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**HEALTH SERVICES COST REVIEW COMMISSION**

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**507th MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION**

**April 9, 2014**

**EXECUTIVE SESSION**

**12:30 p.m.**

**1. Administrative Issues**

**PUBLIC SESSION OF THE  
HEALTH SERVICES COST REVIEW COMMISSION**

**1:00 p.m.**

**1. Review of the Minutes from the Executive Session and Public Meeting on March 12, 2014,  
and the Executive Session on April 7, 2014**

**2. Executive Director's Report**

**3. Status of Work Groups for All-Payer Hospital System Modernization**

**4. Docket Status – Cases Closed**

2242N – UM St. Joseph Medical Center  
2243A – University of Maryland Medical System  
2244A – Johns Hopkins Health System  
2245A – Johns Hopkins Health System  
2246A – Johns Hopkins Health System

**5. Docket Status – Cases Open**

2247R – Garrett County Memorial Hospital

**6. Final Staff Recommendation for Modifying the Maryland Hospital Acquired Conditions  
Program for FY 2016**

**7. Final Staff Recommendation on Readmission Reduction Program for FY 2016**

**8. Report on Monitoring under the All-payer Model**

**9. Report on Principles and Components for Balance Update for FY 2015**

**10. Draft Recommendation on Medicaid Current Financing for CY 2014**

**11. Legislative Report**

**12. Hearing and Meeting Schedule**

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

AS OF MARCH 28, 2014

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
2247R	Garrett County Memorial Hospital	2/28/2014	3/31/2014	7/28/2014	TPR	GS	OPEN

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

Staff Draft Recommendation

Request by the Medical Assistance Program to Modify the Calculation  
of Current Financing Deposits for CY 2014

April 9, 2014

## Introduction

The Medical Assistance Program (MAP) has been providing working capital advance monies (current financing) to hospitals for many years. As a result, MAP receives the prompt pay discount as per COMAR 10.37.10.26(B). MAP is unique among third-party payers in that it is a governmentally funded program that covers qualified poor residents of Maryland. As such, it deals, to a large extent, with retroactive coverage. Recognizing the uniqueness of MAP, the Commission allowed MAP to negotiate a special formula with the hospital industry to calculate its fair share of current financing monies. The Commission approved this alternative method of calculating current financing at its February 1, 1995 public meeting. Currently MAP has approximately \$94 million in current financing on deposit with Maryland hospitals.

As a result of the state budget crisis, MAP requested, and the Commission approved, an exception to the requirement that the amount of current financing on deposit with hospitals be re-calculated annually based on the alternative methodology approved by the Commission for CYs 2009 through 2013. MAP also proposed that there be changes in its current financing formula when its new claims system, which is projected to achieve a dramatic reduction in hospital receivables, is implemented.

## MAP's Current Request

As a result of continuing budget shortfalls, on February 24, 2014, MAP requested an exception to the approved current financing calculation for FY 2014. MAP requested that it be permitted to increase the current financing amounts on deposit with each hospital by the HSCRC's update factor for FY 2014. MAP also reported that it anticipated deploying the new claims system in the 2<sup>nd</sup> quarter of FY 2015.

## Staff Recommendation

Based on the current condition of MAP's budget, staff recommends that the Commission approve MAP's request. Staff also recommends that the approval be subject to the requirement that MAP continue to report annually on the status of the implementation of its new claims system.

# Final Recommendation for Modifying the Maryland Hospital Acquired Conditions Programs for FY 2016

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**Health Services Cost Review Commission**  
**4160 Patterson Avenue Baltimore, MD 21215**  
**(410) 764-2605**

**April 9, 2014**

This document contains the final staff recommendations for updating the Maryland Hospital Acquired Conditions (MHAC) Program for FY 2016.

## A. Introduction

The HSCRC quality-based payment methodologies are important policy tools for providing strong incentives for hospitals to improve their quality performance over time.

Current HSCRC approved policy calls for the revenue neutral scaling of hospitals in allocating rewards and penalties based on performance on the HSCRC's Maryland Hospital Acquired Conditions ("MHAC") initiative, with the net increases in rates for better performing hospitals funded entirely by net decreases in rates for poorer performing hospitals. The term "scaling" refers to the differential allocation of a pre-determined portion of base regulated hospital revenue contingent on assessment of the relative quality of hospital performance. The rewards (positive scaled amounts) or penalties (negative scaled amounts) are then applied to each hospital's revenue on a "one-time" basis (and not considered permanent revenue). In its January 2014 meeting, the Commission approved scaling 3% for the MHAC program (2% for performance and 1% for improvement) in a revenue neutral manner with a notification that there might be changes to the program to align with the Centers for Medicare and Medicaid Innovation (CMMI) All-payer model demonstration contract.

In order to enhance our ability to incentivize hospital care improvements and meet the targets proposed in the CMMI All-payer model demonstration contract that began on January 1, 2014, the Commission has convened four meetings of the Performance Measurement Workgroup to deliberate near-term issues related to the MHAC initiative. These include, for example, shifting from revenue neutral scaling to pre-established performance targets where hospitals earn up to full credit if they meet the targets. The Payment Models Workgroup discussed the scaling methodology at their two meetings in March and a subgroup meeting with representation for the Payment Models and Performance Measurement Workgroups was convened to work through the details of the proposed methodology.

Within the context of the Workgroup activity, staff has developed this recommendation to update the measurement, scoring and scaling methodologies to translate scores into rate adjustments for the MHAC initiative for performance in calendar year 2014 (beginning January 1, 2014). These updates are to be applied to FY 2016 rates for each hospital.

## B. Background

### *1. Centers for Medicare & Medicaid Services (CMS) Hospital Acquired Conditions (HAC) Program*

The federal HAC program began in FFY 2012 when CMS disallowed an increase in DRG payment for cases with added complications in 14 narrowly defined categories. Beginning in FFY 2015, CMS established a second HAC program, which reduces payments of hospitals with scores in the top quartile for the performance period on their rate of Hospital Acquired Conditions as compared to the national average. In FY 2015, the maximum reduction is one percent of total DRG payments.

The CMS HAC measures for FY 2015 are listed in Appendix I.

## 2. MHAC Measures, Scaling and Magnitude at Risk to Date

The MHAC program, which began in state FY 2011, currently uses a large subset of the 65 Potentially Preventable Complications (PPCs) developed by 3M Health Information Systems. The PPC software computes actual versus expected number of complications adjusted for each patient by the All Patient Refined Diagnosis Related Group (“APR DRG”), and severity of illness (“SOI”) category. The attainment scale measures the proportion of each hospital’s inpatient revenue from excess PPCs (calculated as  $\text{cost} \times (\text{actual} - \text{expected number of PPCs})$  compared to the benchmarks). The cost of each PPC is determined by a regression analysis and is updated every year. For FY 15, the expected performance benchmark is calculated using a value of 15% below the statewide average for each PPC used in the MHAC program. The improvement scale was implemented for the first time in FY14 and focused on rewarding hospitals for improvements in five high cost high prevalence PPCs. For FYs 14 and 15, the Commission approved targeting improvement for scaling 1% of inpatient revenue, bringing the “at risk” revenue to 3% for the MHAC program. Appendix II lists the measures used for the MHAC program for FY 2015.

For the MHAC program, the earlier QBR MHAC work group convened in December 2013 to discuss modifications. Representing the industry, the MHA presented the following issues of concern (See Appendix III):

- the MHAC reduction goals should be more directly aligned with the new waiver targets;
- there is little hospital-level predictability of revenue rewards and penalties; and,
- the scaling approach also promotes competition rather than collaboration and sharing of best practices to reduce MHACs.

The MHA strongly advised the Commission to consider a revised MHAC approach that could be applied retroactively beginning January 1, 2014.

As a fall back to overhauling of the MHAC program methodology that could be successfully implemented for rate year 2016, Commission staff presented the following modifications to the current MHAC methodology:

- Through the effort of the Performance Measurement Workgroup to begin in January 2014, work to adapt the MHAC policy to the new waiver requirements with a reasonable implementation period that is consistent with the new all-payer model.
- Absent Commission approval of a revised MHAC policy, continue the current MHAC policy for FY 2016 (which provides for 2% at risk for attainment and 1% for improvement) and increase the benchmark to establish the expected MHAC values for attainment to 75% of the statewide average, which represents a more linear relationship between scaling and performance.

## C. Assessment

Since the inception of the program and as is currently the case, HSCRC solicits input from stakeholder groups comprising the industry including payers to determine appropriate



direction regarding areas of needed updates to the programs. These include the measures used, and the program's methodology components.

The Performance Measurement Workgroup has deliberated pertinent issues and potential changes to current Commission policy necessary to enhance our ability to successfully achieve the in-hospital complication reduction target set forth in the contract with CMMI— a 30% reduction in MHACs over five years. In its four meetings, the Workgroup has considered overall guiding principles, a revised approach for calculating hospital scores and translating them into payment, and incremental first year annual reduction targets for the MHAC program.

### *1. Overall Guiding Principles*

Commission staff vetted several guiding principles for the revised MHAC program that overlap significantly with those identified by the MHA. They include:

- Program must improve care for all patients, regardless of payer.
- Breadth and impact of the program must meet or exceed the Medicare national program in terms of measures and revenue at risk.
- Program should identify predetermined performance targets and financial impact.
- First year target for the program must be established in context of the trends of complication reductions seen in the previous years as well as the need to achieve the new All-payer model goal of a 30% cumulative reduction by 2018.
- Program should prioritize high volume, high cost, opportunity for improvement and areas of national focus.
- Program design should encourage cooperation and sharing of best practices.
- Program scoring method should hold hospitals harmless for lack of improvement if attainment is highly favorable.
- Hospitals should have ability to track progress during the performance period.

### *2. Proposed Revised Measurement Methodology*

The MHA and HSCRC staff presented the key methodology changes over the course of the Performance Measurement Workgroup meetings convened to date.

The discussion entailed a shift to using observed to expected ratios as the basis of the measurement for each PPC and establishing thresholds and benchmarks for each of the 65 PPC measures. It also involved calculating a hospital score of zero to ten for each PPC based on where a hospital's score falls between the thresholds and benchmarks for attainment, and the difference from the hospital's own base score for improvement. The final score is based on the better of an attainment or improvement score for each PPC (similar to QBR scoring), and is the sum of each of the PPC scores.

To target high volume, high cost PPCs and those with potentially greater opportunity for improvement or of national focus, the revised methodology proposes tiering the PPCs in groups and assigning a higher weight of the scores for the "top tier" target PPCs of priority. The Workgroup also discussed rules to address measurement stability issues, e.g., hospitals must have at least 1 expected and 10 at risk cases for the PPC to be included.

## Final Recommendation for Modifying the Maryland Hospital Acquired Condition (MHAC) Program

To translate the scores into payment, HSCRC staff supports setting statewide goals and proposes to differentiate the maximum revenue at risk based on the target level. Appendix IV provides additional PPC measurement and scoring details.

As part of the CMMI contract, the aggregate maximum revenue at risk in Maryland quality/performance based payment programs must be equal to or greater than the aggregate maximum revenue at risk in the CMS Medicare quality programs. Since the CMMI contract performance year is a calendar year, and CMS fiscal year is different than state fiscal year, CMMI proposed to calculate calendar year percent at risk amounts using months they were effective. Below would be the CY 2014 calculations for federal and state aggregate amount at risk:

Federal Aggregate Percent at Risk Amount Calculations:  $(FY2014*9/12) + (FY2015*3/12)$

State Aggregate Percent at Risk Amount Calculations=  $(FY2014*6/12) + (FY2015*6/12)$

For FY 2014, HSCRC staff is proposing that CMMI consider an exemption to this calculation, since the quality-based adjustments have been implemented in Jan 2014 and were doubled to reflect the impact of full fiscal year. In addition to the MHAC, QBR and Readmission Reduction programs, HSCRC staff is that CMMI consider including the potentially avoidable utilization adjustments and revenues at risk due to cost efficiency constraints in global budget contracts in the calculation of aggregate amounts at risk. Appendix V provides the calculations for CY 2014 and CY2015 as proposed based on the current or proposed policies.

Lastly, the comparison of aggregate amounts at risk should take into account the differences in the base revenues to which these adjustments are applied. While the majority of the CMS programs use Medicare base operating DRG payments to assess the penalties and rewards, Maryland programs are based on permanent inpatient revenue, which includes additional payments for Direct Medical Education, Graduate Medical Education, Uncompensated care (similar to Disproportionate share payments), and wage differences. HSCRC staff is working with CMMI to make appropriate adjustments to align the definitions of base revenues for the calculations.

Although the minimum required improvement to reach 30% reduction in five years is 6.87%, staff recommends a higher first year improvement target consistent with the PPC reduction increase trends from FY 2010 to 2013, as illustrated in Figure 1.

**Figure 1. PPC Reduction Trends FY 10 to FY 13**

Potentially Preventable Complication (PPC) Rates in Maryland- State FY2010-FY2013										
	PPC RATES				Annual Change			Average Annual Change	Total FY10-FY13 Change	
	FY10	FY11	FY12	FY13	FY11	FY12	FY13			
<b>TOTAL NUMBER OF COMPLICATIONS</b>	53,494	48,416	42,118	34,200	-9.5%	-13.0%	-18.8%	<b>-13.8%</b>	<b>-36.1%</b>	
<b>UNADJUSTED COMPLICATION RATE PER 1,000 AT RISK CASES</b>	1.92	1.82	1.65	1.41	-5.2%	-9.3%	-14.5%	<b>-9.7%</b>	<b>-26.6%</b>	
<b>RISK ADJUSTED COMPLICATION RATE PER 1,000 AT RISK CASES</b>	1.92	1.77	1.58	1.3	-7.8%	-10.7%	-17.7%	<b>-12.1%</b>	<b>-32.3%</b>	

Based on PPC v.30.

The Performance Measurement and Payment Models Workgroups considered several options for applying penalties and rewards. One of the options considered is illustrated below. Ultimately, the Workgroups agreed that the approach proposed in the recommendation section is a more equitable, transparent and simplistic approach.

In its written submission to HSCRC’s call for white papers on Quality Based Reimbursement, MHA submitted an alternative proposal for a total maximum revenue at risk of 3% and a statewide target of 6.89% for CY 2014. MHA’s full white paper submission entitled “Quality-Related Payment Policies HSCRC Waiver Implementation February 28, 2014” is in Appendix VI.

To provide predictability for the financial rewards and penalties, staff proposes continuous scaling with preset positions on the scale calculated using base year performance scores. Once the base year performance scores are calculated and percent reductions and rewards are determined, the same scale will be used to apply the rewards/penalties for each hospital based on its scores in the performance period.

## D. Recommendations

After consideration of both the Performance Measurement and Payment Models Workgroup deliberations, staff provides the following recommendations effective for CY 2014 performance year that we will continue to vet with stakeholders.

1. Measure hospital performance using Observed (O)/Expected (E) value for each PPC. Define the minimum threshold value to begin earning points as the weighted mean of all O/E ratios (O/E =1). Define the benchmark value where a full 10 points is earned as the weighted mean of top quartile O/E ratio. Establish appropriate exclusion rules to enhance measurement fairness and stability.

2. Set benchmark at zero for PPCs that are serious reportable events (Appendix VI).
3. Prioritize PPCs that are high cost, high volume, have opportunity to improve, and are of national priority by tiering the PPCs in groups and weighting the groups in the final hospital score commensurate with the level of priority.
4. Establish tiered scaling based on state-wide MHAC performance and update annually based on the trends and CMMI contract goals.
5. Calculate rewards/penalties using preset positions on the scale based on the base year scores (Appendix VII).
6. For CY 2014 performance year (Appendix VIII):
  - a. Set minimum MHAC statewide target at 8% improvement with a maximum revenue at risk of 4% of permanent inpatient revenue if this target is missed.
  - b. Set maximum revenue at risk at 1% of permanent inpatient revenue if CY 2014 target stated in 6.a. is met. Provide rewards to hospitals with more than 0.60 score up to 1% of permanent inpatient revenue provided sufficient funds are collected through penalties.
  - c. Set a maximum state-wide total penalty limit at 0.5% of permanent inpatient revenue.

## Appendix I. CMS HAC Measures for FY 2015

### CMS HAC MEASURES Implemented Since FY 2012

HAC 01: Foreign Object Retained After Surgery  
HAC 02: Air Embolism  
HAC 03: Blood Incompatibility  
HAC 04: Stage III & Stage IV Pressure Ulcers  
HAC 05: Falls and Trauma  
HAC 06: Catheter-Associated Urinary Tract Infection  
HAC 07: Vascular Catheter-Associated Infection  
HAC 08: Surgical Site Infection - Mediastinitis After Coronary Artery Bypass Graft (CABG)  
HAC 09: Manifestations of Poor Glycemic Control  
HAC 10: Deep Vein Thrombosis/Pulmonary Embolism with Total Knee Replacement or Hip Replacement  
HAC 11: Surgical Site Infection – Bariatric Surgery  
HAC 12: Surgical Site Infection – Certain Orthopedic Procedure of Spine, Shoulder, and Elbow  
HAC 13: Surgical Site Infection Following Cardiac Device Procedures  
HAC 14: Iatrogenic Pneumothorax w/Venous Catheterization

### CMS HAC Measures Implemented FY 2015

- Domain 1- the Agency for Health Care Research and Quality (AHRQ) composite PSI #90 which includes the following indicators:
  - Pressure ulcer rate (PSI 3);
  - Iatrogenic pneumothorax rate (PSI 6);
  - Central venous catheter-related blood stream infection rate (PSI 7);
  - Postoperative hip fracture rate (PSI 8);
  - Postoperative pulmonary embolism (PE) or deep vein thrombosis rate (DVT) (PSI 12);
  - Postoperative sepsis rate (PSI 13);
  - Wound dehiscence rate (PSI 14); and
  - Accidental puncture and laceration rate (PSI 15).
- Domain 2- two healthcare-associated infection measures developed by the Centers for Disease Control and Prevention's (CDC) National Health Safety Network:
  - Central Line-Associated Blood Stream Infection and
  - Catheter-Associated Urinary Tract Infection.

Appendix II: MHAC Measures, FY 2015

MHAC Measures		Rate Year 2015 (Based on FY2012 Q1234 Data)			
PPC #	PPC Description	Adm \$	Adm T	Cases	Notes
			T Value<1.96		Exclusion Reason
1	Stroke & Intracranial Hemorrhage	\$13,527.00	34.48	825	
2	Extreme CNS Complications	\$14,228.00	25.38	415	
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	\$9,808.00	57.56	4635	
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	\$32,783.00	80.64	780	
5	Pneumonia & Other Lung Infections	\$20,888.00	102.53	3174	
6	Aspiration Pneumonia	\$16,628.00	55.74	1423	
7	Pulmonary Embolism	\$15,051.00	32.59	583	
8	Other Pulmonary Complications	\$9,405.00	49.36	3659	
9	Shock	\$19,321.00	65.17	1506	
10	Congestive Heart Failure	\$6,375.00	19.93	1235	
11	Acute Myocardial Infarction	\$8,294.00	23.2	985	
12	Cardiac Arrhythmias & Conduction Disturbances	\$2,586.00	6.22	977	
13	Other Cardiac Complications	\$5,664.00	7.34	207	
14	Ventricular Fibrillation/Cardiac Arrest	\$20,204.00	47.42	706	
15	Peripheral Vascular Complications Except Venous Thrombosis	\$16,972.00	21.58	202	
16	Venous Thrombosis	\$17,730.00	50.87	1047	
17	Major Gastrointestinal Complications without Transfusion or Significant Bleeding	\$15,508.00	35.18	639	
18	Major Gastrointestinal Complications with Transfusion or Significant Bleeding	\$20,802.00	29.6	250	
19	Major Liver Complications	\$21,822.00	35.52	333	
20	Other Gastrointestinal Complications without Transfusion or Significant Bleeding	\$14,443.00	25.43	388	
21	Clostridium Difficile Colitis	\$17,412.00	60.61	1524	Clinical
22	Urinary Tract Infection	\$0.00	.	0	
23	GU Complications Except UTI	\$7,016.00	12.72	407	
24	Renal Failure without Dialysis	\$8,248.00	59.86	6925	
25	Renal Failure with Dialysis	\$41,311.00	49.57	179	
26	Diabetic Ketoacidosis & Coma	\$8,617.00	5.22	45	
27	Post-Hemorrhagic & Other Acute Anemia with Transfusion	\$6,618.00	19.35	1070	
28	In-Hospital Trauma and Fractures	\$8,560.00	8.9	134	
29	Poisonings Except from Anesthesia	\$-1,331	-1.31	119	t-value
30	Poisonings due to Anesthesia	\$14,971.00	1.34	1	t-value+case
31	Decubitus Ulcer	\$32,815.00	49.94	288	
32	Transfusion Incompatibility Reaction	\$21,835.00	1.97	1	t-value+case
33	Cellulitis	\$10,216.00	26.15	831	
34	Moderate Infectious	\$22,835.00	50.37	621	
35	Septicemia & Severe Infections	\$18,853.00	68.29	1823	
36	Acute Mental Health Changes	\$3,787.00	8.76	659	
37	Post-Operative Infection & Deep Wound Disruption Without Procedure	\$16,777.00	46.81	1052	
38	Post-Operative Wound Infection & Deep Wound Disruption with Procedure	\$34,433.00	29.67	93	
39	Reopening Surgical Site	\$16,986.00	19.38	163	
40	Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D	\$9,819.00	41.69	2283	
41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Pr	\$13,367.00	15.73	171	
42	Accidental Puncture/Laceration During Invasive Procedure	\$6,503.00	19.09	1087	
43	Accidental Cut or Hemorrhage During Other Medical Care	\$259.00	0.17	54	t-value
44	Other Surgical Complication - Mod	\$14,852.00	22.46	284	
45	Post-procedure Foreign Bodies	\$1,762.00	0.8	27	t-value
46	Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body	\$-8,577	-1.05	2	t-value+case
47	Encephalopathy	\$11,772.00	36.2	1194	
48	Other Complications of Medical Care	\$18,559.00	42	640	
49	Iatrogenic Pneumothrax	\$9,534.00	23.58	782	
50	Mechanical Complication of Device, Implant & Graft	\$16,993.00	34	495	
51	Gastrointestinal Ostomy Complications	\$26,871.00	40.61	284	
52	Inflammation & Other Complications of Devices, Implants or Grafts Except Vascular Infec	\$11,290.00	30.89	954	
53	Infection, Inflammation & Clotting Complications of Peripheral Vascular Catheters & Infus	\$14,455.00	20.57	250	
54	Infections due to Central Venous Catheters	\$29,152.00	45.6	315	
55	Obstetrical Hemorrhage without Transfusion	\$406.00	1.39	1494	Clinical
56	Obstetrical Hemorrhage with Transfusion	\$3,723.00	8.09	605	
57	Obstetric Lacerations & Other Trauma Without Instrumentation	\$436.00	1.33	1160	t-value
58	Obstetric Lacerations & Other Trauma With Instrumentation	\$609.00	1.11	409	t-value
59	Medical & Anesthesia Obstetric Complications	\$1,239.00	2.8	646	
60	Major Puerperal Infection and Other Major Obstetric Complications	\$-625	-0.58	107	t-value
61	Other Complications of Obstetrical Surgical & Perineal Wounds	\$1,276.00	1.54	181	t-value
62	Delivery with Placental Complications	\$688.00	1.03	281	t-value
63	Post-Operative Respiratory Failure with Tracheostomy	\$103,152.00	62.65	46	Clinical
64	Other In-Hospital Adverse Events	\$5,354.00	10.89	509	Clinical
65	Urinary Tract Infection without Catheter	\$14,313.00	77.79	3794	
66	Catheter-Related Urinary Tract Infection	\$11,718.00	10.18	93	

Note: Yellow and Gray Shaded PPCs are excluded. Green shaded PPCs are also used for the improvement measurement.

## Appendix III. MHA MHAC Policy Change Considerations



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# DRAFT

### MHAC Payment Policy Changes

- Ensure we achieve waiver targets
  - Match payment policy metrics to waiver target metrics as closely as possible
  - Set targets and reward/penalty in advance—Eliminate scaling
  - Straightforward methodology and easy to monitor progress
  - Encourage cooperation and sharing of best practices
- DRAFT**
- Selecting PPCs on which to focus—asking for input from quality
    - Top 10 by dollar amount (Actual number of PPCs x PPC weight) + a few others
    - Sweet spot of high volume combined with high cost and ability to affect change
  - Setting statewide targets
    - How much would the state save and how many PPCs would be reduced if all hospitals performed at the 75<sup>th</sup> percentile (for example) on all of the target PPCs
  - Set targets for each hospital
    - Case-mix adjusted
    - May not expect same amount of improvement for each PPC—the improvement rate varies dramatically by PPC
    - Ability to improvement may depend on starting point—coding and documentation practices are highly influential for certain PPCs
- Create stepped or progressive targets tied to progressive earn back amounts

## Appendix IV: Revised PPC Measurement Detail

### *Definitions*

The PPC measure would then be defined as:

Observed (O)/Expected (E) value for each measure

The threshold value is the minimum performance level at which a hospital will be assigned points and is defined as:

Weighted mean of all O/E ratios (O/E =1)

*(Mean performance is measured at the case level. In addition, higher volume hospitals have more influence on PPCs' means.)*

The benchmark value is the performance level at which a full ten points would be assigned for a PPC and is defined as:

Weighted mean of top quartile O/E ratio

For PPCs that are never events, the benchmark will be set at 0.

### *Performance Points*

Performance points are given based on a range between "Benchmark" and a "Threshold", which are determined using the base year data. The Benchmark is a reference point defining a high level of performance, which is equal to the mean of the top quartile. Hospitals whose rates are equal to or above the benchmark receive 10 full Attainment points.

The Threshold is the minimum level of performance required to receive minimum Attainment points, which is set at the weighted mean of all the O/E ratios which equals to 1. The Improvement points are earned based on a scale between the hospital's prior year score (baseline) on a particular measure and the Benchmark and range from 0 to 9.

The formulas to calculate the Attainment and Improvement points are as follows:

- Attainment Points:  $[9 * ((\text{Hospital's performance period score} - \text{threshold}) / (\text{benchmark} - \text{threshold}))] + .5$ , where the hospital performance period score falls in the range from the threshold to the benchmark
- Improvement Points:  $[10 * ((\text{Hospital performance period score} - \text{Hospital baseline period score}) / (\text{Benchmark} - \text{Hospital baseline period score}))] - .5$ , where the hospital performance score falls in the range from the hospital's baseline period score to the benchmark



## Final Recommendation for Modifying the Maryland Hospital Acquired Condition (MHAC) Program

Tier A	Tier C
<b>Selected as high cost, high volume statewide plus those that match CMS HAC policy of AHRQ Patient Safety Indicators</b>	<b>Remaining PPCs</b>
<b>3 Acute Pulmonary Edema and Respiratory Failure without Ventilation</b>	<b>1 Stroke &amp; Intracranial Hemorrhage</b>
<b>4 Acute Pulmonary Edema and Respiratory Failure with Ventilation</b>	<b>2 Extreme CNS Complications</b>
<b>5 Pneumonia &amp; Other Lung Infections</b>	<b>12 Cardiac Arrhythmias &amp; Conduction Disturbances</b>
<b>6 Aspiration Pneumonia</b>	<b>13 Other Cardiac Complications</b>
<b>7 Pulmonary Embolism</b>	<b>15 Peripheral Vascular Complications Except Venous Thrombosis</b>
<b>9 Shock</b>	<b>20 Other Gastrointestinal Complications without Transfusion or Significant Bleeding</b>
<b>14 Ventricular Fibrillation/Cardiac Arrest</b>	<b>21 Clostridium Difficile Colitis</b>
<b>16 Venous Thrombosis</b>	<b>23 GU Complications Except UTI</b>
<b>24 Renal Failure without Dialysis</b>	<b>25 Renal Failure with Dialysis</b>
<b>28 In-Hospital Trauma and Fractures</b>	<b>26 Diabetic Ketoacidosis &amp; Coma</b>
<b>31 Decubitus Ulcer</b>	<b>29 Poisonings Except from Anesthesia</b>
<b>35 Septicemia &amp; Severe Infections</b>	<b>30 Poisonings due to Anesthesia</b>
<b>37 Post-Operative Infection &amp; Deep Wound Disruption Without Procedure</b>	<b>32 Transfusion Incompatibility Reaction</b>
<b>38 Post-Operative Wound Infection &amp; Deep Wound Disruption with Procedure</b>	<b>33 Cellulitis</b>
<b>40 Post-Operative Hemorrhage &amp; Hematoma without Hemorrhage Control Procedure or I&amp;D Proc</b>	<b>34 Moderate Infections</b>
<b>42 Accidental Puncture/Laceration During Invasive Procedure</b>	<b>36 Acute Mental Health Changes</b>
<b>49 Iatrogenic Pneumothorax</b>	<b>39 Reopening Surgical Site</b>
<b>54 Infections due to Central Venous Catheters</b>	<b>43 Accidental Cut or Hemorrhage During Other Medical Care</b>
<b>65 Urinary Tract Infection without Catheter</b>	<b>44 Other Surgical Complication - Mod</b>
<b>66 Catheter-Related Urinary Tract Infection</b>	<b>45 Post-procedure Foreign Bodies</b>
<b>Tier B</b>	<b>46 Post-Operative Substance Reaction &amp; Non-O.R. Procedure for Foreign Body</b>
<b>Selected as remaining PPCs with high Medicare percentage (&gt;60%) and high number of Maryland hospitals (&gt;43)</b>	<b>47 Encephalopathy</b>
<b>8 Other Pulmonary Complications</b>	<b>50 Mechanical Complication of Device, Implant &amp; Graft</b>
<b>10 Congestive Heart Failure</b>	<b>51 Gastrointestinal Ostomy Complications</b>
<b>11 Acute Myocardial Infarction</b>	<b>52 Inflammation &amp; Other Complications of Devices, Implants or Grafts Except Vascular Infection</b>
<b>17 Major Gastrointestinal Complications without Transfusion or Significant Bleeding</b>	<b>53 Infection, Inflammation &amp; Clotting Complications of Peripheral Vascular Catheters &amp; Infusions</b>
<b>18 Major Gastrointestinal Complications with Transfusion or Significant Bleeding</b>	<b>55 Obstetrical Hemorrhage without Transfusion</b>
<b>19 Major Liver Complications</b>	<b>56 Obstetrical Hemorrhage with Transfusion</b>
<b>27 Post-Hemorrhagic &amp; Other Acute Anemia with Transfusion</b>	<b>57 Obstetric Lacerations &amp; Other Trauma Without Instrumentation</b>
<b>41 Post-Operative Hemorrhage &amp; Hematoma with Hemorrhage Control Procedure or I&amp;D Proc</b>	<b>58 Obstetric Lacerations &amp; Other Trauma With Instrumentation</b>
<b>48 Other Complications of Medical Care</b>	<b>59 Medical &amp; Anesthesia Obstetric Complications</b>
	<b>60 Major Puerperal Infection and Other Major Obstetric Complications</b>
	<b>61 Other Complications of Obstetrical Surgical &amp; Perineal Wounds</b>
	<b>62 Delivery with Placental Complications</b>
	<b>63 Post-Operative Respiratory Failure with Tracheostomy</b>
	<b>64 Other In-Hospital Adverse Events</b>

**Appendix V. Medicare and Maryland Performance-based Payments Revenues at Risk and Calendar Year Calculations**

Program	Year	Medicare	Maryland
			<b>% Revenue at Risk</b>
	<b>FY 2009</b>		
VBP/QBR			<b>0.50%</b>
	<b>FY 2010</b>		
VBP/QBR			<b>0.50%</b>
	<b>FY 2011</b>		
VBP/QBR			0.50%
HAC/MHAC			0.50%
TOTAL			<b>1.00%</b>
	<b>FY 2012</b>		
VBP/QBR			0.50%
HAC/MHAC			1.00%
TOTAL			<b>1.50%</b>
	<b>FY 2013</b>		
VBP/QBR		1.00%	0.50%
HAC/MHAC			2.00%
HRRP		1.00%	
TOTAL		<b>2.00%</b>	<b>2.50%</b>
	<b>FY 2014</b>		
VBP/QBR		1.25%	0.50%
HAC/MHAC			2.00%
HRRP/Readmission Shared Savings		2.00%	0.41%
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
TOTAL		<b>3.25%</b>	<b>2.91%</b>
	<b>FY 2015</b>		
VBP/QBR		1.50%	0.50%
HAC/MHAC		1.00%	3.00%
HRRP/Readmission Shared Savings		3.00%	To be Proposed at May 2014 Commission Meeting
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
TOTAL		<b>5.50%</b>	<b>3.50%</b>

Final Recommendation for Modifying the Maryland Hospital Acquired Condition (MHAC) Program

Program	Year	Medicare	Maryland
			<b>% Revenue at Risk</b>
	<b>FY 2016</b>		
VBP/QBR		1.75%	1.00%
HAC/MHAC		1.00%	4.00%
HRRP/Readmission Shared Savings Program		3.00%	To be Proposed at May 2015 Commission Meeting
Readmission Reduction Incentive Program			0.50% (Proposed)
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
<b>Total</b>		<b>5.75%</b>	<b>5.50%</b>

**Waiver Calendar Year Calculations based on Existing and Proposed Policies**

	Medicare	Maryland	Cumulative Difference
CY 2014	3.8%	3.2%	-0.6%
CY 2015	5.6%	4.5%	-1.7%

**Appendix VI. MHA White Paper Submission on Quality Based Reimbursement Programs entitled “Quality-Related Payment Policies HSCRC Waiver Implementation February 28, 2014.”**

**NOTE: This submission also addresses the Final Recommendation for Implementing Readmissions Reduction Incentive Program for FY 2016 and is repeated in Appendix VI of that recommendation.**

**Appendix VI. List of Serious Reportable Events**

**MHA’s Recommendations for PPCs Appropriate for Setting Benchmark at Zero**

- In assessing which PPCs could have a benchmark set at zero, we looked to the [\*National Quality Forum’s Serious Reportable Events in Healthcare –2011 Update: A Consensus Report\*](#) to see how closely the PPC matched one of these events.
- The SREs are a group of NQF-endorsed consensus standards that are specifically aimed at improving patient safety. They were selected by a multi-stakeholder steering committee and evaluated according to three main criteria: unambiguous, largely preventable, and serious. The definition of “largely preventable” “recognizes that some of the events are not universally avoidable given the complexity of health care and current knowledge.” “Serious” is defined as “an event that can result in death, loss of a body part, disability, loss of bodily function, or require major intervention for correction (e.g., higher level of care, surgery).”
- We would recommend that the PPCs that could have benchmarks set at zero be referred to as “serious reportable events” rather than “never events,” to align with the NQF Consensus Standards.

PPC #	PPC Name	Statewide Volume October 2012 - September 2013	On NQF List	NQF SRE
PPC 32	Transfusion Incompatibility Reaction	1	No	4B <u>Patient death or serious injury associated with unsafe administration of blood products</u>
PPC 45	Post-procedure Foreign Bodies	21	Yes	1D Unintended retention of a foreign object in a patient after surgery or other invasive procedure
PPC 46	Post-operative Substance Reaction and Non- OR Procedure for Foreign Body	3	Yes	1D Unintended retention of a foreign object in a patient after surgery or other invasive procedure
PPC 31	Pressure Ulcer	121	Yes	4R Any Stage 3, Stage 4, and unstageable pressure ulcers acquired after admission/presentation to a health care setting

## Appendix VII. Performance Scoring Scale for FY 2016

Final MHAC Score	Equal or Below State Quality Target	Exceed State Quality Target
<b>=&lt;0.14</b>	<b>-4.00%</b>	<b>-1.00%</b>
0.15	-3.89%	-0.97%
0.16	-3.78%	-0.94%
0.17	-3.68%	-0.91%
0.18	-3.57%	-0.88%
0.19	-3.46%	-0.84%
0.20	-3.35%	-0.81%
0.21	-3.24%	-0.78%
0.22	-3.14%	-0.75%
0.23	-3.03%	-0.72%
0.24	-2.92%	-0.69%
0.25	-2.81%	-0.66%
0.26	-2.70%	-0.63%
0.27	-2.59%	-0.59%
0.28	-2.49%	-0.56%
0.29	-2.38%	-0.53%
0.30	-2.27%	-0.50%
0.31	-2.16%	-0.47%
0.32	-2.05%	-0.44%
0.33	-1.95%	-0.41%
0.34	-1.84%	-0.37%
0.35	-1.73%	-0.34%
0.36	-1.62%	-0.31%
0.37	-1.51%	-0.28%
0.38	-1.41%	-0.25%
0.39	-1.30%	-0.22%
0.40	-1.19%	-0.19%
0.41	-1.08%	-0.16%
0.42	-0.97%	-0.12%
0.43	-0.86%	-0.09%
0.44	-0.76%	-0.06%
0.45	-0.65%	-0.03%
0.46	-0.54%	0.00%
0.47	-0.43%	0.00%
0.48	-0.32%	0.00%
0.49	-0.22%	0.00%
0.50	-0.11%	0.00%
0.51	0.00%	0.00%

Final Recommendation for Modifying the Maryland Hospital Acquired Condition (MHAC) Program

Final MHAC Score	Equal or Below State Quality Target	Exceed State Quality Target
....	0.00%	0.00%
0.61	0.00%	0.07%
0.62	0.00%	0.14%
0.63	0.00%	0.21%
0.64	0.00%	0.29%
0.65	0.00%	0.36%
0.66	0.00%	0.43%
0.67	0.00%	0.50%
0.68	0.00%	0.57%
0.69	0.00%	0.64%
0.70	0.00%	0.71%
0.71	0.00%	0.79%
0.72	0.00%	0.86%
0.73	0.00%	0.93%
<b>0.74</b> =<	<b>0.00%</b>	<b>1.00%</b>

<b>Penalty threshold:</b>	<b>0.51</b>	<b>0.46</b>
<b>Reward Threshold</b>	<b>No rewards</b>	<b>0.60</b>

Appendix VIII. Scaling Modeling for FY 2016

Hospital ID	Hospital Name	FY 2014 CR/CPE Revenue*	Base CY13 Score	Projected MHAC SCORE For Performance Year with 8% Improvement	% Adjustment	\$ Adjustment	Scenario 1: Scaling for Below State Quality Target of 8%	Projected MHAC SCORE For Performance Year with 12% Improvement	% Adjustment	\$ Adjustment	Scenario 2: Scaling for Exceed Target of 8% Improvement	\$ Adjustment
	MAXIMUM PENALTY				-4.00%	\$			-1.00%	\$		
210022	SUBURBAN	\$151,177,296	0.14	0.22	-3.14%	\$	(4,729,613)	0.27	-0.59%	\$	(897,615)	
210028	HOWARD COUNTY	\$146,791,098	0.19	0.27	-2.59%	\$	(3,808,634)	0.31	-0.47%	\$	(688,083)	
210019	PENNSILVA REGIONAL	\$219,461,838	0.20	0.28	-2.49%	\$	(5,456,889)	0.33	-0.41%	\$	(891,564)	
210009	JOHNS HOPKINS	\$807,708,394	0.21	0.28	-2.49%	\$	(20,083,560)	0.33	-0.41%	\$	(3,281,315)	
210044	G.B.M.C.	\$184,989,402	0.21	0.29	-2.38%	\$	(4,399,748)	0.34	-0.38%	\$	(693,710)	
210001	WERTHUS	\$165,746,592	0.22	0.29	-2.38%	\$	(3,942,081)	0.35	-0.34%	\$	(569,754)	
210040	NORTHWEST	\$121,348,486	0.22	0.30	-2.27%	\$	(2,754,939)	0.36	-0.31%	\$	(379,214)	
210012	SINAL	\$362,977,920	0.24	0.31	-2.16%	\$	(7,848,171)	0.37	-0.28%	\$	(1,020,875)	
210024	UNION MEMORIAL	\$215,726,275	0.25	0.33	-1.95%	\$	(4,197,917)	0.38	-0.25%	\$	(539,316)	
210004	HOUY GROSS	\$276,326,064	0.27	0.35	-1.73%	\$	(4,779,694)	0.40	-0.19%	\$	(518,111)	
210002	UNIVERSITY OF MARYLAND	\$600,197,666	0.28	0.37	-1.51%	\$	(9,084,073)	0.40	-0.19%	\$	(1,125,371)	
210003	BALTIMORE WASHINGTON MEDICAL CENTER	\$184,662,660	0.28	0.35	-1.73%	\$	(3,194,165)	0.41	-0.16%	\$	(288,535)	
210003	UMST. JOSEPH	\$180,611,979	0.28	0.34	-1.84%	\$	(3,319,355)	0.41	-0.16%	\$	(282,206)	
210062	SOUTHERN MARYLAND	\$145,134,232	0.29	0.36	-1.62%	\$	(2,353,528)	0.42	-0.13%	\$	(181,418)	
210006	HARFORD	\$42,495,040	0.31	0.38	-1.41%	\$	(597,228)	0.42	-0.13%	\$	(53,119)	
210008	MERCY	\$191,348,526	0.31	0.38	-1.41%	\$	(2,697,655)	0.44	-0.06%	\$	(119,968)	
210029	HOPKINS BAYVIEW MEDCTR	\$248,923,504	0.32	0.40	-1.19%	\$	(2,960,171)	0.44	-0.06%	\$	(155,577)	
210099	UPPER CHESAPEAKE HEALTH	\$115,418,544	0.32	0.41	-1.08%	\$	(1,247,768)	0.44	-0.06%	\$	(172,137)	
210088	REHAB & ORTHO	\$45,850,528	0.32	0.40	-1.19%	\$	(545,250)	0.44	-0.06%	\$	(28,657)	
210022	UNION HOSPITAL OF CECIL COUNTY	\$60,653,880	0.34	0.41	-1.08%	\$	(655,718)	0.45	-0.03%	\$	(18,954)	
210051	DOCTORS COMMUNITY	\$119,486,136	0.34	0.40	-1.19%	\$	(1,420,916)	0.45	-0.03%	\$	(37,339)	
210023	ANNE ARUNDEL	\$250,956,754	0.35	0.42	-0.97%	\$	(2,441,741)	0.46	0.00%	\$	-	
210027	WESTERN MARYLAND HEALTH SYSTEM	\$159,433,379	0.35	0.43	-0.86%	\$	(1,378,883)	0.47	0.00%	\$	-	
210005	FREDERICK MEMORIAL	\$169,309,101	0.36	0.42	-0.97%	\$	(1,647,332)	0.47	0.00%	\$	-	
210010	DORCHESTER	\$28,755,684	0.36	0.43	-0.86%	\$	(248,698)	0.47	0.00%	\$	-	
210018	MONTGOMERY GENERAL	\$79,741,456	0.36	0.44	-0.76%	\$	(603,449)	0.48	0.00%	\$	-	
210033	CARROLL COUNTY	\$118,189,180	0.37	0.43	-0.86%	\$	(1,022,177)	0.48	0.00%	\$	-	
210015	FRANKLIN SQUARE	\$241,740,018	0.38	0.45	-0.65%	\$	(1,568,043)	0.49	0.00%	\$	-	
210037	EASTON	\$82,689,144	0.39	0.47	-0.43%	\$	(357,575)	0.50	0.00%	\$	-	
210016	WASHINGTON ADVENTIST	\$155,025,406	0.40	0.47	-0.43%	\$	(670,337)	0.50	0.00%	\$	-	
210011	ST. AGNES	\$209,768,089	0.44	0.51	0.00%	\$	-	0.54	0.00%	\$	-	
210044	HARBOR	\$116,221,680	0.45	0.51	0.00%	\$	-	0.55	0.00%	\$	-	
210055	LAUREL REGIONAL	\$53,358,994	0.45	0.53	0.00%	\$	-	0.57	0.00%	\$	-	
210033	PRINCE GEORGE	\$163,205,581	0.46	0.52	0.00%	\$	-	0.57	0.00%	\$	-	
210038	UMMC MDTOWN	\$105,819,110	0.46	0.53	0.00%	\$	-	0.57	0.00%	\$	-	
210060	FT. WASHINGTON	\$16,249,592	0.50	0.57	0.00%	\$	-	0.60	0.00%	\$	-	
210039	CALVERT	\$57,493,422	0.51	0.58	0.00%	\$	-	0.61	0.07%	\$	41,067	
210057	SHADY GROVE	\$195,220,023	0.51	0.57	0.00%	\$	-	0.61	0.07%	\$	139,479	
210028	ST. MARY	\$53,846,970	0.52	0.57	0.00%	\$	-	0.62	0.14%	\$	76,924	
210035	CHARLES REGIONAL	\$60,720,370	0.53	0.60	0.00%	\$	-	0.64	0.29%	\$	173,630	
210066	GOOD SAMARITAN	\$172,932,011	0.56	0.63	0.00%	\$	-	0.66	0.43%	\$	741,137	
210013	BON SECOURS	\$70,685,898	0.61	0.68	0.00%	\$	-	0.69	0.64%	\$	454,409	
210061	ATLANTIC GENERAL	\$33,780,340	0.64	0.69	0.00%	\$	-	0.71	0.79%	\$	265,417	
210017	GARRETT COUNTY	\$17,951,439	0.69	0.74	0.00%	\$	-	0.76	1.00%	\$	179,514	
210005	MCCREARY	\$4,512,494	0.71	0.77	0.00%	\$	-	0.78	1.00%	\$	45,125	
210030	CHESTEROWN	\$26,318,692	0.74	0.79	0.00%	\$	-	0.82	1.00%	\$	263,187	
Penalty							-\$100,025,306					-\$11,842,839
Reward							\$0					\$2,379,889



# Final Recommendation for Implementing a Hospital Readmission Reduction Incentive Program for FY 2016

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**Health Services Cost Review Commission**  
**4160 Patterson Avenue Baltimore, MD 21215**  
**(410) 764-2605**

**April 9, 2014**

This document contains the final staff recommendations for implementing a Readmission Reduction Incentive Program for FY 2016.

### A. Introduction

The United States health care system currently experiences an unacceptably high rate of unnecessary hospital readmissions. These excessive readmissions are a symptom of our fragmented payment system and result in considerable unnecessary cost and substandard care quality. The purpose of this document is to describe one of the components of a proposed Readmission Reduction Incentive program designed to provide incentives for hospitals to improve overall care coordination and substantially reduce readmissions.

There are a number of economic and environmental factors motivating this effort – including the passage of National Health Insurance reform and concerns about the affordability of care and financial sustainability of our current health care system. Dramatic slowing in hospital volume growth and the Commission’s need to mirror tight updates nationally have also brought many to the realization that we must look for other ways to ensure the financial sustainability of Maryland’s hospital/health system.

Commensurate with these events is a recognized need to transition our health care delivery system toward a more coordinated care model, focusing on promoting health of populations and, at the same time, improving efficiency and quality of the care delivered.

Maryland’s readmission rates are high compared to the nation. The Center for Medicare and Medicaid Innovation (CMMI) All-payer model demonstration contract, which began on January 1, 2014, has established readmission reduction targets that require Maryland hospitals to be equal or below rates of Medicare readmissions by 2018. In order to enhance our ability to incentivize hospital care improvements and meet the target, the Commission has convened four meetings of the Performance Measurement Workgroup to vet a proposed methodology and deliberate near-term issues related to providing incentives to reduce readmissions.

### B. Background

Since the inception of hospital rate regulation in Maryland, the HSCRC has experimented with innovative methods of hospital reimbursement. Pursuant to the provisions of Health-General Article, Section 19-219 and COMAR 10.37.10.06, the Commission may approve experimental payment methodologies that are consistent with the HSCRC’s legislative mandate to promote effective and efficient health service delivery and primary policy objectives of cost containment, expanded access to care, equity in payment, financial stability, improved quality, and public accountability.

Our fragmented system for reimbursing health services in this country, for the most part, has provided large disincentives for hospitals and other providers to construct efficient and effective coordinated care models. To address these deficiencies, the HSCRC has implemented episode-based reimbursement and broad-based quality of care Pay-for-Performance (“P4P”) methods designed to promote lower cost and higher quality care.

The Global Budget Revenue (GBR), Total Patient Revenue, (TPR) and Admission Readmission Revenue (ARR) arrangements impose a constraint on the amount of revenue a hospital may generate during a particular year. Of note, lacking the ability to assign patients unique patient

identifiers, the ARR program measures and bundles payments for readmissions that occur within the same hospital only. Hospitals are paid HSCRC approved unit rates – rates based on the units of service provided for any given case. In May 2013, the Commission approved a Shared Savings Policy where hospital revenues are adjusted by 0.3% of inpatient revenues to provide similar cost savings as the federal Centers for Medicare and Medicaid Services (CMS) Readmission Reduction program. Hospitals’ unit rates are updated on an annual basis per the Commission’s normal inflation update process, with any associated adjustments for price compliance, case mix change, volume change, and MHAC and QBR scaling provisions; this recommendation proposes adding an additional positive incentive adjustment for high performing hospitals that meet pre-determined reduction targets for readmissions.

## C. Assessment

### 1. Maryland’s High Readmission Rates

Figure 1 reviews the status of Maryland hospitals compared to all US hospitals using CMS' FY2013 IPPS Final Rule: Hospital Readmissions Reduction Program-Supplemental Data (Revised March 2013).

**Figure 1: Maryland Hospitals Ranked By Excess Readmissions in CMS' Hospital Readmissions Reduction Program\***

National Quartiles: Hospital Ranked From Least to Most Excess Readmissions	Excess Readmissions Due To:		
	Pneumonia	Heart Failure	Heart Attack
Quartile 1 (Least Excess Readmissions)	4 (9%)	4 (9%)	2 (5%)
Quartile 2	4 (9%)	6 (14%)	7 (19%)
Quartile 3	7 (16%)	14 (32%)	10 (27%)
<b>Quartile 4 (Most Excess Readmissions)</b>	<b>29 (66%)</b>	<b>20 (45%)</b>	<b>18 (49%)</b>
<b>Total hospitals included in analysis</b>	3,123	3,110	2,262

**Source:** HSCRC analysis of CMS Readmission data, April 2013.

**Note:** Based on CMS data from July 1, 2008 to June 30, 2011. Some Maryland hospital did not have enough cases for CMS to calculate excess readmission figures (pneumonia= 1 hospital, health failure=1 hospital, heart attack=8 hospitals).

As illustrated in Figure 1, the majority of Maryland hospitals were ranked below the national average for Medicare’s Hospital Readmission indicators, and many were in the lowest 25 percent. Four Maryland hospitals were ranked in the worst 100 hospitals in the nation for each of the three indicators. For pneumonia readmissions, one-fifth of Maryland hospitals (n=9) were ranked among the worst 200 hospitals in the nation for excess readmissions.

Based on data HSCRC has received from the Colorado Foundation for Medical Care on Medicare readmissions in CY 2012, Maryland continues to perform poorly and has one of the highest readmission rates of all states. In addition, quarterly trend data from the Delmarva Foundation through September 2013 on Medicare readmissions continue to reveal that Maryland’s readmission rate is substantially higher than the national average.

### *2. Master Patient Index Enables Measurement of Across-Hospital Readmissions*

Since HSCRC does not collect sufficient patient level data indicators to identify patients across care settings, staff has worked with the Chesapeake Regional Information System for our Patients (CRISP) to assign patients in our data set unique patient identifiers using the CRISP Master Patient Index technology. HSCRC is now able to match patients across hospitals and calculate reliable inter-hospital readmission rates.

### *3. Readmissions Reduction Incentive Program Guiding Principles*

Staff vetted the guiding principles for implementing incentives to reduce readmissions listed below with the Performance Measurement Workgroup.

- Measurement used for performance linked with payment must include all patients regardless of payer.
- Measurement must be fair to hospitals.
- A first year target must be established to reasonably support the overall goal of equal or less than the National Medicare readmission rate by CY 2018.
- Measure specifications used for the program should be consistent with the CMS measure of readmissions (also used by Partnership for Patients Program).

### *4. Key Methodology Components that Support the Guiding Principles*

The key methodology components of the proposed readmission reduction program vetted with the Workgroup are described below. (See Appendix I for Complete Measure Calculation Specifications and Appendix VII for FY 2013 Results).

- **Readmission definition-** Total readmissions/total admissions to any acute hospital<sup>1</sup>
- **Broad patient inclusion-** For greater impact and potential for reaching the target the measure should include all payers and any acute hospital readmission in the state. Staff examined the relationship between improvements in all-payer readmission rates and Medicare readmission rates since the CMMI contract is based on Medicare readmission rates only. The analysis indicated that there is a strong correlation between the Medicare and all-payer measures (Appendix IV).
- **Patient exclusion adjustments-** To enhance fairness of the methodology, planned admissions (using the CMS Algorithm V 2.1) and deliveries should be excluded from readmission counts.
- **Positive incentive-** For hospitals that reach or exceed the goal, they have the opportunity to earn the incentive.
- **Performance measurement consistent across hospitals-** A uniform achievement benchmark for all hospitals will be established for the first year, and performance will be measured cumulatively for future years. The Workgroup discussed using a segmented approach, where hospitals with high readmission rates would be required to have higher benchmarks for improvement. Staff examined whether hospitals with high readmission rates in the base year had higher reductions in the following year using intra-hospital readmissions and did

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<sup>1</sup> Discharge can both be initial and readmission; one readmission within 30 days is counted; transfers are combined into a single stay; and the 30-day period starts at the end of the combined stay, Left against medical advice is also included in the index. Admissions with discharge status of "Died" are excluded.

## Final Recommendation for Implementing a Hospital Readmission Reduction Incentive Program

not find a significant impact of base year readmission rates on readmission reductions the following year (Appendix V). Given the debate whether socio-economic and demographic factors should be used in readmission risk adjustment and that arguments could be made to lower readmission targets for high readmission hospitals if they serve hard to reach populations, staff recommends using a uniform achievement benchmark for all hospitals.

- **Monitor for unintended consequences-** Observation and ED visits within 30 Days of an inpatient stay will be monitored; adjustments to the positive incentive will be made if observation cases within 30 days increase faster than the other observations in a given hospital.

### 5. Readmission Reduction Target, Revenue at Risk for Positive Incentive

Setting targets annually for the next five years is problematic as there are no national projected numbers for admissions or readmissions nor are there projected reduction targets. Therefore, staff has modeled and is recommending a one year target we believe is not overly aggressive but may have potential to incrementally close the large gap that must be bridged in five years. According to the (CMMI) all-payer model demonstration contract, “If in a given Performance Year Regulated Maryland Hospitals, in aggregate, fail to outperform the national Readmissions Rate change by an amount equal to or greater than the cumulative difference between the Regulated Maryland Hospital and national Readmission Rates in the base period divided by five, CMS shall follow the corrective action and/or termination provisions of the Waiver of Section 1886(q) as set forth in Section 4.c and in Section 14.”

As illustrated in Figure 2 below, if a 5% annual reduction in Medicare readmissions is assumed, for FY 2014, reaching a 6.76% reduction target would enable Maryland to begin to close the gap between Maryland and the nation.

**Figure 2. FY 2014 Readmission Reduction Target with 5% Medicare Reduction Modeled**

	National Medicare					Maryland Medicare					MD- US Difference
	Admissions	Readmissions	% Readmissions	Percentage Point Change	Percent Change in Rate of Readmits	Admissions	Readmissions	% Readmissions	Percentage Point Change	Percent Change in Rate of Readmits	
FY2010	11,043,196	2,049,473	18.56%			253,320	54,019	21.32%			14.9%
FY2011	11,129,694	2,070,250	18.60%	0.04%	0.22%	248,731	52,032	20.92%	-0.40%	-1.88%	12.5%
FY2012	10,857,862	1,991,886	18.35%	-0.25%	-1.34%	241,681	49,100	20.32%	-0.60%	-2.87%	10.7%
FY2013	10,458,098	1,847,036	17.66%	-0.69%	-3.76%	235,532	45,244	19.21%	-1.11%	-5.46%	8.8%
FY 2014			16.78%	-0.88%	-5.00%			17.91%	-1.30%	-6.76%	6.8%
CY 2014			16.34%	-1.32%	-7.50%			17.26%	-1.95%	-10.13%	5.7%

In addition to a reduction target, CMMI requires that all Maryland performance programs linked with payment have revenues at risk comparable to the national programs. Appendix III compares Maryland with Medicare revenue magnitudes at risk for each program for FYs 2015-17 and illustrates Maryland designating 0.5% as a positive incentive for reaching readmission reduction targets.

## Final Recommendation for Implementing a Hospital Readmission Reduction Incentive Program

For Maryland's Readmission Reduction Incentive Program, staff believes the amount must not be overly aggressive but sufficient to incentivize positive behavior change and contribute to meeting or exceeding the CMS percentages of revenue at risk.

In its written submission to HSCRC's call for white papers on Quality Based Reimbursement, MHA submitted an alternative proposal for a readmission reduction program. MHA's full white paper submission entitled "Quality-Related Payment Policies HSCRC Waiver Implementation February 28, 2014" is in Appendix VI.

### **D. Recommendations**

As part of the FY 2015 update, the recommendations for the Readmission Shared Savings program will be proposed in May Commission meeting. Staff provides the following recommendations for a new readmission reduction incentive program that would have CY 2014 performance applied to rate year 2016:

1. The Commission should implement a Readmissions Reduction Incentive Program.
2. The CMS readmission measure definition specifications should be used with limited adjustments to enhance the fairness of the measure.
3. The annual target for the first performance year, CY 2014, should be based on an all-payer readmission rate.
4. The risk adjusted readmission reduction target for the first year, CY 2014, should be a 6.76% compared to CY 2013 risk adjusted readmission rates. The readmission reduction target will be determined annually.
5. A positive incentive magnitude of up to 0.5% of the hospital's inpatient permanent revenue should be provided for hospitals that meet or exceed the target set forth in recommendation 4, provided that the FY 2016 update factor has favorable conditions.

## Appendix I. HSCRC Methodology for Readmissions FY2016

### READMISSIONS

FY2013 inpatient data, with EIDs (base year), was used to calculate the readmission rates for all-payer and Medicare patients.

### EXCLUSIONS

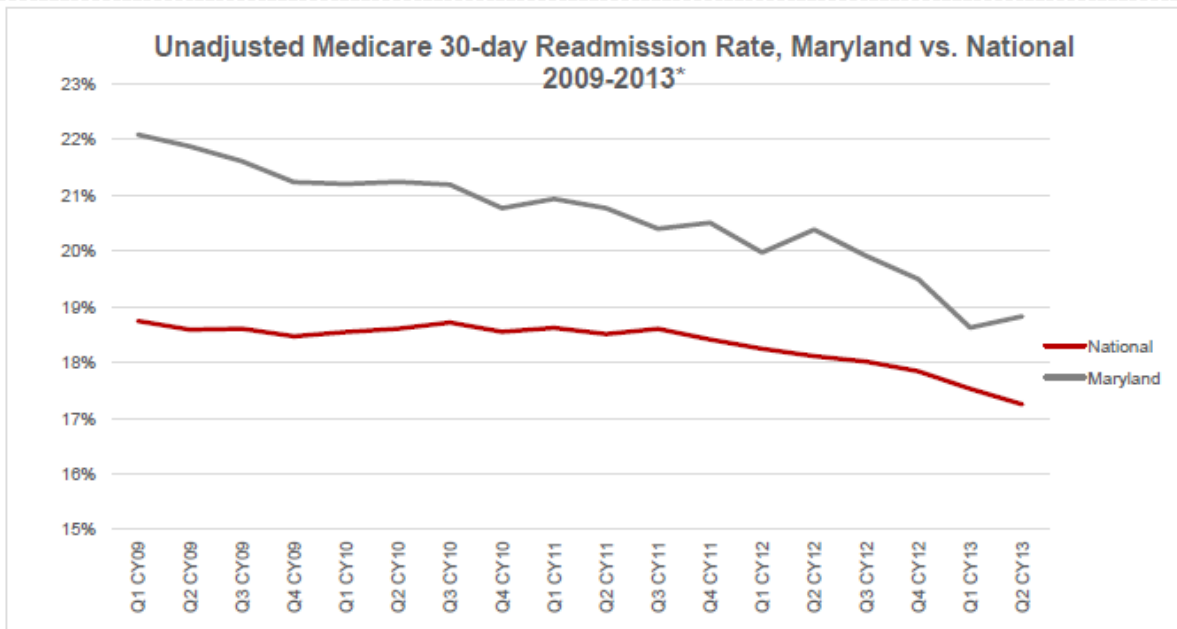
The following were removed from the readmission rate calculations:

1. Rehab hospitals (provider ids 213028,213029, 213300)
2. Cases with null or missing EIDs
3. Duplicates
4. Negative interval days
5. For risk adjustment, based on admission DRGs, exclude DRG and SOI cells with < 2
6. Exclude those who have died (from denominator) and those with same day transfers (interval days = 0) (from readmissions)

### RESULTS

1. Two numerators (readmissions within 30 days of a hospitalization)
  - a. Unadjusted readmissions (comparable to CMS)
  - b. Adjusted readmissions (exclude planned admissions, based on the Clinical Classification System (CCS) to flag planned admissions)
2. Denominator – Total number of discharges
3. Expected Readmissions based on Discharge DRG and Severity of Illness.
4. Calculate Ratio – Adjusted readmissions / expected readmissions
5. Risk Adjusted Readmission Rate – Ratio\*Overall state rate

Appendix II. Medicare Readmissions Quarterly Trend Data from the Delmarva Foundation



	CY 2009		CY 2010		CY 2011		CY 2012		CY 2013*	
	Maryland	National	Maryland	National	Maryland	National	Maryland	National	Maryland	National
Admissions	256,702	11,073,489	250,750	11,100,099	246,407	11,042,259	238,001	11,042,259	119,320	5,241,930
Readmissions	55,741	2,060,324	52,926	2,065,268	50,915	2,047,174	47,474	1,930,871	22,343	911,769
% Readmissions	21.71%	18.61%	21.11%	18.61%	20.66%	18.54%	19.95%	17.49%	18.73%	17.39%



Final Recommendation for Implementing a Hospital Readmission Reduction Incentive Program

**Appendix III. Maryland Performance Based Revenue at Risk Percentages 2009-FY2016  
(Proposed)**

Program	Year	Medicare	Maryland
			<b>% Revenue at Risk</b>
	<b>FY 2009</b>		
VBP/QBR			<b>0.50%</b>
	<b>FY 2010</b>		
VBP/QBR			<b>0.50%</b>
	<b>FY 2011</b>		
VBP/QBR			0.50%
HAC/MHAC			0.50%
TOTAL			<b>1.00%</b>
	<b>FY 2012</b>		
VBP/QBR			0.50%
HAC/MHAC			1.00%
TOTAL			<b>1.50%</b>
	<b>FY 2013</b>		
VBP/QBR		1.00%	0.50%
HAC/MHAC			2.00%
HRRP		1.00%	
TOTAL		<b>2.00%</b>	<b>2.50%</b>
	<b>FY 2014</b>		
VBP/QBR		1.25%	0.50%
HAC/MHAC			2.00%
HRRP/Readmission Shared Savings		2.00%	0.41%
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
TOTAL		<b>3.25%</b>	<b>2.91%</b>
	<b>FY 2015</b>		
VBP/QBR		1.50%	0.50%
HAC/MHAC		1.00%	3.00%
HRRP/Readmission Shared Savings		3.00%	To be Proposed at May 2014 Commission Meeting
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
TOTAL		<b>5.50%</b>	<b>3.50%</b>

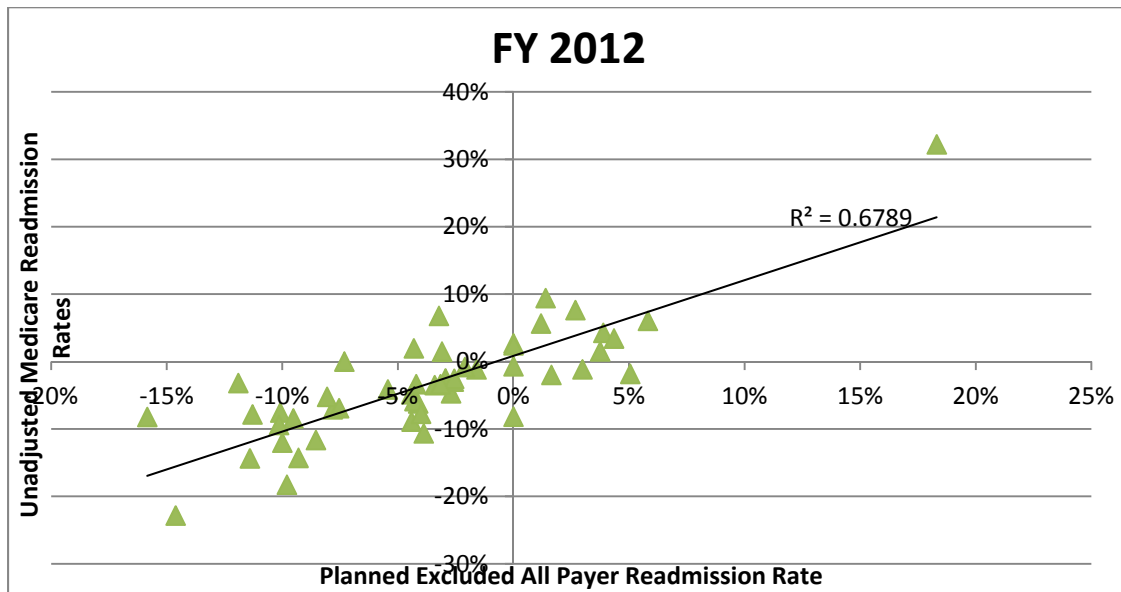
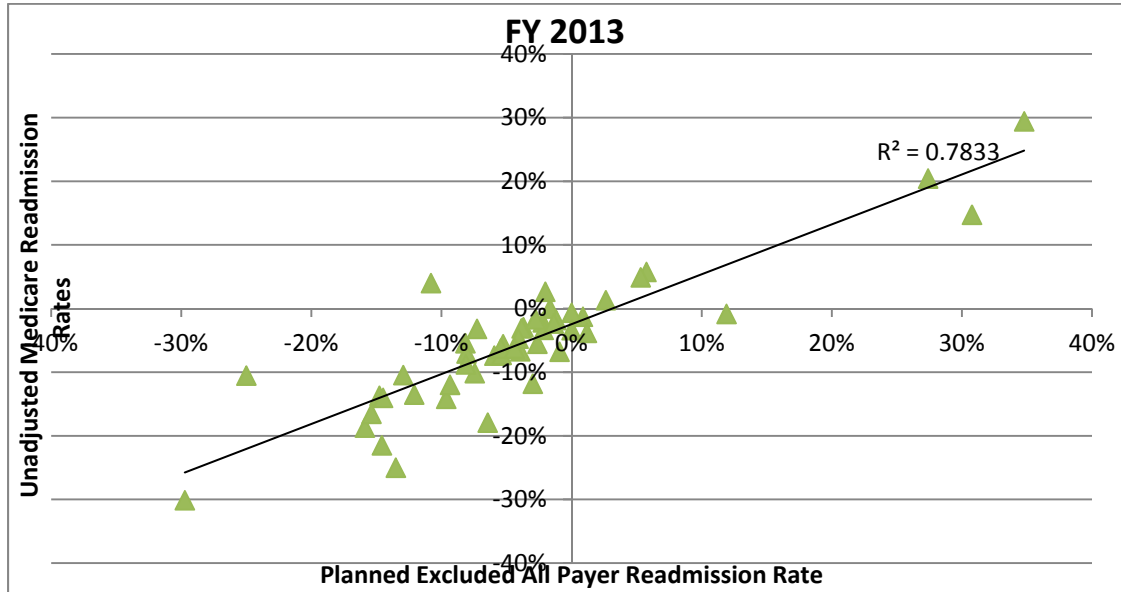
## Final Recommendation for Implementing a Hospital Readmission Reduction Incentive Program

Program	Year	Medicare	Maryland
			<b>% Revenue at Risk</b>
	<b>FY 2016</b>		
VBP/QBR		1.75%	1.00%
HAC/MHAC		1.00%	4.00%
HRRP/Readmission Shared Savings Program		3.00%	To be Proposed at May 2015 Commission Meeting
Readmission Reduction Incentive Program			0.50% (Proposed)
GBR Potentially Avoidable Utilization Efficiency Adjustment			To be Determined after the Completion of GBR contracts
GBR Cost Efficiency Constraint			To be Determined after the Completion of GBR contracts
<b>Total</b>		<b>5.75%</b>	<b>5.50%</b>

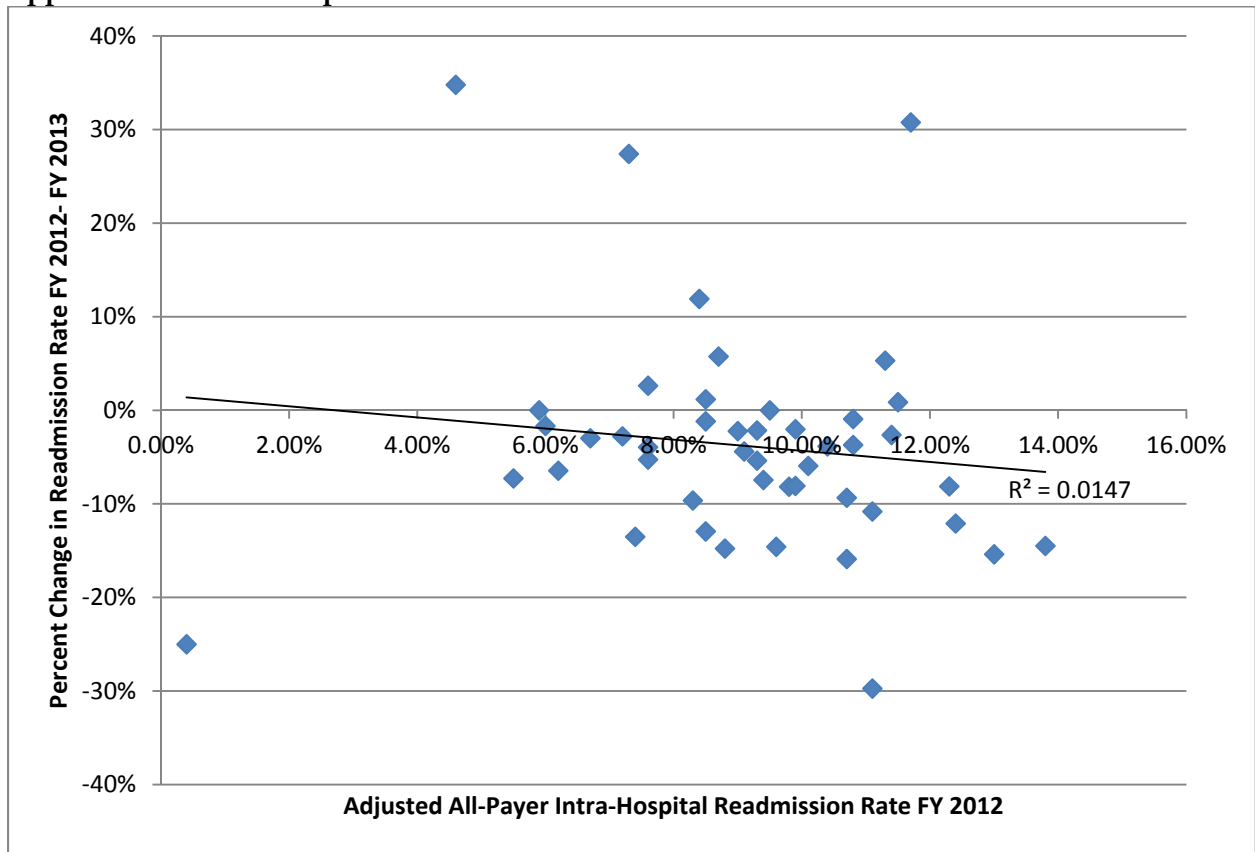
### Waiver Calendar Year Calculations based on Existing and Proposed Policies

	Medicare	Maryland	Cumulative Difference
CY 2014	3.8%	3.2%	-0.6%
CY 2015	5.6%	4.5%	-1.7%

Appendix IV. Annual Percent Change in Readmission Rates: All-Payer vs Medicare



Appendix V. Rate of Improvement and Base Year Readmission Rate



**Appendix VI. MHA White Paper Submission on Quality Based Reimbursement Programs entitled “Quality-Related Payment Policies HSCRC Waiver Implementation February 28, 2014.”**

**NOTE: This submission also addresses the Draft Recommendation for Modifying the Maryland Hospital Acquired Conditions Programs for FY 2016 and is repeated in Appendix VI of that draft recommendation.**

Final Recommendation for Implementing a Hospital Readmission Reduction Incentive Program

Appendix VII. FY 2013 All Payer All Hospital Readmission Rates

HOSPITAL ID	HOSPITAL NAME	TOTAL NUMBER OF HOSPITAL DISCHARGES in DENOMINATOR	TOTAL NUMBER OF UNADJUSTED READMISSIONS	UNADJUSTED READMISSIONS PERCENT	TOTAL NUMBER OF READMISSIONS EXCLUDING PLANNED ADMISSIONS	READMISSIONS EXCLUDING PLANNED ADMISSIONS, PERCENT	TOTAL NUMBER OF EXPECTED READMISSIONS	RATIO = ADJUSTED READMISSIONS / EXPECTED READMISSIONS	RISK ADJUSTED RATE
210017	GARRETT COUNTY	2,247	166	7.39%	156	6.94%	245	0.64	8.02%
210039	CALVERT	7,528	744	9.88%	695	9.23%	906	0.77	9.65%
210003	PRINCE GEORGE	11,951	1,205	10.08%	1,113	9.31%	1,391	0.80	10.05%
210019	PENINSULA REGIONAL	19,148	2,299	12.01%	2,039	10.65%	2,444	0.83	10.48%
210032	UNION HOSPITAL OF CECIL COUNT	6,115	726	11.87%	706	11.55%	843	0.84	10.53%
210037	EASTON	8,470	892	10.53%	806	9.52%	962	0.84	10.53%
210005	FREDERICK MEMORIAL	19,043	2,131	11.19%	1,986	10.43%	2,339	0.85	10.67%
210044	G.B.M.C.	20,319	1,901	9.36%	1,680	8.27%	1,976	0.85	10.68%
210022	SUBURBAN	12,638	1,635	12.94%	1,534	12.14%	1,771	0.87	10.89%
210061	ATLANTIC GENERAL	2,799	422	15.08%	399	14.26%	461	0.87	10.89%
210001	MERITUS	16,506	1,900	11.51%	1,746	10.58%	1,998	0.87	10.98%
210010	DORCHESTER	2,403	382	15.90%	365	15.19%	415	0.88	11.04%
210057	SHADY GROVE	24,918	2,270	9.11%	2,076	8.33%	2,337	0.89	11.17%
210004	HOLY CROSS	34,880	2,876	8.25%	2,628	7.53%	2,932	0.90	11.26%
210006	HARFORD	4,700	772	16.43%	739	15.72%	807	0.92	11.51%
210062	SOUTHERN MARYLAND	15,587	2,081	13.35%	1,899	12.18%	2,069	0.92	11.54%
210016	WASHINGTON ADVENTIST	13,547	1,733	12.79%	1,634	12.06%	1,773	0.92	11.58%
210049	UPPER CHESAPEAKE HEALTH	13,367	1,680	12.57%	1,544	11.55%	1,667	0.93	11.64%
210048	HOWARD COUNTY	18,356	1,997	10.88%	1,812	9.87%	1,930	0.94	11.80%
210033	CARROLL COUNTY	11,963	1,534	12.82%	1,439	12.03%	1,519	0.95	11.91%
210018	MONTGOMERY GENERAL	8,851	1,231	13.91%	1,152	13.02%	1,214	0.95	11.92%
210063	UM ST. JOSEPH	16,582	1,981	11.95%	1,784	10.76%	1,879	0.95	11.94%
210051	DOCTORS COMMUNITY	10,405	1,762	16.93%	1,660	15.95%	1,739	0.96	12.00%
210035	CHARLES REGIONAL	8,194	1,092	13.33%	1,040	12.69%	1,087	0.96	12.03%
210023	ANNE ARUNDEL	31,585	3,067	9.71%	2,755	8.72%	2,864	0.96	12.09%
210058	REHAB & ORTHO	2,680	351	13.10%	311	11.60%	322	0.97	12.15%
210028	ST. MARY	8,388	1,043	12.43%	1,000	11.92%	1,007	0.99	12.48%
210055	LAUREL REGIONAL	6,230	780	12.52%	752	12.07%	740	1.02	12.77%
210015	FRANKLIN SQUARE	23,282	3,294	14.15%	3,050	13.10%	2,983	1.02	12.85%
210027	WESTERN MARYLAND HEALTH SYS	13,147	1,843	14.02%	1,657	12.60%	1,618	1.02	12.87%
210045	MCCREADY	259	50	19.31%	48	18.53%	46	1.04	13.02%
210011	ST. AGNES	18,461	2,602	14.09%	2,461	13.33%	2,332	1.06	13.26%
210012	SINAI	25,677	4,093	15.94%	3,662	14.26%	3,445	1.06	13.36%
210034	HARBOR	9,486	1,240	13.07%	1,171	12.34%	1,088	1.08	13.52%
210008	MERCY	19,128	2,286	11.95%	2,054	10.74%	1,898	1.08	13.60%
210002	UNIVERSITY OF MARYLAND	32,496	5,834	17.95%	4,935	15.19%	4,547	1.09	13.64%
210060	FT. WASHINGTON	2,092	346	16.54%	335	16.01%	306	1.10	13.77%
210009	JOHNS HOPKINS	47,162	8,760	18.57%	7,417	15.73%	6,682	1.11	13.95%
210024	UNION MEMORIAL	13,357	2,347	17.57%	2,226	16.67%	2,005	1.11	13.95%
210043	BALTIMORE WASHINGTON MEDICAL	18,389	3,156	17.16%	2,925	15.91%	2,616	1.12	14.05%
210056	GOOD SAMARITAN	12,321	2,480	20.13%	2,334	18.94%	2,080	1.12	14.11%
210030	CHESTERTOWN	2,060	398	19.32%	377	18.30%	335	1.12	14.13%
210040	NORTHWEST	12,539	2,401	19.15%	2,311	18.43%	2,040	1.13	14.24%
210029	HOPKINS BAYVIEW MED CTR	21,072	3,561	16.90%	3,342	15.86%	2,876	1.16	14.61%
210038	UMMC MIDTOWN	7,192	1,560	21.69%	1,520	21.13%	1,217	1.25	15.70%
210013	BON SECOURS	5,611	1,603	28.57%	1,555	27.71%	1,080	1.44	18.10%
<b>STATE</b>		<b>643,131</b>	<b>88,507</b>	<b>13.76%</b>	<b>80,830</b>	<b>12.57%</b>	<b>80,830</b>	<b>1</b>	







# **DRAFT: Report on Balanced Update and Short Term Adjustments**

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**Health Services Cost Review Commission  
4160 Patterson Avenue Baltimore, MD 21215  
(410) 764-2605**

**April 9, 2014**

This document contains the draft report from the Payment Models Work Group for creating a balanced update for FY 2015 and addressing short term adjustments within the context of the All-Payer Model

## **DRAFT: Report on Balanced Update and Short-Term Adjustments**

### **INTRODUCTION**

#### **Overview**

On July 1 of each year, the HSCRC updates hospitals' rates and approved revenues to account for inflation, policy adjustments, and other adjustments related to performance and settlements from the prior year.

On January 10, 2014, the Center for Medicare & Medicaid Innovation (CMMI) approved the implementation of a new All-Payer Model for Maryland. The All-Payer Model has a three part aim of promoting better care, better health, and lower cost for all Maryland patients. In contrast to the previous Medicare waiver that focused on controlling increases in Medicare inpatient payments per case, the new All-Payer Model focuses on controlling increases in total hospital revenue per capita. The Model establishes both an All-Payer limit of 3.58% annual per capita growth for Maryland residents for the first three years of the Model and a Medicare savings target of \$330 million over the initial five-year period of the Model.

The HSCRC formed a number of Work Groups to provide input on the broad policy issues to be addressed during the implementation of the All-Payer Model. The new All-Payer Model introduces the need for many policy considerations relative to payment models and approaches. The Payment Models Work Group represents a diverse range of individuals including health care administrators, payers, purchasers, physicians, consumer advocates, nurses, and policy experts who have offered their knowledge and practical experience to advise the HSCRC on the structure of payment models, and how to balance its approach to updates in approved revenues and rates for hospitals. The HSCRC prioritized the Work Group deliberations to first address those policies that require immediate attention and are necessary to approve a July 1, 2014 revenue update for hospitals.

The update process needs to take into account all sources of hospital revenue that will contribute to the growth of total Maryland hospital revenues for Maryland residents in order to meet the requirements of the All-Payer Model and assure that the annual update approved by the HSCRC will not result in a revenue increase beyond the limit. In addition, HSCRC needs to consider the effect of the update on the Model's Medicare savings requirement and the total hospital revenue at risk for quality, care delivery, and value enhancement. While rates and global budgets are approved on a fiscal year basis, the All-Payer Model revenue limits and the Medicare savings are determined on a calendar year basis. Therefore, it is necessary to account for both calendar year and fiscal year revenues in establishing updates for the fiscal year.

There are three categories of hospital revenue under the All-Payer Model. The first two categories are under full rate setting authority of HSCRC. The third category of hospital revenue includes hospitals where HSCRC sets rates, but Medicare does not pay on the basis of those rates. The three categories are:

1. Hospitals/revenues under global budgets, including the Global Budget Revenue (GBR) agreements initiated in conjunction with transition policies and Total Patient Revenue (TPR) agreements for 10 hospitals that were renewed July 1, 2013 for their second three-year term.
2. Hospital revenues that are not included under global budgets but are subject to rate regulation on an All-Payer basis by HSCRC, including hospitals that remain on a Charge-Per-Episode (CPE)/Charge-Per-Case (CPC) agreement and hospital revenues excluded from a global budget, such as revenues for non-residents. This category includes freestanding emergency rooms and "chronic" hospital facility revenues if not included in a global budget.
3. Hospital revenues for which HSCRC sets the rates paid by non-governmental payers and purchasers, but where CMMI has not waived Medicare's rate setting authority to Maryland. This includes psychiatric hospitals and Mount Washington Pediatric Hospital.

This draft report addresses the approach for determining the fiscal year (FY) 2015 update and the short-term factors affecting the update that must be considered for the different hospital revenue categories that exist under HSCRC rate setting authority.

### **Goals and desirable features of short-term updates and longer-term policies**

In the context of meeting the requirements of the All-Payer Model, the Payment Models Work Group has developed a set of goals and desirable features to support the achievement of the three-part aim of better care, better health and lower cost while ensuring fairness to all parties involved. These goals and features are meant to frame the discussion around balanced updates and short-term adjustments and should be kept in mind as payment policies are developed.

#### **Goals**

- Promotes the three-part aim as referred to in the All-Payer Model contract (better care, better health, lower costs)
- Meets the All-Payer Model requirements
- Provides hospitals with overall fair and reasonable compensation
- Provides rates and revenues that are sufficient for efficient and effectively operated hospitals and equity among payers

- Promotes health equity among all populations served by the Maryland healthcare system

The Payment Models Workgroup also created a list of desirable features of any payment structures that are implemented under the All-Payer Model. While some of these features may not be immediately addressed in this report, they are intended to serve as a guide in future policy decisions.

## **Desirable Features**

### Promotes Adequate Information Sharing

- Adequate information and data are obtained in a timely fashion, used to shape policy and practice, and shared widely
- Policies and performance (individual provider and in aggregate) can be communicated effectively to the general public
- Physicians and other stakeholders have the information and resources they need to be fully engaged in planning and execution of policy under the new Model

### Promotes Cooperation and Collaboration

- Regional and statewide cooperation and success are promoted
- Significant consideration is given to policies that foster collaboration and consensus among hospitals
- Physicians and other providers are encouraged to collaborate and innovate in care delivery and health improvement. Incentives are aligned and infrastructure is created in support of that goal.
- Payers, plan managers, and hospitals are encouraged to collaborate and innovate to contribute to the goals of the Model.

### Provides Sound Value Incentives

- Value is rewarded
- Incentives are easily understood by the affected entities and consider their capacity to bring about the intended outcomes
- Policies focus on broad performance standards rather than detailed design standards
- Market shifts that involve patients moving toward high-value providers are encouraged, balancing the general principle for funding to “follow the people” with the equally important desire to encourage providers to eliminate excess capacity. Mechanisms for implementing this principle should not undermine the incentive for each hospital to strive for savings via reduced inpatient and outpatient volume where appropriate.

- A culture of experimentation and innovation is encouraged, without forfeiting accountability for quality and efficiency
- Policy preference is provided for revenues under global or population based budgets within the All-Payer Model

#### Other

- Other revenue requirements (such as capital) are considered and adequately addressed

## BACKGROUND

### Historical Approach to Updates

Before the implementation of the All-Payer Model, HSCRC established one annual update across all all-payer rates for case-mix adjusted charges. Factors influencing the update have varied over time depending on financial conditions and policy changes, but historically there have been several key components considered by the HSCRC.

- **Inflation minus productivity:** The update factor accounted for projected increases in hospital operating costs due to inflation, minus an off-setting reduction for increased hospital productivity and other policy adjustments.
- **Waiver margin:** In order to maintain the previous Medicare waiver, Maryland’s cumulative rate of growth of payments per case had to remain beneath the national average. The update factor was adjusted based on trends and forecasting of Maryland and national payments in order to retain an adequate cushion and ensure the continuation of the waiver.
- **Financial condition of hospitals:** The HSCRC monitored quarterly hospital financial indicators and took these into account while deliberating updates that accounted for fair compensation to hospitals as well as the affordability of hospital services to Maryland patients and purchasers.
- **Volume:** Adjustments for actual volume changes were made to reflect fixed and variable cost.
- **Case-mix:** Annual limits were set to restrict increases in revenues for case mix changes statewide, in order to limit the growth of revenue per case for factors unrelated to actual resource use, such as improved medical documentation and coding.
- **Slippage:** This component was an estimation of the deviation from approved revenue growth as a result of other features of the rate setting system, such as: rate increases granted individual hospitals through full rate reviews; the impact of “Spend-down” agreements (negotiated reductions to a high cost hospital’s rates); other factors such as

variations from previous years' volume and price adjustments; or any adjustments related to approved capital projects.

- **Medicaid Assessment:** Uniform and broad-based assessments were used when necessary to address the operating deficit of the State's Medicaid program. These assessments were implemented in such a way as to share the burden between hospitals and payers.

Additionally, annual revenue adjustments were made at the hospital level to reflect the HSCRC's unique uncompensated care (UCC) policy or to fund hospitals for certain incentive programs.

- **UCC:** The HSCRC reimbursed hospitals for the UCC they provide based on a revenue pooling system in which the cost of UCC is shared equally in the rates of all hospitals.
- **Quality based scaling:** A portion of revenue was reallocated based on attainment or improvement of hospitals participating in the Maryland Hospital Acquired Conditions (MHAC) and Quality Based Reimbursement (QBR) programs.
- **Seed funding for new initiatives:** Additional revenue was allocated for hospitals adopting new HSCRC quality initiatives such as the MHAC program and the Admissions-Readmissions Revenue (ARR) program to make necessary infrastructure requirements to meet program targets.

### **Transitional Rate Setting Policy**

In moving to the All-Payer Model, the HSCRC staff applied a transitional rate setting methodology for the first six months of calendar year (CY) 2014. The All-Payer Limit on revenue growth is determined from the Base Period (BP) revenue of CY 2013. The All-Payer Limit is currently being applied to hospital revenues for residents of Maryland. The revenue associated with non-residents is subject to HSCRC rate regulations but is not included under the All-Payer Limit.

This limit is being used to ensure that the requirements of the All-Payer Model are met and that the ceiling is not exceeded in the early stages of implementation.

If, during this six-month period, Maryland is found to have exceeded the 3.58% growth rate, HSCRC may recover those costs by proportionally adjusting either the July 1 update factors or the approved hospital revenues. A more detailed description of the transitional rate setting policy is available in the January 1, 2014 Staff Recommendations. On July 1, 2014 the HSCRC will provide an update to the All-Payer Limit to cover the second half of CY 2014.

### **Hospital Revenue Categories to Be Considered in Balanced Updates**

Maryland hospital revenues fall under one of three categories established by the All-Payer Model. Each of these methodologies has unique structures, and while they are subject to similar variables, these variables can yield different outcomes within each model. Therefore, each category requires a distinct update to support the success of programs funded through each revenue stream while also meeting the goals of the All-Payer model.

#### 1. **Hospitals/revenues under global budgets (GBR, TPR)**

**GBR:** Central to the All-Payer Model is the GBR methodology, which encourages hospitals to focus on population-based health management by prospectively establishing an annual revenue cap for each GBR hospital. GBR is an extension of the existing TPR methodology.

Under GBR, each hospital's total annual revenues are known at the beginning of each fiscal year. Annual revenue is determined from an historical base period that is adjusted to account for inflation updates, infrastructure requirements, population driven volume increases, performance in quality-based or efficiency-based programs, changes in payer mix and changes in levels of UCC. Annual revenue may also be modified for changes in services levels, market share, or shifts of services to unregulated settings.

**TPR:** The TPR methodology is the basis for the new GBR methodology but is limited to sole community provider hospitals and hospitals operating in regions of the state with few overlapping service areas. The goals of the TPR model match those of the GBR model.

#### 2. **Hospitals/ revenues not under global budgets but subject to HSCRC rate regulation on an All-Payer basis (CPC, CPE)**

**Modified CPC/CPE:** Hospitals that choose not to transition to GBR remain on a modified Charge per Care/Episode (CPC/CPE) rate setting methodology that resembles the previous CPC/CPE system in that annual revenue is the product of total units/cases and rates per unit/case. Annual revenue is unknown at the beginning of the fiscal year, and increases or decreases in units/cases yield increases or decreases in revenue.

Under the modified CPC/CPE, hospitals are subject to the same rate settlements, quality measures, and performance requirements as hospitals operating under GBR or TPR.

Modified CPC/CPE hospitals are also subject to policies to limit revenues from volume growth, which currently include a case mix governor, a Variable Cost Factor (VCF) of

50% and the use of a Volume Governor to limit total growth in revenues attributable to volume increases in such hospitals to approximately 1% to 1.25%.

**Excluded Revenues:** With the approval of the HSCRC, GBR hospitals will be allowed to exclude certain revenue lines from the GBR methodology, in particular revenue for non-residents. To date, there have been no revenue exclusions from completed GBR agreements; however, the HSCRC staff expects that the Academic Medical Centers (AMCs) may exclude non-resident revenues from their GBR agreements. This is elaborated on in the “Academic Medical Center” section of this report.

### **3. Hospitals/revenues for which CMMI has not waived Medicare's rate setting authority to Maryland but HSCRC sets rates for non-governmental payers and purchaser**

**Psychiatric and Other Non-General Acute Hospitals:** Psychiatric and non-general acute hospitals do not fall under Maryland's Medicare rate setting waiver. Medicare and Medicaid reimburse Maryland psychiatric and non-general acute hospitals based on their own payment methodologies. Therefore, the three Psychiatric hospitals and Mt. Washington Pediatric Hospital in Maryland, currently regulated by the HSCRC, are not included in the All-Payer Model limit calculations.

## **ANALYSIS**

### **Balanced Updates for the All-Payer Model**

In considering a system-wide update for the All-Payer Model, stakeholders all recognize the need to balance the update amongst the following conditions: 1) meeting requirements of the All-Payer Model agreement; 2) providing hospitals with the necessary resources for success and adjusting for short-term concerns brought on by the implementation of the new Model itself; 3) taking into account factors outside of the Model such as coverage expansion under the Affordable Care Act (ACA).

Through white papers and work group discussions, both hospitals and payers presented approaches to balancing the update and producing an increase in allowed hospital revenues, which does not exceed the limit of 3.58% per capita. The Maryland Hospital Association (MHA) presented on a number of the specific components of the update, while CareFirst focused on an approach to take into consideration the likely impact of the update on the Medicare savings requirement.



As noted above, all sources of patient revenue must be accounted for in order to ensure that hospital revenues remain within the constraints of the All-Payer Model. Therefore, the HSCRC must consider changes in revenues that are under global models (GBR and TPR) as well as those revenues that are outside a global model under a charge-per-case/episode (CPC/E) and unit rate system with new volume policies.

The following table details an approach for determining the system-wide balanced update for the entire All-Payer Model, factors for consideration that will increase the update, as well as factors that will decrease it. Descriptions and policy considerations are discussed for each step in the text following the table. Any numeric figures are for illustration purposes only and are not intended to represent policy recommendations of the HSCRC staff.

## Balanced Update Model Example for Maryland Residents

### I. Maximum allowed growth

Maximum revenue growth allowance	A	3.58% per capita
Population growth	B	<u>0.70%</u>
Maximum revenue growth allowance $((1+A)*(1+B))$	C	<u>4.31%</u>

### II. Components of revenue change-increases

	Portion of Revenues	Allowance	Weighted Allowance
a. Adjustment for inflation/policy adjustments			
-Global budget revenues	80%	2.30%	1.84%
-Non global revenues	20%	1.60%	<u>0.32%</u>
			<u>2.16%</u>
b. Adjustment for volume			
-Global budget revenues	80%	0.80%	0.64%
-Non global revenues for Maryland residents	20%	1.20%	0.24%
-Market share adjustments not revenue neutral			<u>0.88%</u>
c. Infrastructure allowance provided			
-Global budget revenues except TPR	70%	0.33%	0.23%
d. CON adjustments-			
-Opening of Holy Cross Germantown Hospital			<u>0.41%</u>
Net increase before adjustments			<u>3.68%</u>
e. Other adjustments-			
-Uncompensated care increase			0.38%
-Set aside for unforeseen adjustments			0.50%
-Reverse prior year's shared savings reduction			0.20%
-Positive incentives			0.00%
-Net impact of one-time adjustments			<u>4.76%</u>

### III. Components of revenue change-decreases

a. Uncompensated care reduction	-0.80%
b. MHIP adjustment	-0.38%
c. Shared savings/negative scaling adjustments	-0.20%
d. Net impact of one-time adjustments	
Net decrease	<u>-1.18%</u>
Total revenue growth	<u>3.59%</u>
Total revenue growth per capita	<u>2.87%</u>

## **I. Maximum allowed revenue growth**

First, the maximum allowed total revenue growth percentage is calculated by modifying the per capita growth limit for the All-Payer Model based on the population growth estimate obtained from the Department of State Planning.

## **II. Components of revenue change-increases**

Factors contributing to revenue increases must then be accounted for. Those factors contributing to revenue increases include:

- a) **Adjustments for Inflation:** Inflation or trend allowances granted by the Commission under its update process, representing factors such as input prices, labor cost trends, and other factors affecting the cost of delivery.
- b) **Adjustments for Volume:** Volume allowances for global budgets based on population/demographic changes and volume allowances for CPC/CPE budgets based on case mix growth with policy limits applied to estimate maximum revenue growth allowed. Any non-revenue neutral market share adjustments also need to be accounted for in these volume allowances as well as growth in excluded revenue volumes. As discussed below, the HSCRC staff is proposing that volume changes in these cases be recognized in annual updating of global budgets for this category of revenues.
- c) **Infrastructure Adjustments:** Infrastructure adjustments adopted by the Commission as part of the transitional policies. These adjustments recognize the need for investments in care management, population health improvement, and other requirements of global models. The GBR agreements generally provide for an adjustment of 0.325% in FY 2015. This adjustment must be accounted for in the update, although in some cases this adjustment was deferred to a future period to maintain a hospital's revenues within the overall targets utilized. TPR hospitals received an incentive adjustment when they initiated their agreements, which provided for investments in infrastructure. The Commission also recognized that this allowance must be accorded so that global models are not less attractive than the volume based models relying on CPC/CPE methodology.
- d) **Certificate of Need (CON) Adjustments:** Adjustments may be necessary to recognize revenue related to major capital programs, such as the opening of the Holy Cross Germantown Hospital scheduled to take place in the fall of 2014. It is necessary to provide an allowance for any revenue increases that are not offset by market share decreases of other hospitals. This will be an ongoing area of near-term policy development and is discussed at greater length in the "Germantown Hospital" section of this report.
- e) **Other Adjustments:** Other areas that might require an allowance for increased revenue include:
  - **Uncompensated Care (UCC) Increases:** As discussed below in the "UCC and Medicaid Expansion" section of this report, there was a 0.38 % increase in UCC in 2013 that will need to be funded in 2014. Hospitals attribute the

source of this increase to the increased prevalence of high deductible plans, increased outpatient revenues with higher patient responsibility, and other population based factors.

- **Unforeseen Adjustments:** The Commission will need to adopt a policy to allow for unforeseen adjustments that might be required during the year.
- **Reversal of Prior Year’s Shared Savings Reduction:** Reversal of the shared savings adjustment from FY 2014 is restored to the base for FY 2015, with a new adjustment (see below) to reflect the shared savings reduction for FY 2015.
- **Positive Incentives:** HSCRC staff is proposing positive incentive programs such as a readmission reduction program that will result in a revenue adjustment for FY 2016. This is marked as a placeholder to account for future changes that might affect the revenue increase calculations.
- **Net Impact of One-Time Adjustments:** One-time adjustments included in hospitals' rates are reversed annually, to restore them to the base for the next year.

### **III. Components of revenue change-decreases**

There are several possible changes that could decrease the revenues for FY 2015. These include:

- a) **UCC Reductions:** A reduction in UCC resulting from the expansion of Medicaid and Exchange enrollees. For FY 2015, HSCRC staff is proposing a reduction related to a portion of the Medicaid enrollment expansion referred to as Primary Adult Care (PAC) enrollees. As discussed below, the amount of adjustment is under review.
- b) **MHIP Adjustment:** A reduction in assessments related to the Maryland Health Insurance Plan (MHIP) assessment is currently being considered by the General Assembly. This assessment is currently set at 1% of hospital revenues. There is proposed legislation in Maryland that would reduce it to 0.3%. If hospital rates were reduced for this full change, there would be a 0.7% reduction. However, there are several other assessment offsets being considered, including the funding of the HSCRC budget and a community partnership funding program.
- c) **Shared Savings Reduction and Negative Scaling Adjustment:** A reduction is shown for the reinstatement of the shared savings adjustment for FY 2015. The amount presented in the table above is assumed to be the same as the amount from the prior year, however, the Commission will need to determine the actual policy. For example, if the Commission doubled this adjustment; the reduction would increase to 0.4%. For FY 2015, all quality adjustments will be revenue neutral, however in FY 2016 and beyond, the proposed MHAC policy institutes non-revenue neutral adjustments in which overall reductions are greater than overall rewards.
- d) **Net Impact of One-Time Adjustments:** One-time adjustments included in hospitals' rates are reversed annually. This is intended to account for the net reversal of one-time adjustments when hospitals reduce revenues.

While this table enumerates the central provisions leading to a balanced update for All-Payer Model overall, there are additional variables to consider such as one-time adjustments, as well as revenue and rate compliance adjustments and price leveling of revenue adjustments to account for annualization of rate and revenue changes made in the prior year.

### **Impact of the Balanced Update on the Medicare Savings Requirement**

CareFirst presented a model to the workgroup to assess the impact of the update on potential Medicare savings. This is a difficult task, because the Medicare savings is a dynamic calculation that depends upon the relative increase in hospital costs per beneficiary across the United States in comparison to the cost per beneficiary increases experienced in Maryland. Because of this complication and its interaction with the All-Payer test, there is a clause in the All-Payer agreement that, with the approval of CMMI, permits Maryland to institute a differential (reduction) in the Medicare payment to achieve required savings in the event that the All-Payer test has been met, but Medicare savings have not accrued to the extent required.

The CareFirst model is a complex model with many assumptions and considerations. CareFirst's white paper and power point on this subject can be found in the HSCRC website at:

<http://www.hscrc.maryland.gov/documents/md-maphs/wg-meet/pay/2014-03-20/CareFirst-Paper-4-Annual-Update-Allowance.pdf>

<http://www.hscrc.maryland.gov/documents/md-maphs/wg-meet/pay/2014-03-20/HSCRC-CareFirst-Proposal-Update-Meeting-the-Dual-Waiver-Tests-of-the-Demonstration.pdf>

The HSCRC staff computed that the historic growth in Medicare per beneficiary payments for hospitals over the past decade was lower than the overall increase in hospital revenues per capita, with the Medicare rate of increase approximately two-thirds of the all-payer rate of increase. This is believed to be driven in part by the decreasing volume of Medicare inpatient admissions per capita, particularly medical admissions with high concentrations of Medicare patients, combined with the lower proportion of outpatient services, where payments are growing faster, utilized by Medicare patients. The CareFirst model was developed and presented by Dr. Jack Cook. Several components of the model are included in the table below. The table starts with a calculation of the estimated required increase per beneficiary to arrive at the required savings and ends with the maximum total revenue increase that could be allowed on an All-Payer basis, which would enable the production of savings if all assumptions were met. Each line in the table is described briefly below.

<b>CareFirst's Illustrative Model to Calculate the Allowed Revenue Increase for Maryland Residents that Will Also Meet the Medicare Savings Requirement</b>	
1. Limit of the Medicare Savings Target, Representing the Per Capita Increase for Maryland residents that Could Occur While Producing the Required Savings	1.25%
2. Difference Statistic Representing the Projected Difference in Revenue Growth Per Capita for Maryland residents on an All-Payer Basis to the Growth in Medicare Revenue Per Capita	2.00%
3. Maximum Increase in Hospital Charges for Maryland residents/ Maryland resident--the Product of Multiplying Line 1 by Line 2	3.275%
4. Projected Increase in Population for Maryland residents	0.70%
5. Maximum Increase in Hospital All-Payer Charges that Will Produce Required Medicare Savings--the Product of Multiplying Line 3 by Line 4	4.00%

1. The limit of the Medicare savings target is that by the end of CY 15, Maryland must produce approximately 1% in savings compared to the national rate of increase. To begin this process in 2014, the calculation takes the projections of hospital cost per beneficiary growth provided by the CMS actuaries for CY 2014 and CY 2015 of 1.9% and 1.6% respectively. These two years are added together to produce a total growth of 3.5%. The 1% savings requirement is subtracted to arrive at 2.5% total allowed growth. Finally, this amount is divided over two years to arrive at a target allowance of 1.25%. ( $\frac{1}{2} (1.9\% + 1.6\% - 1.0\%) = 1.25\%$ ).
2. The CareFirst model calculates a difference statistic representing the average percentage difference between the all-payer revenue increase per capita and the Medicare revenue increase per capita, based, in part, on differences in the growth rates and mix of inpatient and outpatient services between Medicare beneficiaries and all Maryland patients. This calculation is done with charges rather than Medicare payment data and uses the population over 65 years of age as a proxy for growth in Medicare beneficiaries. CareFirst calculates an average difference statistic of 2.94%, but this discussion is based on a more conservative estimated differential of 2%.
3. The allowed Medicare per capita increase is increased by the difference statistic to impute an allowed all-payer per capita limit.

4. The overall population increase for the State is estimated at 0.7%.
5. The imputed all-payer per capita limit from step 3 above is increased by projected population growth to arrive at a 4% estimate for the maximum increase in revenue that could be provided on an all payer basis and still meet the Medicare savings requirement.

The two most critical assumptions in this model are the assumptions regarding the level of increase in Medicare payments per beneficiary and the calculation and maintenance of the differential statistic between the increase in Medicare payments per beneficiary and the overall increase in hospital revenues per capita. HSCRC recently obtained updated projections from the CMS actuaries that would yield a 3.4% growth over the two years rather than the 3.5% included in the table above. However, HSCRC staff notes that this is a dynamic test and that the actual rates of increase could be lower (or higher) than those currently projected by CMS. The importance of focusing on Potentially Avoidable Utilization (PAU) resulting from care delivery improvements is essential to maintaining or increasing the difference statistic beyond two percent.

The conclusion of the table is that if these two significant assumptions were obtained (the per capita spending increases and the difference between Medicare and all-payer per capita spending), then HSCRC could allow total revenue growth of up to 4% while still achieving the Medicare savings required. However, given the far-reaching changes in both insurance coverage and the demographics of the Medicare population over the next few years along with the impact of care delivery reforms underway, the actual numbers will differ from these calculations, and those differences may be material.

### **Calendar Year Impact**

While we are addressing fiscal year updates in the context of the balanced update, we must take into account the impact on calendar year revenues since the test is performed on a calendar year basis. Staff will need to provide additional modeling to the Commission to evaluate the impact on calendar year revenues. With the increased importance of calendar years, the HSCRC staff will recommend that the volume governor be applied to non-global hospitals and revenues in October, with an update in November if necessary. For global budget hospitals, a revenue limit for December should be placed in the contract and compliance should be required both at the end of the calendar year and at the end of the fiscal year.

### **Balanced Updates for Each Hospital Model**

We now turn to examine the update factors that might be afforded to each class of hospital revenues:

1. Revenues under global budget models
2. Revenues from Maryland residents under the All-Payer Model that are not under a global model as well as those revenues under the Medicare rate setting waiver that are not under a global model
3. Revenues where HSCRC sets rates, and the revenues are neither included under the Medicare rate setting waiver nor under the All-Payer limit. These revenues will be included in the Medicare savings calculation to the extent that Medicare uses these facilities.

A primary focus of MHA and CareFirst in presenting their concepts was to focus on the overarching requirements of a system-wide update for the All-Payer Model. This section of the report will now focus on recommendations for developing updates at the hospital level, specifically for hospital revenue under the Medicare rate-setting waiver, (1) and (2) above. For hospitals not under the waiver as enumerated in (3) above, HSCRC staff will take a slightly different approach, which is addressed in the section following the table. There is considerable overlap between the HSCRC’s historical approach to determining updates; however, some changes are being recommended in order to achieve the goals of the All-Payer Model.

**Hospital revenues under the All-Payer Model and/or Medicare Rate-Setting Waiver**

The chart below outlines important components for consideration for balanced updates at the hospital level for hospital revenue categories (1) and (2) listed above. Hospital revenue category (3) is discussed further in the section below the chart.

<b>Components Considered</b>	<b>1. Revenue from Maryland residents under global models</b>	<b>2. Revenues from Maryland residents under the All-Payer Model that are not under global model as well as those revenues under the Medicare rate setting waiver that are not under global models</b>
Inflation	<p><b>Inflation</b></p> <p>Use Global Insights</p> <p>To account for cost increases associated with inflation less policy adjustments.</p>	<p><b>Inflation-Productivity/Policy Adjustments</b></p> <p>Use Global Insights</p> <p>To account for cost increases associated with inflation, less productivity and policy</p>



	<p>Policy adjustments may be applied to reach the desired target under the All-Payer Model.</p> <p>For FY 2015, the GBR and TPR methodologies themselves are intended to curb the potential increases in total revenue through the use of the prospective revenue cap. Therefore, productivity should not be initially subtracted from inflation during the initial year of the model. Savings can be used to invest in infrastructure that will be important to the sustainability of the model and to the care delivery improvement and population health objectives.</p>	<p>adjustments</p> <p>Adjust for policy reductions for productivity, ACA, and policy limits of the All-Payer Model</p> <p>The factor should be at least 0.7% lower than the factor applied to GBR/TPR revenues as a matter of policy to ensure that revenues under the CPC/CPE methods would not routinely produce a more favorable result than global models. Global models relinquish a general volume adjustment and, therefore, productivity must be derived from alternative sources.</p>
<p>Volume Adjustment</p>	<p><b>Demographic Shift Driven Volume Adjustments</b></p> <p>The GBR and TPR methodologies are intended to reduce avoidable volume through the prospective revenue cap. Therefore, volume adjustments should only be considered when they are driven by population and demographic factors and for shifts between hospitals, where the shift does not undermine the Model. Any increase in volume adjusted for in one hospital must be coupled with a matched volume decrease in another hospital.</p> <p>HSCRC has developed a demographic adjustment method that allocates population growth</p>	<p><b>Volume Governor and 50% VCF</b></p> <p>Modified methodology for revenues under the All-Payer Limit (Maryland residents) should continue to limit revenues from volume by continuing the 2% volume governor approved with the transitional polices, which limits revenue growth from volume 1% to slightly greater than 1% in combination with a hospital 50% VCF.</p> <p>CareFirst recommended synchronizing the volume governor with the population adjustment for each hospital, which would decrease the amount available, on average to 0.7%,</p>

<p>and demographic changes to each hospital based on virtual patient service areas (VPSA) which are cohorts broken down by zip code and age. The population growth is multiplied by adjusted cost based use rates to arrive at an age-adjusted population growth. After removing potentially avoidable utilization from the formula, the result is multiplied by 50% to represent a variable cost factor. TPR hospitals have a population adjustment that was based on age-adjusted growth by county. The result was multiplied by a 25% factor, which served as a rough estimate of avoidable utilization.</p> <p>The demographic adjustment is addressed in a subsequent section of this document.</p> <p>If there are large changes in non-resident volumes, they should be examined from the perspective of the GBR/TPR. For many hospitals, the non-resident population is part of the local community they serve, and the revenues are under the global budget in the spirit of promoting simplicity of the model and consistent incentives for local communities of patients served.</p> <p>Academic medical centers experience a much larger non-resident volume, and referrals of individuals for tertiary and quaternary care. These revenues</p>	<p>effectively limiting volume growth statewide to the population allowance used in the global budget models.</p> <p>The policy approved by the Commission to exclude non-resident revenue from the volume adjustment should be continued, while subjecting this revenue to the other entire rate setting principles of HSCRC and requiring that identical rates be applied to all revenue categories provided within each hospital.</p>
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	<p>should be removed from the GBR if material to ensure that there is sufficient incentive to continue to serve this population of patient and to prevent reductions in these revenues from negatively impacting the Model.</p> <p>For AMCs, cases that constituted categorical exclusions under the CPC/CPE may be included in a separate GBR budget, with annual rebasing. This provides the certainty to the model of a fixed budget for one year, but provides the protection for adjustment as these highly specialized cases fluctuate over time.</p>	
<p>Market Share and Demographic Adjustment</p>	<p><b>Adjustments for Shifts in Market Share</b></p> <p>The Work Group will develop a systemic approach for market share adjustments after completion of the Balanced Update.</p> <p>The HSCRC does not intend to make adjustments for market share increases that are not offset by a corresponding decrease at another hospital with the exception of the new Germantown Hospital, which is discussed further in the Holy Cross Germantown Hospital section of this report. The HSCRC also does not intend to make revenue adjustments on market share changes that would discourage reduction of PAU or otherwise undermine the Model.</p>	<p>N/A</p>

	<p>GBR/TPR hospitals must report closures and shifts of services to unregulated settings to the HSCRC so that necessary global budget adjustments can be made.</p> <p>HSCRC staff will introduce policies to adjust for changing patterns in transfers to AMCs, (Johns Hopkins Hospital and University of Maryland Medical Center) which may be encouraged or reduced based on institutional capabilities. This policy would begin effective with FY 2015.</p>	
Volume and Case-Mix Governor	N/A	The volume and case-mix governor will be calculated based solely on the volume changes of non-global revenues under the All-Payer Limit.
All-Payer Requirement Adjustments	Adjustments as needed to meet the savings requirements of the All-Payer model established in the final contract between CMMI and the State of Maryland	
PAU Adjustments	Adjustments based on attainment or improvement in readmission reduction and other future PAU programs developed by the HSCRC.	
Quality Based Scaling Adjustments	Adjustments based on attainment or improvement in MHAC and QBR programs and other future quality outcome programs developed by the HSCRC.	
UCC Adjustments	Adjustments to account for the pooling of UCC costs amongst all hospitals. Annual updates to amounts paid into or received from the pool.	
Seed Funding for New Initiatives	Necessary funds should be made available for infrastructure investments necessary to succeed under the GBR and TPR methodologies, considering the constraint in volumes and costs required for success and the efforts	Hospitals should be encouraged to adopt a global budget.

	needed to improve care delivery while lowering costs.	
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### **3. Hospital Revenues under HSCRC Rate Setting but Not Included in the All-Payer Model or Medicare Rate Setting Waiver**

There are three psychiatric hospitals and Mt. Washington Pediatric Hospital that are not acute general hospitals and are not included under the Medicare Waiver. HSCRC sets rates for these hospitals but Medicare does not pay on the basis of HSCRC rate setting. Last year, HSCRC developed update factors for the psychiatric hospitals through consideration of the approach Medicare uses to update rates for psychiatric hospitals nationally. Mt. Washington Pediatric Hospital was provided the same update as Waiver hospitals. HSCRC staff proposes to utilize the same process it used last year for psychiatric hospitals, but to extend the adjustment to Mt. Washington Pediatric Hospital when it proposes update factors at the May Commission meeting. Several representatives of the work group stressed that productivity reductions for these hospitals should be minimized while they are seeking to work with hospitals under the All-Payer Model to respond to behavioral health and other factors that contribute to readmissions and to integrate and improve care delivery.

#### **Other Short Term Issues**

##### **UCC and Medicaid Expansion**

The HSCRC needs to examine the level of UCC provided in hospitals' rates as well as the formula used to determine the amount of funds to be remitted or withdrawn from the UCC fund by each hospital. This analysis and policy changes will be presented in a separate document, but it is highlighted herein because it affects the amount of revenue that can be provided under a balanced update.

The HSCRC's provision for UCC in hospital rates is one of the unique features of rate regulation in Maryland. UCC includes bad debt and charity care. By recognizing reasonable levels of bad debt and charity care in hospital rates, the system enhances access to hospital care for those patients who cannot pay for care. The UCC methodology has undergone substantial changes over the years since it was initially established in 1983. The Commission adopted the most recent version of the policy on September 1, 2010.

Under the current policy, the statewide UCC provision (now 6.86%) is placed in each general acute hospital's rates, excluding Shock Trauma and Kernan. Each hospital remits funds or withdraws funds from an UCC pool administered by HSCRC based on application of the formula contained in the policy. Hospitals with a result above 6.86% withdraw money from the funds to cover additional UCC, while hospitals with a result below 6.86% pay into the fund.

There are several factors contributing to the need for review of the level of UCC provided for in rates overall as well as the formulation of hospital specific levels used to determine whether the hospital will receive money from the pool, or pay into the pool.

- UCC increased by approximately 0.38 percentage points between fiscal year 2012 and fiscal year 2013. This increase will be considered for rate formulation for FY2015 rates under current policies.
- Historically, Medicaid enrollment has been used in the regression formulation to predict UCC levels for individual hospitals. As Medicaid expands, the use of Medicaid enrollment in the formulation along with other regressions variables needs to be reexamined. Additionally, HSCRC staff has been informed that undocumented immigrants, who are not eligible for full Medicaid benefits, are producing unrecognized increases in UCC care levels for specific hospitals.

As a result of the ACA, on January 1, 2014, there was a substantial expansion in Medicaid coverage as well as an increase in the number of privately insured Maryland residents through the Exchange. The long-term result of this expansion is not yet known, but it is expected to result in a decrease in UCC levels in Maryland.

The HSCRC is proposing to take a prospective but conservative approach by adjusting the UCC provision in hospital rates based on the coverage provided to the Primary Adult Care (PAC) enrollee population, which made up an estimated 15% of UCC in 2013 in Maryland before this population was enrolled in Medicaid under the expansion. PAC was a Maryland health care program for low-income adults under age 65 who had incomes below 116% of the poverty level but who did not qualify for Medicaid benefits. PAC provided a limited benefit package covering the cost of primary care, family planning, prescriptions, mental health care and addiction services, and hospital emergency room services. However, PAC did not reimburse for inpatient or outpatient hospital care. When PAC-enrolled individuals received hospital care, hospitals would generally not be reimbursed for the services provided, and the hospitals would consider the cost of these services to be UCC. The estimated impact of reducing the UCC provision in rates is approximately 1 percent of revenues; this is a large adjustment and the data used to estimate this reduction are being reviewed.

In January 2014, approximately 96,000 Marylanders transitioned from PAC to full-benefit Medicaid under the Medicaid expansion. Now that former PAC enrollees have access to full

Medicaid benefits, including hospital care, Maryland hospitals will see resulting changes to UCC. HSCRC staff proposes to adjust for the projected decrease in UCC based on the expected decrease in UCC from the transfer of the PAC population to Medicaid.

In the future, HSCRC may need to propose further UCC adjustments to account for variations in UCC that are not captured by the PAC population. This may include a variation due to other new Medicaid or exchange enrollees, changes in undocumented immigrant populations, or increased prevalence of high deductible, high copay insurance plans that are currently increasing the bad debt levels experienced by hospitals. HSCRC staff will work with CRISP, State Medicaid officials, and hospitals to assess these trends in tandem.

### **Holy Cross Germantown Hospital (HCGH)**

The new Holy Cross Germantown Hospital (HCGH) will be opening in calendar year 2014 and will fall under the All-Payer Model at the start of FY 2015. It will be operating under the modified CPC/CPE methodology and initially it will exempt from the volume governor and 50% VCF under policies approved by the Commission, until it reaches the revenue projections of its CON application or is in operation for a reasonable period of time to reach its revenue capacity, whichever occurs first.

The CON application for the hospital laid out its service area and expected sources of patient volumes. Based on the application, HSCRC expects to make a prospective adjustment to the global budget of Holy Cross Hospital based on the anticipated volume shift, applying a 50 percent variable cost adjustment. HSCRC expects to make market share adjustments based on reductions in Equivalent Case Mix Adjusted Discharges (EDMADs) to hospitals or regulated emergency facilities that experience volume changes as a result of the opening of HCGH over a base period of FY 2013. HSCRC expects to take precautions not to penalize the hospitals for reductions in PAU volumes that do not result in actual increases in patients served at HCGH. An alternative statistic other than ECMADs may be applied in the case of the emergency facilities. These reductions will be applied one-quarter to six months in arrears for hospitals and regulated emergency facilities except Holy Cross Hospital, where the adjustment will be prospective.

Because the new hospital will be receiving volume adjustments at 100% but the market share losses will be accounted for at 50%, the maximum amount of additional revenue that can be expected to be absorbed via a volume adjustment is 50%. Given the sensitivity of the calculation and the initial lag in adjustments for regulated facilities other than Holy Cross, HSCRC staff proposes to set aside 70% of the estimated FY 2015 revenue as a statewide funding adjustment. For fiscal year 2015, HCGH projects \$80 million in revenues. Applying a 70% factor to this revenue amount results in an amount of approximately \$56 million that would need to be absorbed from the statewide revenue cap in the first year.

Special consideration must be given to the statewide impact of the new hospital and market share adjustments that might be necessary. The approach to addressing the new HCGH outlined in this report is a one-time, transitional approach and does not reflect a permanent capital policy.

## **Population and Demographic Adjustments**

As stated above, the GBR and TPR arrangements are intended to provide a framework to support the shift of focus to the three part aim, with the intent to promote the reduction of avoidable utilization when care is improved. As a result, the HSCRC needs to determine the volume growth that will be allowed due to demographic factors and provide appropriate level of increases to accommodate such volume changes.

HSCRC staff developed a methodology to allocate base population to each hospital using virtual patient service areas (VPSA) and allow for revenue increases that the model projects for population growth and aging of the population. For GBR, the VPSA are determined as the proportion of total Equivalent Case Mix Adjusted Discharges (ECMADS, i.e., case mix adjusted inpatient admissions+ equivalent outpatient visits) served by a hospital in each zip code and age cohort combination. Since the TPR hospitals had more uniquely defined service areas, VPSA is equivalent to the county where these hospitals are located.

To account for variation in hospital use by age composition of the population served, the impact of aging is estimated using the ratio of average total hospital costs for each age cohort to the average (age weights) in the base year. Once the base population for VPSA and age weights are derived, age adjusted volume growth is calculated by applying projected population growth and age weights for each zip code and age cohort to the base VPSA population. As the fixed levels of revenue embodied in the TPR and GBR models encourage reduction in avoidable utilization and promote efficiency, historical estimates of average total costs should be adjusted for the potential of reducing avoidable utilization (PAU). For GBR, the PAU adjustments are implemented by reducing age weights by the percent of PAUs for each age cohort. Furthermore, the 50/50 VCF is applied to the estimated age adjusted volume growth to align GBR with the state-wide variable cost policies. Allowing the TPR hospitals to receive 25% rather than 50% of the estimated age adjusted revenue growth was intended to account for avoidable utilization, because their historical cost weighting factors had not been reduced by the PAU adjustment.

HSCRC staff will continue to refine the calculations of population and demographic adjustments to be applied with the July 1 update. Some issues to be discussed are appropriateness of current age cohorts (0-14, 15-64, 65-74,75-84, 85+ ) , additional population adjustment factors (e.g.,sex), application of PAU adjustments and state-wide weights, and calculation of VPSA.



Other policy concerns include the application of an adjustment that increases revenues in areas of the State or in hospitals with excess capacity where volumes are declining. This topic requires consideration, but the timeline for consideration may be beyond the July 1 update period.

### **Academic Medical Centers (AMCs)**

AMCs play a distinct role in the health care system by handling a large proportion of highly acute cases, accepting regional referrals, and serving as centers for clinical and technological innovation in the State. For global models to be successful in Maryland, AMCs<sup>1</sup>, must be seen as statewide resources for tertiary and quaternary care. HSCRC staff believes that different regulatory treatment must be given to specific clinical service lines at AMCs operating under a global model that will allow AMCs to function effectively within this new payment structure. By adapting the model to fit the needs of AMCs, more revenues can be included under global models, with the advantage of improving the predictability of revenue budgets along with the alignment of incentives to reduce avoidable volumes.

Under GBR, hospitals are incentivized to lower expenses and volume by taking measures to reduce avoidable utilization and promote care management and quality improvement. This may result in community hospitals transferring complex cases to AMCs in order to get patients the advanced care they need and reduce the high costs associated with those patients. Utilizing AMCs as regional referral centers may lower total cost of care and improve outcomes for critically ill patients and thus be beneficial to the entire Maryland health system. AMCs must have the capacity to take on the possible influx of complex cases without facing financial penalty under a global model.

For AMCs to continue their unique and significant role in the State's health care system, it is necessary to adopt several different regulatory considerations for AMCs operating under a global model. HSCRC staff is evaluating and proposing options to segregate select clinical service lines from the annual GBR, creating an effective payment structure for inter-hospital transfers, and keeping distinct patient populations separate when calculating the annual GBR.

AMCs can be divided into five clinical service lines that will require consideration of different regulatory treatment in order to address the issues AMCs will face in adopting GBR.

### **Clinical Service Lines Requiring Different Regulatory Treatment**

1. Out of State
2. Categorical Exclusions

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<sup>1</sup> This refers specifically to Johns Hopkins Hospital and University of Maryland Medical Center.

3. Transfers In
  - a. In-System transfers
  - b. Other Transfers
4. Statewide Referrals
5. Local Area

**Out of state:** Out of state cases will be excluded from the GBR cap.

**Categorical exclusions:** Categorical exclusions are cases predominantly treated at AMCs that require complex tertiary or quaternary care. Within the previous charge per case (CPC) model, categorical exclusions were distinguished from other cases because these cases have less predictability in resource management and large variation within a particular APR DRG. This high variability in cost puts hospitals at financial risk when admitting categorical exclusion cases. To avoid a financial risk for taking on such cases, they were excluded from CPC averages.

Some of the same risks apply under a global model. The volume and cost of categorical exclusion cases may fluctuate more than routine cases, and hospitals' resources may be strained to compensate for such fluctuations when their annual revenue is fixed over multiple years. Because Kaiser Permanente(KP) operates the only other large multi-hospital system in the United States where the hospitals operate under fixed budgets, KP may be able to offer insights on policy issues faced by the HSCRC. The HSCRC staff interviewed representatives of Kaiser Permanente to determine how they handled these cases under hospital budgets. One method favored by Kaiser Permanente was an annual fixed budget, with rebasing each year to reflect actual experience. The HSCRC staff proposes to evaluate this model for the AMCs. Assuming this model is used, HSCRC will require annual volume and cost projections with periodic monitoring to ascertain the trends. Transplants appear to have increasing volumes and may require some revenue capacity in the statewide annual budget. HSCRC staff will provide an update on these categorical cases in the May report.

**Transfers-In:** A transfer-in case is a transfer from one acute hospital to another acute hospital (excluding MDC 5: diseases and disorders of the circulatory system). Transfers-in to AMCs may increase as community hospitals implement global models and are incentivized to transfer cases requiring costly tertiary and quaternary care to AMCs. This potential shift of complex cases from community hospitals to AMCs can be a positive development to the extent that well timed transfers-in may lower total costs of care and improve outcomes. On the other hand, AMCs may work with community hospitals using telemedicine and other resources to reduce unnecessary transfers. Given these dynamics, HSCRC staff plans to present an approach to adjust the global budgets of transferring hospitals when transfers increase over a base period, and to increase the global budget of the receiving AMC by the same amount. HSCRC will calculate a fixed price to

alleviate undue risk to community hospitals for outlier volumes. HSCRC staff also inquired how Kaiser Permanente handled similar situations in developing its proposed concepts for addressing this patient population. For example, in FY 2013, the transfer-in cases average CPC at Johns Hopkins Hospital (JHH) was 55% higher than cases originating at JHH and had a 59.3% greater length of stay. There must be a payment structure in place that encourages community hospitals to appropriately transfer complex cases and supports AMCs in accepting them.

**In-System Transfers:** Under global models, hospital systems are responsible for effectively managing and financially resolving transfers that take place between one hospital and another hospital within a larger system. In these instances, the systems will provide HSCRC with the revenues to be adjusted in the global models, and adjustments will be made accordingly after HSCRC staff review.

**Other Transfers:** AMCs will be given a base period to establish an expected number of patients transferred in from each community hospital. Transfers-in will then be monitored, and if transfers-in from a particular community hospital increase beyond the population based adjustment, a fixed dollar amount per case will be charged to the GBR budget of the transferring hospital and credited to the GBR budget of the AMC. Conversely, reductions in transfers would result in reductions in the AMC budget and possible increases in the community hospital budget at a fixed allowance. The expected numbers of cases and costs might be rebased to reflect changing conditions. There could also be revenue shifts between the AMCs as their market share of transfers in changes. This will allow community hospitals to provide patients the advanced care they need and shift those potentially expensive cases to AMCs at a predetermined cost, while also allowing AMCs to handle increasing numbers of severe cases when warranted. HSCRC staff will prepare additional documentation regarding a base period for transfers in and a budget amount per transfer case for expected implementation in FY 2015. The HSCRC staff will also consider the question regarding whether the amount allowed for reductions in transfers should equal the amount charged for the increase. Staff favors simplicity, recognizing the transitional nature of the policy.

This policy will require continuing evaluation and refinement as the State gains more experience under the Model. Several work group members also requested that HSCRC consider making information about transfers pre and post Model implementation available outside of the hospital field to support evaluation of the impact on consumers. HSCRC staff will consider how best to do this.

## CONCLUSION

A balanced update is crucial to the initial success of the All-Payer Model. This update must allow hospitals the necessary resources to succeed in the important first years of the All-Payer Model, while also ensuring that Maryland is on the right trajectory to meet the growth, savings and quality requirements of the All-Payer Agreement. This report outlined a great number of factors to consider and areas to be resolved. Moving forward, the HSCRC staff will continue to engage stakeholders and create specific recommendations to report back to the Commission.

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**TO:** Commissioners

**FROM:** Legal Department

**DATE:** April 2, 2014

**RE:** Hearing and Meeting Schedule

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**Public Session:**

May 14, 2014 1:00 p.m., 4160 Patterson Avenue, HSCRC Conference Room

June 11, 2014 1:00 p.m., 4160 Patterson Avenue, HSCRC Conference Room

Please note, Commissioner's packets will be available in the Commission's office at 11:45 p.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.

<http://www.hscrc.maryland.gov/commission-meetings-2014.cfm>

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