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

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

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

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

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

1. Background
   a. Since its inception, the HSCRC rate system has recognized a variable cost factor (VCF) adjustment when setting rates in response to volume changes
   b. The VCF has ranged from 50/50 to 100/0
c. The HSCRC operated very successfully for more than a decade when the VCF was 50/50: costs were controlled, hospitals were profitable, etc.

d. This success was achieved without the additional constraint that exists today through the statewide revenue increase limits that are established in the waiver agreement.

2. Under the GBRs, volume changes are largely recognized through the Demographic Adjustment (DA) and the Market Shift Adjustment (MSA)

a. The "effective" VCF under the MSA varies widely and unpredictably across hospitals and services.

b. The MSA is complex, hard to explain and unpredictable: when methodologies are opaque, incentives are dilute and not likely to change behavior.

c. The unpredictability arises partly from the lack of statistical stability that is associated with the volume measurement structure of the MSA (i.e., approximately 60 product lines x approximately 300 zip codes = roughly 18,000 cells).

d. The GBRs provide strong incentives to reduce volume, but the MSA creates challenges for hospitals facing "good" volume increases: specifically, they cannot know in advance whether a particular service will be paid for, or at what level, because payment depends on what has happened, or not happened, or will happen at other hospitals.

e. The MSA has also led, in some instances, to a lack of responsiveness to large volume declines at some hospitals that are draining needed funds out of the overall hospital system. How long must money remain with hospitals with volume declines, especially when those declines have come on an across-the-board basis rather than through reductions in "potentially avoidable utilization" (PAUs) and other forms of unnecessary care?

f. The complexity, instability and unpredictability of the MSA is a major source of dissatisfaction among hospitals with the GBR-based budget system; on balance, the MSA is undermining support for the HSCRC’s core objectives and activities.

g. The MSA was implemented with laudable objectives but, after almost four (4) years of experience under the GBRs and the new waiver system, it is appropriate to review its merits and to recommend changes.

3. The volume statistics that are used in the MSA have some significant weaknesses: while the inpatient volume statistic (CMADs) generally does a good job of measuring volume changes, some components of the outpatient volume measure—such as the methods used to measure extended recovery stays, observation stays, drug utilization and costs—may have serious weaknesses that
should be expeditiously fixed or ameliorated through enhanced data collection, methodological adjustments or other improvements.

4. The Demographic Adjustment (DA)

a. The DA was designed to provide GBR-based revenue increases to hospitals based on changes in the number and demographic characteristics of persons in their service areas.

b. In rural areas, where hospitals have well-defined service areas, the DA provides reasonably targeted compensation for volume increases tied to population changes.

c. However, in urban and suburban areas, demographic shifts are not closely linked with particular hospitals and the DA is spread in a manner that does not reliably place resources with the hospitals that are experiencing population-driven volume changes.

5. Recommendations: Given the observations outlined above, the HSCRC should do the following:

a. The MSA should be abandoned and replaced with a budget adjustment methodology whereby (i) hospitals would be provided with volume adjustments (+/-) to their GBRs for non-PAU volume using a VCF = 50/50 across all services except for drugs and organ acquisitions, which would be subject to the VCFs described below; and (ii) the actual volume changes that occur would be monitored by the HSCRC and, if volumes increase on a statewide or regional basis beyond the levels justified by population changes, including demographic changes, the GBRs of those hospitals with volume increases would be adjusted downward, on a basis approved by the HSCRC, at the beginning of each rate year following each calendar year covered by the Model Agreement to the levels needed to enforce the population-based volume limitations of the previous calendar year. The proposed elimination of the MSA, and the re-establishment of the recommended VCFs, should be made in a way that will not jeopardize the “population-based” nature of the GBRs, as required by CMS, and any adverse impacts of the VCF changes, and associated payments for volume, on the waiver tests should be addressed by the HSCRC in a timely manner.

b. The VCF for inpatient and outpatient drugs will be 60%. This VCF will provide the hospitals with substantial protection against the impact of rising drug costs, which are to a substantial degree beyond their immediate control, while maintaining an incentive to hospitals to push back on drug price increases, find substitutes, etc. The HSCRC should evaluate, as needed, the appropriateness of the drug cost “set-asides” (of 0.28% and 0.20%) that were included in the Update Factor for FY 2018.
c. If the HSCRC finds it useful, in the future, to differentiate the VCFs for drugs, and it can develop a reliable and administratively practical method for implementation of differentiated drug cost VCFs, or if other superior methods of making appropriate adjustments for drug costs can be developed, the HSCRC should entertain those ideas and encourage their development.

d. The prices paid by the hospitals for drugs should be examined and the charges assigned to and the volume adjustments made for drugs (including drugs funded through the 340b program) should be scrutinized as needed to ensure that they reflect the reasonable costs of such drugs to the dispensing hospitals.

e. The volume measures used to track changes in the volume of drugs should be examined and modified to ensure that they accurately measure both changes in the volume and in the price of drugs. In particular, the overhead allocations assigned to drugs should be modified so that drugs with high prices (or large price increases) do not pull unreasonably high overhead allocations with them.

f. The actual costs of organ acquisitions, to the extent they are set by the regional transplant centers and other authorities, will be assigned a VCF = 100% for volume increases and decreases.

g. If the HSCRC is concerned that the elimination of the MSA might lead to inappropriate volume increases, it can take at least four steps to mitigate the possible impact of these increases: first, it can inform the hospitals that it will be monitoring volumes monthly and on a biannual basis and may take action if volumes are increasing inappropriately overall or at particular hospitals; second, it can make clear that excess volume increases will result in reductions in the overall Update Factor in order to maintain compliance with the waiver tests; third, it can tighten the volume adjustment for volume increases—e.g., by lowering the 50% VCF for volume increases to a lower amount (e.g., 40%); and, fourth, it can require the hospitals to adjust their charges to ensure they remain in compliance with their mid and full year GBRs inclusive of any volume changes.

h. In some instances, hospitals have experienced large volume decreases since the beginning of the Model Agreement. The MSA has in general applied effective VCFs that have allowed these hospitals to retain a majority of the revenues that had been associated with these volume declines in their GBRs. The HSCRC should not permit hospitals that experienced large volume declines since the beginning of the Model Agreement, for which they retained a majority of the revenue on the way down, to collect fifty percent (or more) of the revenue on the way back up until they have reached the volume they had at the time they entered into their GBR. A relatively small number of hospitals have experienced significant volume increases since the start of the new Model for which
they have received effective VCFs which were substantially lower than the VCFs specified above. These hospitals, if they experience volume declines, should not be subjected to the VCFs that are specified above, because they would remove more money than was provided for the volume increases, until their volumes have returned to their pre-Model levels.

i. The decrease in the incentives provided under the GBRs to reduce volume (which have already been somewhat undermined by the uncertainties associated with the MSA) by a move to a 50/50 VCF for most services can be effectively addressed by means of the recommendations offered below regarding changes in the "Potentially Avoidable Utilization" (PAU) methodology.

j. The Demographic Adjustment should be eliminated except for the "Total Patient Revenue" (TPR) hospitals and any hospitals that are not under TPR arrangements that are operating in well-defined market areas to be defined by the HSCRC.

B. Potentially Avoidable Utilization (PAU)

1. The HSCRC currently adjusts hospital rates based on the performance of hospitals in reducing their levels of PAU.

2. The PAU methodology has three basic weaknesses:

a. First, the definition of PAU is very narrow—it encompasses only readmissions and "Prevention Quality Indicators" (PQIs) which consist of "ambulatory care sensitive conditions." The definition of PAUs does not include the vast array of tests, imaging services and surgical and non-surgical procedures and interventions that are major sources of unnecessary utilization.

b. Second, the definition of PAU is inequitable because PQIs are inpatient-related and medical in nature: hospitals that have large outpatient and surgical patient mixes are less likely to have significant PAU as a share of their total revenue. Therefore, the PAU exposes some hospitals to inequitably computed PAU-based revenue penalties.

c. Third, the level of PQIs at a hospital depends, to a large degree, on the extent to which adequate primary care resources are present in a hospital's service area. Although the Model Agreement and the proposed Enhanced Model encourage hospitals to work to enhance primary care capabilities in their service areas, this is a task that is only partly within the influence of hospitals. The establishment of strong primary care networks should be given high priority but it is a task that will require time and the concerted efforts of multiple parties.
3. For these reasons, many in the hospital industry view the PAU methodology as a revenue adjustment methodology that does not provide well-designed incentives for the creation of programs that would be effective in reducing the broad spectrum of unnecessary care.

4. **Recommendations:** On the basis of the observations outlined above, we believe the following:

   a. The PAU adjustments should be modified on an expedited basis as described below.

   b. Hospitals should be given the opportunity to construct and propose to the HSCRC programs designed to reduce all types of unnecessary care in accordance with general principles and guidelines which would be established by the HSCRC.

   c. Hospital proposals to reduce unnecessary utilization would be expected to meet the following criteria:

   -- They must be grounded in the medical, economics and health services literature regarding unnecessary care;

   -- They must be accompanied by data compiled by the proposing hospital(s) from their own utilization with associated estimates of the amount of unnecessary care that probably exists and the proportion of that utilization that the hospitals believe they will be able to successfully eliminate over a specified time period (e.g., 3-5 years);

   -- The projected reductions in unnecessary care must be significant;

   -- The proposals must demonstrate strong clinical input and support from physicians at the proposing hospitals;

   -- The proposals must describe the analytic, managerial, incentive and other programs that would be implemented to drive the reductions in unnecessary care;

   -- The proposals must demonstrate that strong physician leadership will be at the core of the unnecessary care reduction efforts; and

   -- The proposals must identify the amounts of unnecessary care reductions that the programs will be expected to achieve over the stated time horizon (e.g., 3-5 years) and the related savings and must be accompanied by a description of the methodologies that will be used to measure (and report on) these reductions.

   d. For those hospitals that implement approved volume-reduction programs, the HSCRC would exempt volume reductions achieved in the areas of unnecessary care targeted by the programs from the downside VCF volume adjuster provided that the hospitals are able to document,
on an ongoing basis, that their programs are achieving the projected reductions.

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

C. Rate Realignment

1. The HSCRC statute instructs the HSCRC to set rates on an equitable basis across payers without undue discrimination in a manner that reflects the efficient and effective provision of needed services.

2. The HSCRC initially set rates in strict accordance with direct and allocated costs inclusive of approved markups for uncompensated care, payer differentials, teaching levels and other factors.

3. Over time, partly in response to waiver test concerns and/or Medicaid budget pressures, the HSCRC departed from its historical practice of setting cost-based rates by revenue center and allowed or directed various forms of cost shifting.

4. These actions have led to significant distortions in pricing that undermine the efforts of senior hospital managers to design strategies that are based on true, rather than distorted, cost, revenue and profitability projections; they undermine transparency in the hospital industry; and they have discriminatory effects on purchasers including individuals who pay for care on an out-of-pocket basis.

5. At least some of the rate adjustment strategies that were taken by the HSCRC (such as the application of higher rate increases to outpatient services to protect the previous waiver, which covered inpatient Medicare services only) have become outmoded in addition to being problematic under the HSCRC statute’s requirements.

6. Recommendations: The HSCRC should prescribe rate realignment actions that will bring hospital charges into line with direct and indirect costs (inclusive of mark-ups, etc.) on a revenue center basis with appropriate adjustments in the allocation of overhead (especially with regard to high cost drugs and organ acquisition). To the extent that this rate realignment has adverse waiver impacts, the effects should be offset by adjustments to the Update Factor or other
policies that affect Medicare revenue levels. Any needed adjustments could be phased in if necessary and appropriate.

D. The Readmission Reduction Incentive Program (RRIP)

1. The RRIP is designed to encourage hospitals to reduce their overall and Medicare-specific readmission rates.

2. Maryland is required by its current waiver to reduce its Medicare readmission rate to (or below) the national average Medicare readmission rate by the end of CY 2018.

3. As of CY 2017 YTD, Maryland’s readmission rate had dropped by 14.75% since CY 2013 and is expected to be at or below the national Medicare readmission rate by the end of CY 2018.

4. The all-payer readmission rate in Maryland has also dropped but it is unknown whether the non-Medicare readmission rates are high, low or equal to the national average readmission rate for non-Medicare patients because comparable, sufficiently detailed data have not been available for evaluation.

5. The GBRs provide strong financial incentives to hospitals to reduce all unnecessary readmissions.

6. Some technical issues exist that may have confounding effects on readmission statistics such as the use of observation stays in lieu of readmissions, the inclusion or exclusion of psychiatric readmissions, etc. In addition, there is some debate about the length of the readmission time period (e.g., 30, 60 or 90 days) that would be most appropriate.

7. There is credible evidence that readmissions are inversely related, to some degree, to the socioeconomic status (SES) level of patients after casemix differences have been filtered out of the analyses. If low SES patients tend to have more readmissions because they have less access to primary care, weaker support systems, and other burdens, then they carry cost effects with them that are not currently recognized by the HSCRC.

8. Recommendations: On these bases, the HSCRC should take the following steps:

   a. It should modify the existing RRIP to focus it on Medicare readmissions only and to ensure that its targets are set so that Maryland at least keeps pace with any Medicare readmission reductions that are mandated by the Model Agreement or its successor contract.
b. The revised RRIP should apply positive and negative revenue adjustments across a continuous scale (see Section G) to hospitals based on their absolute level of Medicare readmissions, relative to national Medicare readmission levels, updated on an ongoing basis, after adjustment for casemix and SES levels.

c. Hospitals that believe they can achieve appropriate reductions in their readmission rates for other payers (e.g. Medicaid, commercially insured patients, etc.) should be encouraged to include strategies to achieve these targeted reductions in their proposals for alternatives to the PAU policy described above. The GBRs will continue to provide strong incentives to hospitals to reduce unnecessary readmissions across all patient categories.

d. The revised RRIP should address any technical issues associated with readmission rate measurements (including those identified above).

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

1. The QBR provides hospitals with financial incentives tied to their performance across a range of quality domains including patient satisfaction, patient safety and clinical quality measures and the MHAC (Maryland Hospital Acquired Conditions) program encourages reductions in preventable conditions.

2. Maryland continues to perform poorly on most of the patient satisfaction measures; it performs in a mixed but generally average manner on the patient safety measures; and it has achieved a 47% reduction in MHACs since CY 2013.

3. The ongoing poor performance on the patient satisfaction measures is a serious concern of the HSCRC and an opportunity to achieve performance gains that would have substantial benefits for patients.

4. Many concerns have been raised about the credibility of the very large improvements in MHAC levels over the last four years (and, especially, in the immediate wake of the conversion to the new waiver and the GBR budgets). In particular, changes in clinical coding practices have been cited as a possible source of some portion of the improvements.

5. **Recommendations:** On these bases, the HSCRC should do the following:

   a. Review the MHACs and retain those that identify preventable conditions in a reliable way in a revised MHAC program or incorporate them into a revised QBR policy in a way that will ensure compliance with the Model Agreement or the proposed Enhanced Model.

   c. Place a greater emphasis on patient satisfaction and patient safety measures and a limited set of other quality measures that can be
objectively and reliably measured and benchmarked against national standards. In particular, ED wait times—which are unacceptably high in Maryland—should be featured in the revised QBR and the HSCRC should establish strong financial incentives for improvements in these areas after taking into account those factors (such as SES, bed availability, and volume of emergency petition patients) which may influence the ability of particular hospitals to meet the ED wait time standards.

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

F. The Medicare Performance Adjustment (MPA)

1. The HSCRC has approved a final recommendation from the staff which outlines a Medicare Performance Adjustment (MPA) that is designed to place individual hospitals at risk for a small portion of their Medicare revenues based on their ability to control the Total Cost of Care (TCOC) for Medicare FFS beneficiaries who are assigned to them through a three tier attribution process.

2. The rationale for the MPA is based substantially on a desire to enhance the ability of physicians in Maryland to become eligible for MACRA-based bonuses through participation in Advanced Alternative Payment Models (AAPMs).

3. The MPA would allow physicians participating with hospitals bearing risk under the MPA to claim MACRA bonuses and might incentivize them to manage care in ways that would enhance the likelihood of success in Phase Two of the waiver.

4. However, serious objections have been raised regarding the reliability and appropriateness of the attribution methods proposed for the MPA, including the methods used to assign individuals to hospitals; the potential absence of cohesive patient/provider relationships; the challenge of creating and supporting provider networks that could effectively manage care; the stability and reliability of the Medicare TCOC target budgets that would be created for the individual hospitals; and the minimal level of financial incentives initially included in the program.

5. **Recommendations**: Given these concerns, the HSCRC should take the following steps:

   a. The HSCRC should proceed with the MPA for CY 2018, as outlined by staff, inclusive of any changes that are settled on prior to the start of CY 2018.
b. The HSCRC should continue to work on the MPA during the first half of CY 2018 to make refinements in it; in addition, the HSCRC should solicit proposals from the hospitals (individually, as systems or as geographic groups) for approaches whereby they could be placed at risk for Medicare FFS TCOC target budgets in CY 2019 and future years using alternative MPA arrangements that they would create in response to a number of key criteria that would be established by the HSCRC.

c. The HSCRC should require the alternative MPA arrangements to be consistent with the requirements of the Model Agreement and the proposed Enhanced Model.

d. The Trend Factor for the Medicare TCOC target budgets would not be pre-set for CY 2018: it would be tied and reconciled to the Medicare TCOC test in the waiver agreement.

G. General Improvement and Clarification of Rate Setting Methodologies

1. Many of the HSCRC's current rate setting methodologies are so complex that they are not well-understood by hospital CEOs, CFOs, and Commissioners.

2. Methodologies that are not well-understood by the entities that are governed by them are ineffective tools for providing incentives and driving desired behaviors.

3. The complex nature of many of the HSCRC's existing methodologies is a key source of dissatisfaction with the existing system.

4. **Recommendations**: On these grounds, the HSCRC should do the following to improve its rate setting methodologies and enhance their ability to motivate desired behaviors:

   a. Use continuous scales in determining incentive rewards and penalties as described in Attachment One which provides a draft methodology whereby the HSCRC can apply incentives and penalties which can be focused or relaxed, if appropriate, on any segments of the performance distribution—for example, the HSCRC might elect to apply a modifier which would remove rewards or penalties from hospitals within any particular performance range so that the incentives could be focused on hospitals on the "good" or "bad" ends of the performance distribution. These choices would be made by the HSCRC as policy decisions in the context of the particular quality programs upon review of the relevant information.

   b. Eliminate the use of "contingency" structures in which hospitals are put at risk for the performance of other hospitals at the statewide level. Hospitals that meet specified target levels of performance should be entitled to receive their award and should not lose any part of it because
other hospitals did not meet their targets. If there is a desire to spur inter-hospital cooperation, a bonus could be applied to the rewards of all hospitals that operate at or above a specified attainment level and the penalties applicable to all hospitals that do not reach a specified attainment level could be reduced if, on the whole, hospital performance is judged by the HSCRC to meet an acceptable overall standard.

c. Eliminate the use of combined “attainment,” “improvement” and “consistency” scales. The use of multiple performance metrics of these kinds greatly adds to the complexity of the methodologies and detracts from their understandability. Hospitals with higher attainment scores should always receive higher rewards or lower penalties than hospitals with lower attainment scores. If the scales are set on a continuous basis, then improvements are inherently recognized by an attainment-only scale because improving to higher attainment levels will always bring either higher rewards or smaller penalties.

d. In constructing methodologies and adjustments, the HSCRC should rely whenever possible on straightforward, non-complex techniques which can be readily understood by hospital CEOs, CFOs and Commissioners who are charged with the task of operating under or establishing and maintaining key policies. Regression-based adjustments and other more complex tools should be used only when they provide clearly better results and are accompanied by persuasive logical and conceptual rationales.

H. Timing of Proposed Methodological Changes

1. The HSCRC and the Maryland hospital industry took major steps on the road to a high value system and achievement of the Triple Aim through the adoption of the GBRs and other actions that were implemented under the Model Agreement. However, after nearly four years of experience, we now have an opportunity to make some important improvements in our rate setting methods based on experience and feedback from a variety of interested groups.

2. The proposed changes reflect a significant groundswell of opinion that the HSCRC should at this time make significant improvements in its key methodologies to maximize the likelihood that the objectives and requirements of the current waiver and Phase Two will be met and the interests of the public will be served.

3. It is best to make policy changes at the beginning, rather than during, rate periods. The waiver operates on a calendar year (CY) basis while hospital rate years run from July 1 through June 30 each year.
4. The elimination of the MSA and the establishment of the budget adjustment methodology that would provide VCF adjustments subject to the population-based volume limitations described above should be implemented, effective for 1/1/2018, inclusive of volume changes that occurred during CY 2017 that have not already been reflected in rate orders. If a brief period of time is needed at the start of CY 2018 to make these changes, they should be implemented as quickly as possible retroactive to 1/1/2018. These adjustments should be implemented in a way that ensures ongoing compliance with the population-based requirements of the Model Agreement.

5. The hospitals should be allowed and encouraged to submit alternatives to the PAU program prior to 7/1/2018 with the start-up of such programs that are found to be approvable by the HSCRC to begin by 7/1/2018. The improvements and modifications to the standard PAU policy that were recommended above should be implemented for 7/1/2018.

6. The following methodological and other changes should be specified in detail on a timely basis during the first half of CY 2018 for implementation on 7/1/2018:

   a. The rate realignment changes needed to restore the close alignment of charges and costs on a revenue center basis with any steps that are appropriate, if necessary, to phase-in any significant impacts on the relevant waiver tests;
   b. The modification of the RRIP;
   c. The revisions to the MHAC and QBR policies;
   d. The proposed solicitation of alternative MPA methods should be issued by 7/1/2018 with first implementations to occur, if approvable proposals are received, on 1/1/2019, with later implementations to occur on 7/1/2019 or at later dates depending on hospital responses; and
   e. The proposed general clarifications and improvements of rate setting methodologies, described in Section G, should be implemented effective 7/1/2018 with draft recommendations and policies incorporating these changes to be brought forward to the Commission for review and approval on a staged basis during the first half of CY 2018.

Submitted by:
Jack C. Keane
HSCRC Commissioner
11/15/2017

Date

Submitted by:
John M. Colmers
HSCRC Commissioner
11/15/2017

Date

11/15/17 9:09 AM
Attachment One:  
Illustration of Quality Scoring Tool

**Example of Calculation of Quality Points (for individual measures, domains or total quality score)**

**Assume:**  
Best MD. Hospital is 40% better than the standard.  
Worst MD. Hospital is 35% worse than the standard.  
Range = absolute value of best to worst.  
Assumed maximum reward: 2%  
Assumed maximum penalty: -2%

**Calculation of Reward for Hospitals with Scores Better than the U.S. (or Maryland)**

Average  
Assume hospital "X" has a score which places it at 30% better than the standard: it would receive the following: "Maximum Reward" x (Hospital Score/Best Hospital Score) = 1.50% x 2% = 30% = 75%

**Calculation of Reward for Hospitals with Scores Worse than the U.S. (or Maryland)**

Average  
Assume hospital "Y" has a score which places it at 25% worse than the standard: it would receive the following: "Maximum Reward" x (Hospital Score/Worst Hospital Score) = -1.43% x -2% = -25% = 71%

Modifier: In some instances, the HSCRC might wish to focus rewards and penalties on the extremes of the range. The following method illustrates one way in which this objective could be accomplished using quartiles, deciles or any other segmentation of the distribution. It could be used to facilitate the focusing of rewards and penalties on any segment of the distribution.

<table>
<thead>
<tr>
<th>Assumed Adjustment Factors</th>
<th>Best Quartile (&quot;Good&quot;)</th>
<th>Middle Quartile (&quot;Good&quot;)</th>
<th>Middle Quartile (&quot;Bad&quot;)</th>
<th>Worst Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best MD. Hospital &quot;X&quot;</td>
<td>1.25</td>
<td>1.00</td>
<td>1.00</td>
<td>1.25</td>
</tr>
<tr>
<td>Assumed Hospital &quot;Y&quot;</td>
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<td>1.25%</td>
<td>-0.75%</td>
<td>-1.43%</td>
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<td>1.2500%</td>
<td>-0.7500%</td>
<td>-1.7857%</td>
</tr>
</tbody>
</table>

Note: Adjusted Rewards and Penalties would be capped at pre-set maximum levels.