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 10th, 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 requirement. 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 where HSCRC sets rates that are 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 framing the discussion on balanced updates and short-term adjustments, the Payment Models Work Group outlined a set of goals and desirable features that should be kept in mind as payment policies are developed.

**Goals**
- Promotes the three-part aim of the All-Payer Model (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

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

- Adequate information and data are obtained in a timely fashion, used to shape policy and practice, and shared widely
- 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
- Policies can be communicated effectively to the general public
- Value is rewarded
- Regional and statewide cooperation and success are promoted
- Physician and other provider alignment, engagement, and innovation are promoted
- 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
- Significant consideration is given to policies that foster collaboration and consensus among hospitals
- Physicians and stakeholders outside of the hospital have the information and resources they need to be fully engaged in planning and execution of policy under the new Model

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 will recover those costs by proportionally adjusting either the July 1st update factors or the approved hospital revenues. A more detailed description of the transitional rate setting policy is available in the January 1st, 2014 Staff Recommendations. On July 1st, 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 GBR agreements; however, the HSCRC staff expects that the 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.
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 Medicaid 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 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

**I. Maximum allowed growth**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum revenue growth allowance</td>
<td>A</td>
<td>3.58%</td>
</tr>
<tr>
<td>Population growth</td>
<td>B</td>
<td>0.70%</td>
</tr>
<tr>
<td>Maximum revenue growth allowance ((1+A)*(1+B))</td>
<td>C</td>
<td>4.31%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Portion of Revenues</th>
<th>Allowance</th>
<th>Weighted Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Adjustment for inflation/policy adjustments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Global budget revenues</td>
<td>80%</td>
<td>2.30%</td>
<td>1.84%</td>
</tr>
<tr>
<td>- Non global revenues</td>
<td>20%</td>
<td>1.60%</td>
<td>0.32%</td>
</tr>
<tr>
<td>b. Adjustment for volume</td>
<td></td>
<td></td>
<td>2.16%</td>
</tr>
<tr>
<td>- Global budget revenues</td>
<td>80%</td>
<td>0.80%</td>
<td>0.64%</td>
</tr>
<tr>
<td>- Non global revenues</td>
<td>20%</td>
<td>1.20%</td>
<td>0.24%</td>
</tr>
<tr>
<td>- Market share adjustments</td>
<td></td>
<td></td>
<td>0.88%</td>
</tr>
<tr>
<td>c. Infrastructure allowance provided</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Global budget revenues except TPR</td>
<td>70%</td>
<td>0.33%</td>
<td>0.23%</td>
</tr>
<tr>
<td>d. CON adjustments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Opening of Holy Cross Germantown Hospital</td>
<td></td>
<td></td>
<td>0.41%</td>
</tr>
<tr>
<td>Net increase before adjustments</td>
<td></td>
<td></td>
<td>3.68%</td>
</tr>
<tr>
<td>e. Other adjustments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Uncompensated care increase</td>
<td></td>
<td></td>
<td>0.38%</td>
</tr>
<tr>
<td>- Set aside for unknown adjustments</td>
<td></td>
<td></td>
<td>0.50%</td>
</tr>
<tr>
<td>- Reverse prior year's shared savings reduction</td>
<td></td>
<td></td>
<td>0.20%</td>
</tr>
<tr>
<td>- Positive incentives</td>
<td></td>
<td></td>
<td>0.00%</td>
</tr>
<tr>
<td>Net increase</td>
<td></td>
<td></td>
<td>4.76%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Component</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Uncompensated care reduction</td>
<td>-0.80%</td>
</tr>
<tr>
<td>b. MHIP adjustment</td>
<td>-0.38%</td>
</tr>
<tr>
<td>c. Shared savings/negative scaling adjustments</td>
<td>-0.20%</td>
</tr>
<tr>
<td>Net decrease</td>
<td>-1.18%</td>
</tr>
<tr>
<td>Net result</td>
<td>3.59%</td>
</tr>
</tbody>
</table>
I. Maximum allowed revenue growth
First, the maximum allowed revenue growth percentage is calculated by taking the per capita growth limit for the All-Payer Model and modifying it 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.

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 rebasing 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 .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) **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:

   - **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 shown as an increase, and there is a corresponding decrease in the revenue reductions for reinstituting the savings policy for FY 2015.

- **Positive Incentives:** HSCRC staff is proposing a positive incentive 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.

### III. Components of revenue change-decreases

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

a) **UCC Reduction:** 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 PAC enrollees. As discussed below, the amount of adjustment is under review.

b) **MHIP Adjustment:** A reduction in assessments may occur related to the Maryland Health Insurance Plan (MHIP) assessment. 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 provided. 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:** A reduction is shown for the reinstitution of the shared savings adjustment for FY 2015. The amount presented in the table below is the same as the amount that may be restored in rates from the prior year. However, the Commission will need to determine the policy. If the Commission added to this adjustment, the reduction would increase to 0.4%.

While this table enumerates the central provisions leading to a balanced update for the whole All-Payer Model, there are additional variables to consider such as one-time adjustments reversing into the revenue stream that either increase or decrease the revenues, as well as revenue and rate compliance adjustments and price leveling of revenue adjustments.
Impact on 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:


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, at approximately two-thirds of the rate of increase. This is believed to be driven in part by the decreasing volumes of inpatient admissions per capita, particularly medical admissions with high concentrations of Medicare patients, combined with the lower proportion of outpatient services utilized by Medicare patients where there is a much higher rate of growth. 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.
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 increase per capita and a Medicare increase per capita. 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. The calculation produces an average difference statistic of 2.94%, but the model uses a 2% statistic for conservatism based on the observation of standard deviation as well as the constraint placed on rate increases during FY 2013.

3. The allowed Medicare per capita increase is increased by the difference statistic to arrive at an allowed all-payer per capita limit.

4. The overall population increase for the State is estimated at 0.7%.
5. The all payer per capita limit is increased by the projected population growth to arrive at a maximum increase in revenue that could be provided on an all payer basis that would still result in the Medicare savings required based on the assumptions of the model.

The two most critical assumptions in the model are the assumption regarding the level of increase in Medicare payments per beneficiary and the maintenance of a difference of at least two percentage points 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 below. However, HSCRC staff notes that this is a dynamic test and that the actual rates of increase could be lower than those 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 revenue growth per capita of up to 4% while still achieving the Medicare savings required.

**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 under the All-Payer 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 or 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 under the All-Payer Model

<table>
<thead>
<tr>
<th>Components Considered</th>
<th>Revenue Under All-Payer Model or Medicare-Waiver-Exempt Global Models</th>
<th>Revenue Under Global Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td><strong>Inflation-Productivity/Policy Adjustments</strong></td>
<td><strong>Inflation</strong></td>
</tr>
<tr>
<td></td>
<td>Use Global Insights</td>
<td>Use Global Insights</td>
</tr>
<tr>
<td></td>
<td>To account for cost increases associated with inflation, less productivity and policy adjustments</td>
<td>To account for cost increases associated with inflation less policy adjustments.</td>
</tr>
<tr>
<td></td>
<td>Adjust for policy reductions for productivity, ACA, and policy limits of the All-Payer Model</td>
<td>Policy adjustments may be applied to reach the desired target under the All-Payer Model.</td>
</tr>
</tbody>
</table>
|                        | The factor should be at least .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 | 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
models relinquish a general volume adjustment and, therefore, productivity must be derived from alternative sources.

<table>
<thead>
<tr>
<th>Volume Adjustment</th>
<th>Volume Governor and 50% VCF</th>
<th>Demographic Shift Driven Volume Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Modified methodology for revenues under the All-Payer Limit should continue to limit revenues from volume by continuing the 2% volume governor approved with the transitional polices, which limits revenue growth from volume to 1% in combination with a hospital 50% VCF.</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>CareFirst recommended synchronizing the volume governor with the population adjustment for each hospital, which would decrease the amount available, on average to .7%, effectively limiting volume growth statewide to the population allowance used in the global budget models.</td>
<td>HSCRC has developed a demographic adjustment method that allocates population growth 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, but there</td>
</tr>
<tr>
<td></td>
<td>Non-residents revenue should be excluded from the volume adjustment, while being subject to the other entire rate setting principles of HSCRC and being charged identical rates to revenues of residents.</td>
<td></td>
</tr>
</tbody>
</table>

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.
was no adjustment for avoidable utilization.

The demographic adjustment is addressed in a subsequent section of this document.

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.

Academic medical centers experience a much larger non-resident volume, and referrals of individuals for tertiary and quaternary care. These revenues 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.

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.

| Market Share and Demographic | N/A | Adjustments for Shifts in Market Share |
Market share adjustments will be addressed by the work group after completion of the balanced update. The HSCRC does not intend to make adjustments for market share increases that are not offset by a corresponding decrease at another hospital. 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.

GBR/TPR hospitals must report closures and shifts of services to unregulated settings to the HSCRC so that necessary market share adjustments can be made.

HSCRC staff will introduce policies to adjust for changing patterns in transfers to AMCs that may be encouraged or reduced based on institutional capabilities. This policy would begin effective with FY 2015.

<table>
<thead>
<tr>
<th>Adjustment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume and Case-Mix Governor</td>
<td>The volume and case-mix governor will be calculated based solely on the volume changes of non-global revenues under the All-Payer Limit.</td>
</tr>
<tr>
<td>All-Payer Requirement Adjustments</td>
<td>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</td>
</tr>
<tr>
<td>PAU Adjustments</td>
<td>Adjustments based on attainment or improvement in readmission reduction and other future PAU programs developed by the HSCRC.</td>
</tr>
<tr>
<td>Quality Based Scaling Adjustments</td>
<td>Adjustments based on attainment or improvement in MHAC and QBR programs and other future quality</td>
</tr>
<tr>
<td></td>
<td>outcome programs developed by the HSCRC.</td>
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<tr>
<td>----------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td><strong>UCC Adjustments</strong></td>
<td>Adjustments to account for the pooling of UCC costs amongst all hospitals. Annual updates to amounts paid into or received from the pool.</td>
</tr>
<tr>
<td><strong>Seed Funding for New Initiatives</strong></td>
<td>Hospitals should be encouraged to adopt global budgets. 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 needed to improve care delivery while lowering costs.</td>
</tr>
</tbody>
</table>

**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.

**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 need 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.
- For FY 2014, HSCRC suspended the charity care multiplier used in the formulation of the level of UCC recognized for individual hospitals in applying the policies due to inconsistencies in allocating UCC between charity care and bad debt amounts. HSCRC staff will need to assess the consistency of allocations for FY 2015.

As a result of the ACA, on January 1st, 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 will 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; however, 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
Certificate of Need application or is in operation for a reasonable period of time to reach its
revenue capacity, whichever occurs first.

The Certificate of Need application for the hospital laid out its service area and expected sources
of patient volumes. The expected sources of volume include movement of patients from Holy
Cross Hospital as well as population growth. 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 staff also proposes to
remove the zip codes from the demographic adjustment for the HCGH service area from the
volume allowance provided under the global budget for the three hospitals with significant
overlaps in service areas--Holy Cross Hospital, Shady Grove Adventist Hospital, and
Montgomery General Hospital. The population allowance will be reserved instead for the new
hospital. In addition to these adjustments, HSCRC expects to make market share adjustments
based on reductions in Equivalent Case Mix Adjusted Discharges (EDMADs) for Shady Grove
Adventist Hospital, Montgomery General Hospital, and Shady Grove Adventist Emergency
Center in Germantown, MD 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 Center. These reductions will be applied one-quarter to six months in arrears for hospitals 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 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 two of the hospitals, 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 about $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.

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 defined service areas, VPSA is equivalent to the county where these hospitals are located. To account for variation in hospital use by age, 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 level 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% of the estimated age adjusted revenue growth accomplish similar results.
HSCRC staff will continue to refine the calculations of population and demographic adjustments to be applied with the July 1st 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 (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 (AMC)**

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 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. The advantage to adapting the model to fit the needs of AMCs is that 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 disincentives under a global model. Moreover, AMCs are the sole providers of certain essential quaternary care in the State.

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 different regulatory treatment in order to address the issues AMCs will face in transferring to GBR.

**Clinical Service Lines Requiring Different Regulatory Treatment**
1. Out of State
2. Categorical Exclusions
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 disincentive 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. 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 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.

**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.