurisdiction could have situational awareness of all the units transporting patients to Baltimore hospitals. As a technical matter, however, interface of the dispatch systems was not possible at that time. BCFD also explored obtaining access to cameras at each ED in the City to be able to visualize ambulance back-up at the ED, but that could not be accomplished due to security issues, availability of cameras and other factors.

In 2013, BCFD implemented a new approach using Medical Duty Officers (MDO). The MDO is a captain and licensed paramedic or nurse who is the liaison between BCFD and each hospital and functions much like an air traffic controller. An MDO maintains situational awareness and works with ED charge nurses at City hospitals to maintain real time situational awareness and bed availability for certain patient

complaints. The MDO has the ability to route ambulances to appropriate destinations. This approach resulted in decreased transfer times, improved treatment times, and improved EMS unit availability. For example, after implementation, ambulances were returning to service within 60 minutes 95% of the time and within 45 minutes 80-85% of the time even during flu season. The MDO program is expensive, however, with personnel costs to BCFD of about \$300,000 annually.

Currently, BCFD is in the process of implementing FirstWatch and anticipates its full deployment within six (6) months. Implementation of FirstWatch will provide access to critical operational data in real-time, close monitoring of key measurements, and use of information to adjust unit deployment and other aspects of service operations. Montgomery County Fire & Rescue Services and Charles County Department of Emergency Services have also purchased FirstWatch.

## Maryland's All-Payer Model

### *Background*

For over 40 years, the federal government has “waived” federal Medicare rules for Maryland so that hospital payments may be set at the State level. Beginning January 1, 2014 through December 31, 2018, Maryland’s federal “waiver” of Medicare rules was updated under the “All-Payer Medicare Model Contract.” Whereas hospitals used to be reimbursed by all payers on a regulated, fee-for-service basis under the federal “waiver,” hospitals are currently incentivized to improve quality of care while controlling per capita hospital growth. The new All-Payer Model requires hospitals to take responsibility for patients in their service area in order to improve health and reduce unnecessary utilization. Hospitals have partnered with community providers and implemented care coordination activities that aim to direct the patient to the most appropriate level of care. In some cases, this results in additional screening in the ED to determine the most appropriate level of treatment for the patient that increases ED wait times for patients.

In the first three and a half years since implementing the All-Payer Model, Maryland has met or exceeded the key Model tests for limiting hospital cost growth on an all-payer basis, providing savings to Medicare, and improving quality of care. Maryland has also proposed a Care Redesign Amendment to the All-Payer Model, in response to stakeholders’ request for greater provider alignment and transformation tools.

### *Next Phase: Total Cost of Care Model Beginning January 2019*

In early 2017, CMS and State officials, with input from Maryland health care leaders, began negotiations for a new “Maryland Total Cost of Care Model” that is set to begin January 2019. Maryland will be expected to progressively transform care delivery across the health care system, beyond hospitals, with the objective of improving health and quality of care. At the same time, State growth in Medicare spending must be maintained lower than the national growth rate.

The new Total Cost of Care Model will leverage the foundation already developed by Maryland for hospitals and build on the investments that hospitals make during 2014 through 2018. Maryland will continue to encourage provider- and payer-led development of Care Redesign programs to better meet the needs of patients, especially those with complex and chronic conditions. Maryland is also continuing efforts to implement a new Maryland Primary Care Program (MDPCP), which is intended to bring care coordination and support to approximately 400,000 Medicare beneficiaries and 2,000 providers. The State will commit its public health resources to support population health improvements that are aligned with Model goals and Marylanders’ needs.

## STRATEGIES TO ADDRESS ED OVERCROWDING

### HSCRC

Through a focus on the goals of the All-Payer Model, the HSCRC is incentivizing improvements in readmissions, inpatient hospital-acquired conditions, and patient satisfaction of admitted patients, among other measures of hospital quality of care. As hospitals work to improve on these patient outcome measures, hospitals are implementing care redesign activities, including increased Care Management and Care Coordination services. Some of these services are provided in the Emergency Department (ED), which may impact ED wait times. Hospitals have expressed the view that some inefficiency under ED Wait Time measures may be the result of additional care coordination and care transition support, which is vital to the long-term success of the Maryland All-Payer Model.

The HSCRC has been exploring potential policies that will incentivize hospitals to continue to improve hospital efficiency and patient throughput. Two potential strategies have been identified: 1) adding an ED performance measure in the Quality-based Reimbursement program; or 2) requesting hospital efficiency improvement action plans from hospitals that have poor ED performance measures coupled with reduced patient days.

#### *Performance Measures in the Quality-Based Reimbursement Program*

The Maryland Health Services Cost Review Commission (HSCRC's or Commission's) quality-based measurement and payment initiatives are important policy tools for providing strong incentives for hospitals to improve their quality performance over time. These initiatives hold amounts of hospital revenue at-risk directly related to specified performance benchmarks.

The HSCRC operates several pay-for-performance programs related to hospital quality improvement and achievement; chiefly among these are the Readmissions Reduction Incentive Program (RRIP); the Maryland Hospital-Acquired Conditions Program (MHAC); and the Quality-Based Reimbursement program (QBR).

Maryland's Quality-Based Reimbursement (QBR) program employs measures that are similar to those in the federal Medicare Value-Based Purchasing (VBP) program. Because of its long-standing Medicare waiver for its all-payer hospital rate-setting system, the Centers for Medicare & Medicaid Services (CMS) has given Maryland various special considerations, including exemption from the federal Medicare VBP program. In its place, the HSCRC implements the Maryland-specific QBR program.

The Maryland QBR Program currently consists of 15 measures of inpatient hospital quality across 3 domains - Person and Community Engagement (encompassing 8 measures of Patient Satisfaction); Safety (encompassing 5 measures of hospital-acquired conditions, distinct from the PPCs, and 1 measure of early elective delivery); and Mortality (1 measure of in-hospital mortality).]

To update these programs each year, the HSCRC hosts regular meetings of the Performance Measurement Work Group. The Performance Measurement Work Group is comprised of various stakeholders, including hospitals, insurance providers, Medicaid, consumer advocates, subject-matter experts, and other Health Department staff. In building and updating pay for performance programs, the HSCRC Performance Measurement Work Group follows the following guiding principles:

- The measurements used for performance linked with payment must include all patients, regardless of payer.
- The measurements must be fair to hospitals.

- Annual targets must be established to reasonably support the overall goal of meeting or outperforming the national Medicare readmission rate by CY 2018.
- The measurements used should be mostly consistent with the CMS readmissions measure.
- The approach must include the ability to track progress.

HSCRC works to track and incentivize improvement on a number of hospital quality measures, and updates its core pay-for-performance programs each year. Each annual program update involves extensive stakeholder review, vetting, and modeling; draft proposals are then presented to the Commission and to the public for feedback; and final policies are approved by Commissioners in a formal vote.

Through the Performance Measurement Work Group, the HSCRC has provided modeling for the addition of two ED performance measures, the ED-1b and ED-2b measure, which measures the amount of time that elapses between arrival to admission, and between the decision to admit a patient and the actual admission, respectively. The process to add a measure to the QBR is intensive and requires significant modeling and vetting to ensure that the measures are accurate and can be fairly applied to all hospitals. The HSCRC will be voting on changes to the quality program in December 2017 for revenue that will be at-risk in RY 2020.

#### *Hospital Efficiency Improvement Action Plans*

After a discussion of ED efficiency at the October 2017 HSCRC monthly meeting, Commissioners suggested that additional quantitative and qualitative data be collected from hospitals that are experiencing the worst ED wait times, through the solicitation of a Hospital Efficiency Improvement Action Plan. As of this publication, 13 hospitals were notified by the HSCRC to submit a Hospital Efficiency Improvement Action Plan based on their performance on ED wait time measures compared to the State average, high use of yellow alert/diversion, and have excess capacity. Those hospitals will submit an action plan to the HSCRC by January 2018 that details the steps that will be taken to improve hospital throughput. This strategy will allow for a more comprehensive approach to correcting ED inefficiency.

## MIEMSS

### *Yellow Alerts*

MIEMSS will assess and determine whether the use of Yellow Alerts should be discontinued.

There are varying views on the utility of Yellow Alerts as a mechanism for monitoring and impacting ED overcrowding. Some Maryland hospitals believe the use of Yellow Alerts provides temporary relief from ED overcrowding by diverting patients to other hospitals and are supportive of continued use of the Alert system. Other hospitals limit the use of Alerts, and some hospitals, as a matter of policy, never go on Alert status. There is no uniform application of the Alerts among hospitals that use Alerts and no universally-accepted trigger for putting an ED on a Yellow Alert.

The inconsistent application among hospitals of Alert status is one reason that some EMS jurisdictions are unconvinced as to the utility of alerts. These jurisdictions point out that the use of Alerts provides no early indication that stress is developing in the ED and that by the time a hospital is overloaded and goes on Alert, it is too late to decompress quickly the overloaded ED. EMS is also faced with inconsistent use of alerts among hospitals which is particularly problematic for ambulances with service areas that typically encompass more than one or two hospitals.

NEDOCS<sup>23</sup> is a 6-item scale that was developed to objectively assess the degree of overcrowding within an ED and provide a universal, uniform definition of when emergency department overcrowding occurs. NEDOCS is used in many hospitals in the U.S. Research into application of NEDOCS in high volume EDs, however, indicate that NEDOCS may overestimate ED overcrowding possibly due to different perceptions of ED overcrowding by health care providers working at different EDs<sup>24</sup>.

MIEMSS attempted to conduct a pilot application of NEDOCS at several EDs in 2016. The pilot, which was to run for 90 days, was intended to examine correlations between rising NEDOCS scores and ambulance diversion. Actual hospital participation in the pilot was low and inconsistent; consequently, no conclusions could be drawn from the pilot.

Based on experiences in other states, there is increasing interest in discontinuing use of Yellow Alerts in Maryland. In 2009, the state of Massachusetts banned the use ambulance diversions. Hospitals were given six months 'notice to prepare and create strategies to mitigate overcrowding, e.g., hiring extra staff, increasing instances of inpatient bed rounding. After the ban, the length of time spent in the ED for admitted patients fell by 10.4 minutes at nine (9) hospitals in the Boston area, while ED patients who were subsequently discharged did not see any increase in time spent in the ED. Further, ambulance turnaround time fell by more than two minutes<sup>25</sup>.

#### *New Models of EMS Care Delivery*<sup>26</sup>

MIEMSS and EMS jurisdictions will continue to develop new models of EMS care delivery and assess their utility in reducing ambulance transport of low acuity patients to hospital EDs. MIEMSS will work with the HSCRC to permit reimbursement for EMS participation in these programs.

*Mobile Integrated Healthcare (MIH)* - MIH programs that have demonstrated the capability of linking patients to preventative health services, reducing 9-1-1 EMS call volumes, and improving the continuity of care from the hospital to the home in order to reduce complications for patients and avoid unnecessary hospital readmissions. MIH programs have been implemented and are operational in Queen Anne's County, Montgomery County, Prince George's County, and Charles County. Additional MIH programs are set to start in Salisbury-Wicomico County and in Frederick County. A key feature of each of these programs is connecting frequent users of the 9-1-1 EMS system who have non-emergency conditions, or multiple underlying medical conditions, with medical and/or social programs within their communities that can address the conditions that resulted in the patient's call to 9-1-1 for EMS. Maryland MIH programs are targeted to reducing the number of EMS transports of high utilizers of 9-1-1 EMS services who have chronic or low acuity conditions by partnering with other health care providers to conduct home visits to assess, treat and refer patients to needed services outside the emergency department environment.

*Alternative Destinations.* Alternate Destination Programs transport 9-1-1- patients with low acuity conditions to an urgent care or similar care environment, instead of transporting low-

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<sup>23</sup> Weiss SJ, Derlet R, Arndahl J, et al. Estimating the degree of emergency department overcrowding in academic medical centers: results of the National ED Overcrowding Study (NEDOCS). *Acad Emerg Med* 2004; 11:38-50.

<sup>24</sup> Wang H, Robinson RD, Bunch K, et al. The inaccuracy of determining overcrowding status by using the National ED Overcrowding Study Tool. *Am J Emerg Med* 32 (2014) 1230-1236.

<sup>25</sup> "Ambulance Diversion," Health Affairs Health Policy Brief, June 2, 2016. DOI: 10.1377/hpb20160602.353150.

<sup>26</sup> MIEMSS. Maryland Mobile Integrated Health Programs Involving EMS. Report in Response to the Joint Chairmen's Request. October 2017.

acuity patients to a hospital emergency department. The Baltimore City Fire Department (BCFD) is implementing a pilot Alternative Destination Program (ADP) to provide services to patients in an urgent care environment instead of a hospital emergency department. The program is based on an internal Baltimore City analysis that showed that about one-third of the City's 9-1-1 calls were low-acuity incidents. As a result, BCFD developed its ADP program to encourage appropriate 9-1-1 use, optimize EMS resource utilization, and maintain appropriate patient care. At this time, there is no ability for BCFD to bill for patient transport to an urgent care facility.

The ADP program will assess the accuracy and safety of triaging patients identified by a nationally-recognized protocol that tailors EMS response to the potential severity of injury or illness based on the information provided to dispatch by the 9-1-1 caller.<sup>27</sup> Patients eligible for inclusion in the ADP program are those whose have been determined to be stable low-acuity patients.

Under the pilot program, in response to a 9-1-1 call for an apparent low-acuity patient located within identified geographic boundaries and available hours of the pilot, BCFD will dispatch the normal EMS resources to the patient, along with an Emergency Nurse Practitioner who will determine if the patient is, in fact, low-acuity and otherwise meets the pilot criteria. Such patients will be offered transportation to the University of Maryland Medical Center Urgent Care Center which is located across the street from the UMMS ED entrance. Patients who do not consent will be transported to the closest hospital emergency department.

A significant limitation to the development of these programs, however, is the lack of EMS reimbursement as traditional sources of reimbursement are not available to support EMS participation in these programs. Because EMS is viewed as a transportation benefit, EMS is not reimbursed unless a transport actually occurs. Medicare limits EMS reimbursement to patient **transports** to and from: 1) hospitals; 2) patient homes; 3) critical access hospitals; 4) dialysis facilities for End-Stage Renal Disease patients; 5) skilled nursing facilities; and 6) physician's offices, but even then only when the ambulance is en-route to a Medicare-covered destination, the patient is in dire need of professional attention, and the ambulance continues to the covered destination immediately thereafter. As a practical matter, public safety EMS jurisdictions, which respond to 9-1-1 calls, generally are limited in terms of transport destination to hospital emergency departments, while commercial services, which do not respond to 9-1-1 calls, transport patients to destinations that include patient homes, dialysis facilities and skilled nursing facilities. Other payers, e.g., Medicaid and private insurers, similarly tie reimbursement to the requirement that the patient must be transported to the identified destinations. This reimbursement model provides a financial incentive for EMS to transport all patients to hospital emergency departments which is a high cost environment, instead of either providing services for low-acuity patients at the patient's home and arranging for the patient to obtain other, needed services in a non-emergency (lower cost) setting.

Tying EMS reimbursement to patient transports severely limits the ability of EMS to implement, or even participate in, new models of care delivery, such as MIH and alternative destination programs. At the same time, these reimbursement policies also limit the transport destination options by requiring public safety EMS services to transport 9-1-1 patients to hospital emergency departments which discourage the development of Alternative Destination Programs. A further complicating factor is that potential

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<sup>27</sup> The protocol was developed by the International Academies of Emergency Dispatch, a nonprofit standard-setting organization promoting safe and effective emergency dispatch services worldwide.

alternative destinations, and in particular, urgent care centers, are not regulated in Maryland in a manner that ensures that health care personnel staffing, equipment and services are standardized and uniformly available at urgent care centers throughout the state.

The potential impact of reimbursing EMS for managing certain identified 9-1-1 EMS calls in a manner other than by transporting the patient to a hospital could be significant. A 2013 study projected that if Medicare had the flexibility to reimburse EMS throughout the United States for certain 9-1-1 EMS calls in a manner other than requiring transport to a hospital emergency department, patient continuity of care could be improved and annual Medicare savings could range from \$283 to \$560 million.<sup>28</sup>

Changing Medicare and Medicaid reimbursement policies for EMS could have a transformational on the growth of MIH and other non-traditional EMS service delivery models. MIH programs report that the majority of their program participants are Medicare or Medicaid recipients<sup>29</sup>.

The value of MIH Programs was identified and underscored by the Workgroup on Rural Health Care Delivery. In its final report, the Workgroup recommended enhancing or expanding MIH:

“...Sending paid emergency medical technicians (EMTs), paramedics, mid-level healthcare professionals, or community health workers into the homes of patients can help with chronic disease management and education, as well as post-hospital discharge follow-up, to prevent hospital admissions or readmissions, and to improve patients’ experience of care. These healthcare workers can help patients navigate to destinations such as primary care, urgent care, dental care, mental health care services, or substance abuse treatment centers, instead of emergency departments, thus avoiding costly, unnecessary hospital visits. While the workgroup members are very supportive of these programs, sustainable funding is a concern. At its last meeting, the Workgroup briefly discussed the need for EMS providers to be recognized as healthcare providers. Currently, EMS providers are reimbursed for the transportation, but not the healthcare services provided. If EMS providers could bill for health care services the sustainability concerns for MICH programs could be resolved...”<sup>30</sup>

### *Standard for Expected Ambulance Off-Load Time*

Ambulance offload is the time between the arrival of an ambulance-transported patient and the time that the patient is moved off the EMS stretcher with transfer of care to ED staff. MIEMSS will work with EMS jurisdictions to identify a reasonable standard time for ambulance off-load.

Delays in ambulance off-load effectively keeps the ambulance out-of-service which can delay EMS responses to other emergency calls in their jurisdictions, decreasing advanced life support coverage that responds to cardiac arrests, trauma, and other critical cases. High ambulance off-load times also decrease EMS productivity as ambulance crews wait to hand-over patient care to hospital personnel and the financial and personnel costs of such delays are a burden to EMS programs. Delays in ambulance

---

<sup>28</sup> Alpert A, Morganti KG, Margolis GS, Wasserman J, and Kellerman AL. Giving EMS Flexibility in Transporting Low-Acuity Patients Could Generate Substantial Medicare Savings. *Health Affairs* 32:12. December 2013.

<sup>29</sup> For example: (1) Queen Anne’s County MICH Program reports 82% of its participants are Medicare beneficiaries and 5.6% are Medicaid beneficiaries; and (2) Prince George’s County MIH Program reports 56% are Medicare patients and 19% are Medicaid patients. Baltimore City Fire Department’s payer mix (for all transports) is 43% Medicaid and 32% Medicare (FY15 data).

<sup>30</sup> Report of the Workgroup on Rural Health Delivery to the Maryland Health Care Commission. “Transforming Maryland’s Rural Healthcare System: A Regional Approach to Rural Healthcare Delivery.” p. 17, 2017.

off-load also raise potential EMTALA concerns. EMTALA requires that a patient receive a medical screening examination upon arrival to determine if an emergency medical condition exists.

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**CRISP**

# Presentation to HSCRC Commission Meeting

December 13, 2017



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Columbia, MD 21046  
877.952.7477 | [support@crisphealth.org](mailto:support@crisphealth.org)  
[www.crisphealth.org](http://www.crisphealth.org)



# Key Milestones – Medicare Data Analytics

Nov 2014

- HSCRC Workgroup initiated with the charge of: “facilitating multi-stakeholder discussions regarding efficient and effective implementation of population-based and patient-centered care coordination to support the new Maryland All-Payer Model”

Apr 2015

- HSCRC Care Coordination Workgroup Report: “Data sharing and data analytics are foundational requirements for effective care coordination”
  - Secure new data sources, specifically Medicare patient-level data
  - Identify patients who could benefit from care coordination and chronic care management
  - Engage CRISP to contract with a qualified vendor ...to normalize Medicare data and other related datasets



# Key Milestones – Medicare Data Analytics

Feb 2016

- Release of first “Total Cost of Care” Reports using Chronic Condition Warehouse (CCW) data

June 2016

- RFP issued for vendors to land, normalize and create reports based upon the CCLF (Medicare patient identifiable claims) data
- Evaluation Committee stood up comprising CRISP staff, hospital and other industry stakeholders

Aug – Sept  
2016

- Seventeen responses to RFP
- Evaluation Committee selects six vendors for in-person presentations
- Three vendors selected for follow-up presentations

Oct 2016

- Medicare Limited Dataset (LDS) released. Claims based, not patient identifiable, emphasis on cost of episodes of care
- hMetrix selected as preferred vendor for Medicare CCLF data; negotiations begin

Dec 2016

- AMS selected as vendor for HCIP program



# Key Milestones – Medicare Data Analytics

Sept 2017

- hMetrix releases first version of CCLF data going back thirty-six months
- A series of training webinars held for all hospitals - patient identifiable data for participating hospitals and aggregate for non-participating

Oct - Dec  
2017

- HSCRC, CRSIP & AMS support hospitals in updating reports and provider lists to CMS
- A “limited data set” using CCLF data released for hospitals not participating in Care Redesign
- More than 30 hospitals accessing CCLF analytics
- Reports integrating Medicare data with other data sets available to CRISP being designed



# Care Redesign Program

## Sample HCIP Reporting

### Physician Dashboard; For All Physicians

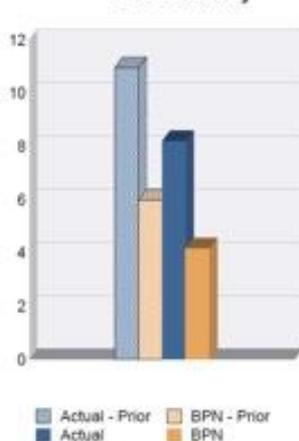
Prior - July 20XX through December 20XX and Current - January 20XX through June 20XX; Medicare Claims

Provider: 000000 - General Hospital

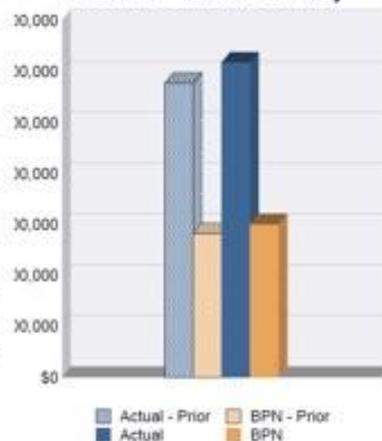


Responsible Physician	PAR Status				Specialty						
PHYS222											
Physician's First Name	Physician's Last Name										
<b>QUICK STATISTICS</b>											
	Resource Utilization		Average LOS		INCENTIVE	Performance	Improvement		Total		
	Prior	Current	Prior	Current		Prior	Current	Prior	Current	Prior	Current
Your Information	\$577,406	\$617,845	11.0	8.2	Maximum Incentive	\$8,312	\$9,783	\$0	\$19,381	\$8,312	\$29,164
Best Practice Norm (BPN)	\$282,350	\$300,001	6.0	4.2	Your Incentive	\$2,234	\$2,081	\$0	\$8,837	\$2,234	\$10,918
Variance	\$295,056	\$317,845	5.0	4.0	Unearned Incentive	\$6,079	\$7,702	\$0	\$10,543	\$6,079	\$18,245
Discharges by Complexity Level (SOI)	Current	SOI 1: 3	SOI 2: 13	SOI 3: 14	SOI 4: 5	Total: 35	Deaths: 3 (7.32%)	Readmission 7 Day:	30 Day:		
	Prior	SOI 1: 1	SOI 2: 5	SOI 3: 11	SOI 4: 6	Total: 23	Deaths: 1 (4.17%)	Readmission 7 Day:	30 Day:		

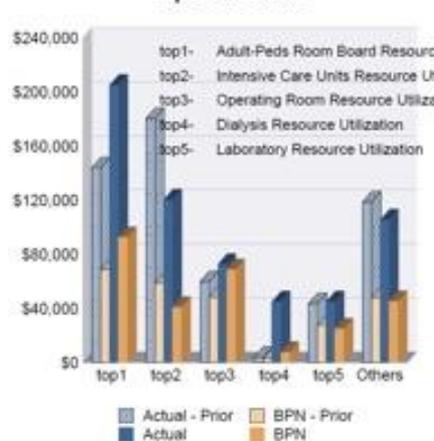
LOS Summary



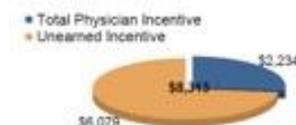
Resource Utilization Summary



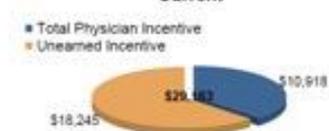
Top Cost Centers



Prior



Current



Cost Center Summary

	Your Resource Utilization		BPN		Variance	
	Prior	Current	Prior	Current	Prior	Current
Top1 Adult-Peds Room Board Resource Utilization	\$144,274	\$205,589	\$68,962	\$92,842	\$75,313	\$112,746
Top2 Intensive Care Units Resource Utilization	\$180,817	\$120,741	\$58,710	\$40,991	\$122,107	\$79,750
Top3 Operating Room Resource Utilization	\$60,070	\$72,986	\$48,692	\$69,012	\$11,377	\$3,975
Top4 Dialysis Resource Utilization	\$3,988	\$45,189	\$3,080	\$7,759	\$908	\$37,430
Top5 Laboratory Resource Utilization	\$43,677	\$45,161	\$27,441	\$25,123	\$16,236	\$20,037
Top6 Cardiac Catheterization Resource Utilization	\$28,881	\$38,311	\$13,632	\$15,783	\$15,249	\$22,528
Top7 Respiratory Therapy Resource Utilization	\$55,343	\$29,000	\$18,870	\$11,369	\$36,473	\$17,630
Top8 Emergency Room Resource Utilization	\$7,343	\$14,385	\$3,932	\$5,910	\$3,412	\$8,475
Top9 Radiology Resource Utilization	\$14,150	\$12,639	\$7,963	\$8,363	\$6,187	\$4,276
Top10 Physical Therapy Resource Utilization	\$13,197	\$11,482	\$3,764	\$3,977	\$9,433	\$7,505



# Care Redesign Program Sample CCIP Reporting



CRISP

MEDICARE CCLF  
DATA EXPLORER

🏠 Main Dashboard

Population Analytics

Episode Analytics

Pharmacy Analytics

⚙️ Administration

👤 Doe, Jonathon

🔙 logout

## Start Here.



### Population Analytics ↑

- > PMPM by Demographics
- > County Characteristics
- > DRG Summary
- > Place of Service Summary

- > PMPM by Type of Service
- > Diagnosis Summary
- > BETOS Summary
- > Paid Band Report

- > PMPM by County
- > Inpatient Outpatient Providers
- > Imaging Summary
- > High Cost Member

- > County Distribution
- > HH/SNF Providers
- > Specialty Summary

### Episode Analytics ↑

#### Financial

- > Financial Performance
- > Payment Details
- > Episode Payment Distribution

#### Acute Care

- > Acute Care Management
- > Length of Stay
- > Readmission Overview
- > Readmission Analysis
- > Physician Report
- > Physician Readmissions

#### Post-Acute Care

- > Post-Acute Care Management
- > First PAC Payment
- > Physician Discharge Pattern
- > Inpatient Rehab Report
- > Skilled Nursing Facility Report
- > Home Health Report
- > Sequence of Care
- > Opportunity Summary
- > PAVE - Savings Opportunity

### Pharmacy Analytics ↑

> Medication Adherence Report

> Medication List

> Population Health Report

> Medication Issues



# Care Redesign Program Sample CCIP Reporting\*

## Customized Column Headers

CRISP MEDICARE CCLF DATA EXPLORER

Home Population Episode Pharmacy Administration Hospital: [dropdown] hMetrix, Admin Logout

Population Population Navigator

Roster: select roster

Patient ID	Patient Name	Gender	DOB	Measure Count	Current Year Total Medical Paid	Previous Year Total Medical Paid	Current Year Pharmacy Patient Paid
1170000	HEARN, JAMES	Male	05/01/1948	1	\$4,816	\$6,456	\$7,848
1170001	HEARN, JIM	Male	05/01/1948	1	\$4,765	\$4,766	\$7,815
1170002	HEARN, JENNIFER	Female	05/01/1948	11	\$4,793	\$0	\$0
1170003	HEARN, JENNIFER	Female	11/01/1948	6	\$0	\$4,163	\$11,069
1170004	HEARN, JENNIFER	Female	05/01/1948	6	\$0	\$8,635	\$5,877
1170005	HEARN, JENNIFER	Female	05/01/1948	6	\$0	\$1,036	\$15,519
1170006	HEARN, JENNIFER	Male	05/01/1948	5	\$0	\$6,325	\$3,272
1170007	HEARN, JENNIFER	Female	05/01/1948	9	\$0	\$910	\$7,130
1170008	HEARN, JENNIFER	Female	11/01/1948	8	\$0	\$10,640	\$6,190
1170009	HEARN, JENNIFER	Male	11/01/1948	8	\$0	\$8,669	\$4,481
1170010	HEARN, JENNIFER	Male	05/01/1948	4	\$0	\$4,147	\$3,038
1170011	HEARN, JENNIFER	Female	05/01/1948	6	\$0	\$4,019	\$3,322
1170012	HEARN, JENNIFER	Female	05/01/1948	9	\$4,816	\$3,357	\$5,133
1170013	HEARN, JENNIFER	Male	05/01/1948	9	\$30,398	\$3,398	\$2,961
1170014	HEARN, JENNIFER	Female	05/01/1948	9	\$3,527	\$4,145	\$3,096
1170015	HEARN, JENNIFER	Female	05/01/1948	8	\$6,101	\$25,791	\$21,595
1170016	HEARN, JENNIFER	Female	05/01/1948	10	\$11,204	\$13,406	\$10,258
1170017	HEARN, JENNIFER	Female	05/01/1948	5	\$5,751	\$14,893	\$1,825
1170018	HEARN, JENNIFER	Male	05/01/1948	4	\$1,145	\$1,227	\$9,687
1170019	HEARN, JENNIFER	Female	11/01/1948	10	\$33,451	\$9,278	\$21,595
1170020	HEARN, JENNIFER	Female	05/01/1948	5	\$5,405	\$2,013	\$5,852

Columns:  Patient ID,  DOB,  Measure Count,  Current Year Total Medical Paid,  Previous Year Total Medical Paid,  Current Year Pharmacy Patient Paid,  Previous Year Pharmacy Patient Paid

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\* Fictitious Data



# Care Redesign Program Sample CCIP Reporting



## Post-Acute Care Management



Print Excel

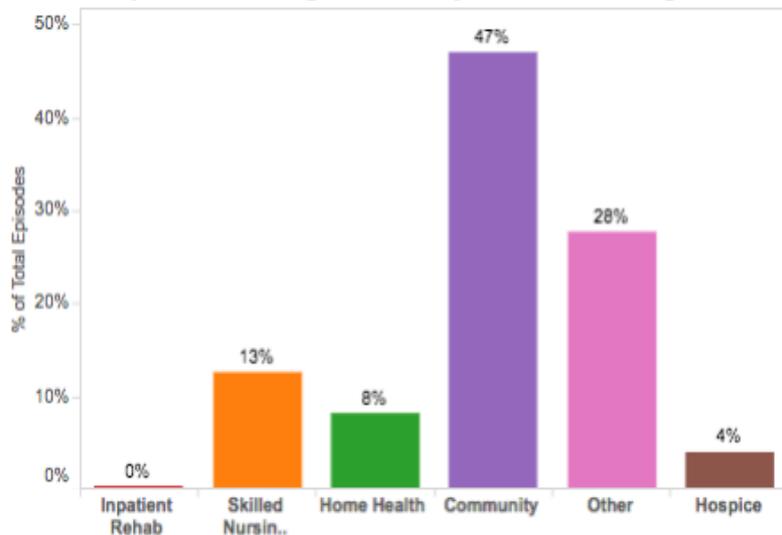
Index Admission Provider Name: (All) | Index Admission DRG Family: Acute myocardial infarction | Index Admission APR DRG: 190:Acute myocardial infarction | Episode Time Period: (Multiple values)

Data Covering the Period January, 2016 - December, 2016

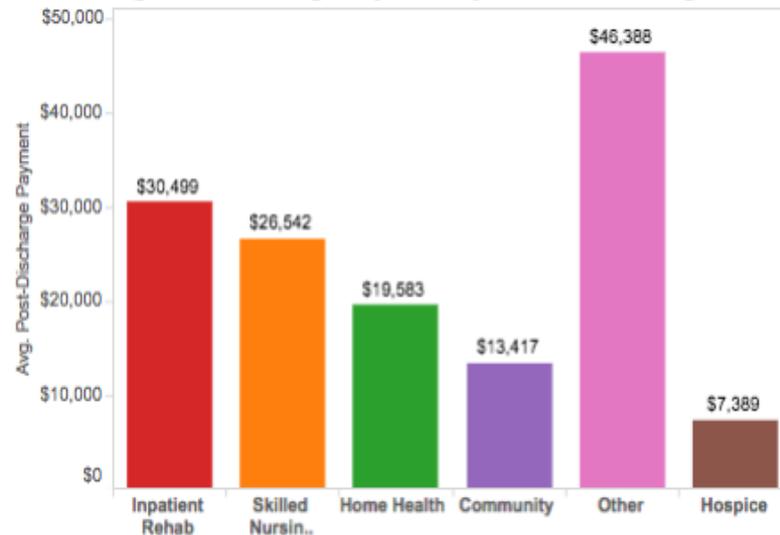
### Post-Discharge Setting

- Community
- Home Health
- Hospice
- Inpatient Rehab
- Other
- Skilled Nursing Facility

### Episode Discharge Pattern by First PAC Setting



### Avg. Post Discharge Payment by First PAC Setting



State of Maryland  
Department of Health

Nelson J. Sabatini  
Chairman

Joseph Antos, PhD  
Vice-Chairman

Victoria W. Bayless

John M. Colmers

Adam Kane

Jack C. Keane



Donna Kinzer  
Executive Director

Katie Wunderlich, Director  
Engagement and Alignment

Allan Pack, Director  
Population Based  
Methodologies

Chris Peterson, Director  
Clinical & Financial  
Information

Gerard J. Schmith, Director  
Revenue & 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  
hsrcr.maryland.gov

**TO: Commissioners**

**FROM: HSCRC Staff**

**DATE: December 13, 2017**

**RE: Hearing and Meeting Schedule**

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January 10, 2018 To be determined - 4160 Patterson Avenue  
HSCRC/MHCC Conference Room

February 14, 2018 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 10:15 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://hsrcr.maryland.gov/Pages/commission-meetings.aspx>.

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