AGREEMENT BETWEEN THE HEALTH SERVICES COST REVIEW COMMISSION (HSCRC) AND HOSPITAL SYSTEM NAME REGARDING THE ADOPTION OF THE HSCRC’S ADMISSION-READMISSION REVENUE (ARR) SYSTEM

This Agreement made this \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (enter date), between Hospital System Name on behalf of its member hospitals, List Hospitals, (the Hospital, Hospitals, or Hospital System) and the Health Services Cost Review Commission (the Commission, or HSCRC) is subject to the following provisions:

# General Description

The Commission’s Admission-Readmission Revenue (ARR) arrangement is a voluntary revenue constraint program developed by the HSCRC, which provides hospitals with a financial incentive to more effectively coordinate care and reduce unnecessary readmissions to their facilities. ARR arrangements apply to regulated hospital inpatient services and charges only. The methodology results in the establishment of an Admission-Readmission Revenue constraint, which builds upon each Hospital’s HSCRC approved inpatient unit rates. The ARR agreement imposes a case mix adjusted standard bundled Admission-Readmission Charge Per Episode (ARR-CPE) target for each Hospital, as identified above, which applies to inpatient admissions and subsequent readmissions.

An inpatient case is considered a readmission to the Hospital if the patient is admitted to the same facility (intra-hospital readmission), or another hospital in the same Hospital System (intra-system readmission in the case where linked system hospitals are treated as a single entity for purposes of this methodology) within 30 days of the discharge of the initial admission of the same patient.

This agreement supplements each Hospital's current Charge Per Case (CPC) agreement.

1. **Contract Period**

This ARR agreement is in effect for three years, beginning July 1, 2011 and ending June 30, 2014, unless extended by written mutual agreement between the Hospital/Hospital System and the HSCRC. The HSCRC will use June 2011 as the pre-period to identify initial admissions that are discharged in June 2011 but associated with readmissions during July 2011.

Section IV of this agreement describes modification and cancellation provisions.

1. **Methodology**

This section outlines the ARR methodology. Details of the ARR methodology are available in the “Admission-Readmission Revenue Operational Policy Guidelines” located on the Commission website and incorporated herein. This document may change from time to time. HSCRC staff will discuss potential updates and modifications to the Operational Policy Guidelines in a public ARR workgroup prior to their adoption.[[1]](#footnote-1) The HSCRC will clearly document any updates and modifications to the Operational Policy Guidelines.

Under the Commission’s CPC system, permanent included revenue is divided among total included discharges to generate the CPC target. Under this ARR agreement, the permanent included revenue will be redefined as the ARR-CPE target, where an episode is defined as an initial admission of a patient and any subsequent readmissions to the same facility, or linked system hospitals, within 30 days of the discharge of the initial admission of the same patient.

If the Hospital can successfully reduce intra-hospital readmissions (or intra-system readmissions, where applicable), the established ARR-CPE target remains unchanged. [[2]](#footnote-2) The Hospital can generate productivity gains and associated savings by maintaining existing revenue (as authorized under the approved ARR-CPE), while eliminating the costs associated with intra-hospital/intra-system readmissions.

1. **Covered Cases and Case Exclusions**

The cases to be included in this agreement are cases included in the Commission’s CPC methodology.

Categorical exclusions from the CPC methodology will also be excluded from the ARR methodology. For example, zero and one-day stay cases are excluded from the CPC methodology for rate year 2012; therefore, zero and one-day stay cases are excluded from the ARR methodology for rate year 2012. Consistent with CPC methodology, outlier cases will have their charges reduced to the trim-point for weight setting, CMI calculation, and CPC/CPE target calculation.

Details regarding cases exempt from this arrangement are specified in the Operational Policy Guidelines document.

1. **ARR Episode of Care Definition**

An ARR Episode of Care (ARR-EOC) is an initial admission of a patient and any subsequent readmissions to the same facility, or linked system hospitals, within 30 days of the discharge of the initial admission of the same patient.

The 30 day period applicable to an ARR-EOC begins upon discharge of the initial admission of a patient. If that patient is readmitted within the 30 day window, regardless of the number of times, those readmissions are counted as part of the single ARR-EOC.

If a patient is admitted only once to the Hospital (or linked system hospital) during the 30 day period, the single admission (i.e., the initial and only admission) comprises the entire ARR-EOC. In this agreement, all references to “initial admissions” include both only admissions and initial admissions.

Examples and illustrations of ARR-EOCs are specified in the Operational Policy Guidelines document. The Operational Policy Guidelines document also provides details of ARR-EOC exemptions, such as handling of transferred cases and discharges/admissions to/from special units within a hospital.

1. **Linked System Hospitals**

As agreed upon by the Hospitals and the HSCRC, the HSCRC will consider as a single entity for purposes of defining the ARR-EOCs specified hospitals within a multi-hospital system. The Hospital System must complete Addendum A prior to executing this agreement. In Addendum A, the Hospital Systems lists those linked hospitals and specifies the agreement years to which the linking is applicable. Hospital Systems also provide a description of the methodology used to link patient records for linked system hospitals.

Linked system hospitals must supply the HSCRC with data to track the patients readmitted between the Hospitals (e.g., a patient identifier crosswalk) on a quarterly basis parallel to the HSCRC inpatient data submission schedule.

If the System Hospitals do not yet have the ability to track intra-system readmissions, the Hospital System must describe in Addendum A the planned method to establish tracking intra-system readmissions in year 1 or in subsequent years.

1. **Risk Adjustment and Weight Development**

In order to risk adjust, the HSCRC will calculate statewide weights per current methodology (i.e., using statewide data to establish statewide weights by APR-DRG/SOI cell). The HSCRC will then construct statewide ARR weights for the entire ARR-EOC. This methodology results in a weight that bundles readmissions with the case weight for the initial admissions. The HSCRC will classify the episodes by the APR-DRG/SOI of the initial admission in the episode.

In developing ARR weights, the HSCRC will seek to maintain a monotonic relationship of ARR weights across the severity levels for each APR-DRG (i.e., if a SOI within an APR-DRG has a lower weight than a lower level SOI within that same APR-DRG, then the HSCRC will combine applicable SOI cells and develop a common weight for the cells using these combined data). HSCRC will calculate the hospital-specific ARR case mix index (ARR-CMI) in the base year. See Attachment A for a sample calculation.

Details are specified in the Operational Policy Guidelines document.

The HSCRC will monitor for substantial changes in the proportion of certain populations utilizing services at each Hospital. Populations include, the elderly, Medicaid as expected payer, and discharges with mental health as a secondary diagnosis. As these populations are associated with higher readmission rates, demonstrated substantial changes merit review by the HSCRC for potential adjustment.

1. **Calculation of Hospital's ARR-CPE**

The HSCRC will calculate an approved ARR-CPE for each Hospital using the following steps (see Attachment B for sample calculation):

1. Calculate the hospital-specific ARR-CMI using statewide weights as described in Section III Paragraph C applied to initial admissions. This will be the base period ARR-CMI;
2. Determine total included revenue consistent with current methodology for the Charge Per Case;
3. Consolidate included cases into ARR-EOCs as defined in Section III Paragraph B of this agreement. Count the ARR-EOCs;
4. The ARR-CPE will be the total included revenue calculated in Step b. divided by the count of episodes in Step c.
5. **Compliance Under the ARR-CPE**

For the first year of the agreement, the corridor for the EOC will be expanded from 1 percent to 2 percent for overcharges and remain at the current policy of 2 percent for undercharges. In recognition of the added complexity of managing to an ARR-CPE target, the corridor for overcharges will be expanded for the first year of the agreement. The HSCRC staff and Hospital staff will monitor compliance to the target during the first year and reassess at the end of year 1 whether future years will require an expanded corridor.

Calculation of compliance at the end of the rate year:

* 1. Calculate actual included revenue: Actual inpatient charges less trim revenue and excluded revenue;
  2. Calculate actual included cases: Actual inpatient cases less exclusions and readmissions.
  3. Actual ARR-CPE will be included revenue calculated in Step a above divided by included cases as calculated in Step b above;
  4. Calculate case mix for ARR-CPE by applying the statewide weights (described in Section II Paragraph C above) to initial and only admissions for the current period. This will be the current ARR-CMI;
  5. Calculate the approved included revenue: Approved ARR-CPE x (current period ARR-CMI/base period ARR-CMI) x actual included cases;

1. **Volume and Price Adjustment**

A volume and price adjustment will be performed for the Hospital each rate year. If the gross revenue charged by the Hospital exceeds the approved revenue, the difference between the gross revenue charged and the approved revenue will be subtracted from the revenue that would otherwise have been approved for the Hospital for the subsequent year. Conversely, if the gross revenue charged is less than the approved revenue, the difference will be added to the revenue for the subsequent year, except that undercharges below the corridor specified in Section III Paragraph E above will not be so included. This volume and price adjustment is a one-time adjustment and, therefore, will be reversed in the subsequent year.

A volume adjustment consistent with approved Commission policy will be applied to initial and only readmissions. Readmissions will be excluded from the volume adjustment. See Attachment C for sample calculation.

1. **Annual Update Adjustments**

The HSCRC will apply annual update adjustments consistent with CPC methodology. For example, each Hospitals’ approved total revenue shall be adjusted for:

1. The annual update factor approved by the Commission for the Hospital;
2. Reversal of any previous retroactive adjustments;
3. Changes to each Hospital's markup due to changes in mix of payers or changes in approved differential amounts and approved bad debt provision;
4. Volume and price adjustments as specified in Section III Paragraph F;
5. Adjustment for quality scaling (QBR and MHAC) and ROC scaling; and
6. Other adjustments consistent with CPC methodology.
7. **Other Terms, Potential Modifications, and Cancellation Provisions**
8. **Special Provision for Transition**

The Commission will provide each Hospital up to an additional 0.5 percent of included inpatient revenue in rates (the “Seed Funding Provision”) to help cover the costs associated with the development of improved discharge planning and care coordination infrastructure for a period of two years. At the end of the two year period, the Seed Funding Provision will be removed from rates, and a commensurate one-time decrease to rates will be applied over the subsequent period not less than two years.

By signing this ARR agreement, each Hospital agrees to devote the Seed Funding Provision toward the financing of costs associated with the planned interventions, necessary infrastructure, and monitoring activities.

The Hospital/Hospital System reserves the right to request continuation of the Seed Funding provision. To justify this request, the Hospital/Hospital System may seek to quantify overall system cost savings that can reasonably be attributed to the initiation of this ARR agreement. The Hospital/Hospital System also reserves the right to propose continuation of the Seed Funding provisions related to infrastructure development costs associated with other Episode of Care/Bundled Payment initiatives designed to save cost and improve quality by improving their coordinated care infrastructures.

In order to track the progress of the reduction in readmissions, actual expenditures, and system savings and to better identify the status of continuation of the Seed Funding, the Hospital/Hospital Systems will meet with the HSCRC after six and twelve months of activity under the ARR agreement.

1. **Hospital/Hospital System ARR Interventions Budget**

In Attachment D, the Hospital/Hospital System is to provide a proposed budget of expenses and a description of planned interventions with program monitoring/program evaluation activities.

1. **Monitoring and Reporting Requirements**
2. **Hospital/Hospital System Reporting to HSCRC**

On a quarterly basis, the Hospital/Hospital System shall supply the HSCRC with data on a number of metrics to track the progress of ARR interventions. The HSCRC will provide the quarterly reporting specifications and report due dates in the Operational Policy Guidelines document.

The Hospital/Hospital System shall also submit an annual report summarizing trends in the reported metrics and generally describing the overall impact of the ARR program for the Hospital/Hospital System. The annual report shall provide a precise summary of actual expenditures on personnel and/or interventions and infrastructure dedicated to reducing readmission should be included in the Hospital's/Hospital Systems. The HSCRC will provide the annual reporting specifications and report due dates in the Operational Policy Guidelines document.

1. **HSCRC Monitoring and Program Evaluation**

The HSCRC will monitor certain measures to track the impact of ARR. These include, but are not limited to, metrics outlined in the Operational Policy Guidelines.

HSCRC staff will examine trends in these identified metrics. Unanticipated changes in these metrics may be cause for modification of the ARR agreement with the Hospital/Hospital System.

After the first 12 months of the ARR agreement (but no later than 18 months after initiation of the program), the HSCRC staff will undertake an evaluation of the success of ARR. Success will be evaluated in the context of how well the pilot contributes to the goal of improving the overall value of care provided at the ARR hospitals (lower cost and better clinical effectiveness/quality) at both the institution and system levels. Particular focus will be applied to an analysis of utilization trends post-ARR implementation (e.g., the utilization metrics outlined above). HSCRC staff will report the results of this evaluation to the Commission and the Hospital/Hospital System and discuss any appropriate mid-course modifications with the Hospital/Hospital System (if any) at that time.

1. **Other Requirements**

Under this agreement, the Hospital/Hospital System must continue to charge HSCRC approved unit rates for facility services rendered.

1. **Policy Modifications and Exclusions**
2. **Modifications to the ROC Calculation**

Because this agreement substantially alters the measurements upon which hospitals' adjusted charges are compared within the State, the HSCRC staff shall convene a workgroup in year 1 to review technical issues related to the ROC and ARR.

1. **Modifications to the Case Mix Calculation for Purposes of the Case Mix Governor**

If the HSCRC determines that the Hospital is treated unfairly for purposes of the application of the case mix governor due to the implementation of the ARR methodology, HSCRC staff may seek to devise a methodology to eliminate the negative impacts to the Hospital’s case mix calculation that are associated with the Hospital’s ARR initiatives.

1. **Statewide Readmissions Exclusion**

The Hospital/Hospital System under this agreement will be exempt from any statewide readmission policy.

1. **ARR Agreement Modifications** 
   1. **Possible Agreement Modifications to Allow for Better Alignment of Incentives**

Under healthcare reform, a number of approaches have been suggested to contain healthcare costs. For example, bundling services under a single payment has been identified prominently as one method for aligning incentives for the efficient delivery of healthcare services. The methodology outlined within this agreement is a first step in bundling services by providing a single payment for an episode of care, regardless of additional readmissions that occur after the initial admission into a hospital. Because healthcare reform efforts are progressing rapidly, the parties to this agreement may mutually agree to modify its terms to expand the services included within this methodology. Potential changes include, but are not limited to, the inclusion of hospital outpatient and emergency department services; post-acute care services; additional days within the readmission window; and gain-sharing with physicians.

* 1. **Other Agreement Modifications**

The Hospital/Hospital System under this agreement reserve the right to seek modification to the agreement due to unanticipated circumstances beyond the control of the Hospital including but not limited to the following:

* Closure of either an acute care or psychiatric facility within its primary services area;
* Significant change in services offered at either an acute care or psychiatric facility within its primary services area;
* Influenza epidemic, major natural or terrorist disaster in the area which results in a larger than usual number of hospital admissions;
* Expansion of Medicaid volumes due to modifications in eligibility requirements or market factors.

Any such request for modification must be presented and discussed with HSCRC staff. The staff have the final authority to approve or reject such modifications.

1. **ARR Agreement Cancellation Provisions**
   1. **Year 1 Cancellation Provision**

In recognition that the Hospital/Hospital System may enter into this agreement prior to the HSCRC issuing ARR weights, either party may cancel this agreement, with or without cause, within 30 days of the HSCRC issuing the first year's ARR weights.

* 1. **Hospital/Hospital System Cancellation Provision at the End of the Contract Period**

This agreement may be cancelled by the Hospital/Hospital System at the end of the contract period by giving the Commission 60 days prior written notice of intent to cancel with or without cause.

* 1. **Commission Cancellation Provision with Cause**

The Commission reserves the right to cancel this agreement, with cause, at any time.

1. **Definition of Terms**

**Annual Update:** The annual increase to Maryland hospital rates for the upcoming HSCRC rate year as approved by the Commission including all applicable adjustments to rates.

**All Patient Refined Diagnoses Related Groups (APR-DRG):** The grouping system used by the HSCRC for inpatient services. The Diagnosis Related Groups (DRGs) are a patient classification scheme which provides a means of relating the type of patients a hospital treats (i.e., its case mix) to the costs incurred by the hospital. The All Patient Refined DRGs (APR-DRG) incorporate severity of illness subclasses into the DRGs.

**Admission-Readmission Revenue (ARR):** A voluntary revenue constraint program (described in this agreement) developed by the HSCRC which provides hospitals with a financial incentive to more effectively coordinate care and reduce unnecessary readmissions to their facilities.

**Admission-Readmission Revenue Operational Policy Guidelines:** A document prepared by the HSCRC staff with input from representatives of the hospital industry, providing definitions, examples and explanations of how the ARR methodology will be operationalized. The document includes definitions of the 30 day ARR-EOC covered by this agreement, a list and examples of cases excluded from this agreement (unless otherwise noted in this Agreement), and a discussion of other operational issues associated with ARR. The HSCRC will update the Operational Policy Guidelines to document updates and revisions to the ARR methodology.

**ARR Case Mix Index (ARR-CMI):** The case mix index calculated for ARR hospitals using the bundled episodes.

**ARR Charge Per Episode (ARR-CPE):** An ARR hospital’s approved revenue constraint as determined by dividing approved included revenue by the count of ARR Episodes of Care.

**ARR Episode of Care (ARR-EOC):** An episode of care, defined for purposes of this ARR agreement, includes an initial admission of a patient and any subsequent readmissions to the same facility, or linked system hospitals, within 30 days of the discharge of the initial admission of the same patient.

**Base Period:** The rate year immediately preceding the first year of the ARR pilot program (or in this case the initial base period covers the period from July 1, 2010 through June 30, 2011 with a lead month of June 2010 to capture Initial Admissions resulting in a Re-admission within 30 days).

**Categorical Exclusions:** Inpatient cases excluded from the CPC per existing Commission policy.

**Charge Per Case (CPC):** The Commission-approved charge constraint methodology focusing on individual inpatient cases.

**Initial Admission (IA):** The initial hospitalization of a patient is the admission that begins the ARR-EOC (over a 30 day window) for subsequent readmissions of that same patient to the same hospital within 30 days from the discharge of that initial hospitalization. In this agreement, all references to initial admissions include both only admissions and initial admissions.

**Intra-Hospital Readmissions:** Cases originally treated at an ARR Hospital and subsequently readmitted to that same Hospital within the identified 30 day window.

**Intra-System Readmissions:** Cases originally treated at a Hospital in an ARR Hospital System and subsequently readmitted to another Hospital in that same ARR Hospital System within the identified 30 day window.

**Inter-Hospital Readmissions:** Cases originally treated at an ARR Hospital but later readmitted to another facility within the identified 30 day window.

**Linked System Hospital:** Hospitals within a multi-hospital system that are treated as a single entity for determining ARR-EOCs.

**Maryland Hospital Acquired Conditions Initiative (MHAC):** The HSCRC’s Hospital Acquired Conditions measurement methodology that compares a hospital’s risk-adjusted actual rate of hospital acquired conditions to an expected or predicted rate based on State-wide experience.

**Measurement Period:** The current rate year (or rate year immediately following the Base Period) which will be the basis for measuring ARR performance.

**Only Admission (OA):** An initial admission that does not have a subsequent readmission within the readmission window. In this agreement, all references to initial admissions include both only admissions and initial admissions.

**Price Compliance and Volume Adjustments:** Application of the Commission’s normal one-time price and volume adjustments (after accounting for the impact of readmission volume changes).

**Quality-Based Reimbursement:** The HSCRC’s pay-for-performance initiative linking hospital payment with performance (both relative and year-to-year) on a set of processes of care and patient experience of care measures.

**Readmissions (RA):** Readmissions or rehospitalizations for the purposes of this agreement, are those situations where a patient was previously initially admitted to the Hospital for inpatient treatment and then subsequently brought back and admitted again to that same Hospital (or to a linked system hospital) within the 30 day readmission window.

**Reasonableness of Charges (ROC):** Commission policy that compares hospitals based on charges and subsequently scales hospital revenue based on the outcomes of the methodology.

**Seed Funding Provision:** Up to an additional 0.5 percent of inpatient revenue in rates to help cover the costs associated with the development of improved discharge planning and care coordination infrastructure for a period of two years.

**Severity of Illness (SOI):** A function of to APR-DRG grouper that categorizes cases based on the severity of the case. HSCRC's case mix adjustment is based off of SOI.

**Zero or One-Day Stay Cases:** Patients admitted and discharged by a hospital with a length of stay less than or equal to one.

In Witness Whereof, the Parties have executed this Agreement and have this date caused their respective signatures to be affixed hereto:

Attest: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

(Date)

Chief Financial Officer

Hospital System Name

Attest: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

(Date)

Executive Director

Health Services Cost Review Commission

**Attachment A**



**Attachment B**



**Attachment C**



ARR Intervention Plan and Metrics Template

HSCRC staff developed this template to assist hospitals in organizing ARR intervention plans and to define the metrics associated with the each major intervention.

*(Note to Hospital Systems: If there is variation in interventions for hospitals within the system, please provide this information for each hospital separately.)*

**Hospital/System Name:**

*Copy and paste the following for each intervention.*

**Intervention Name:**

**Brief Summary of the Intervention (2-3 sentences), rationale for selection:**

Provide a description of the intervention including the problem(s) or process(es) for which the intervention aims to address.

**Target population:**

Describe the intended target of the intervention.

**Intervention Implementation Status/Date:**

Indicate when the hospital/hospital initiated the intervention. For interventions not fully implemented, indicate percent of work toward implementation completion and estimated implementation date.

**Intervention Staffing FTEs:**

Specify dedicated or partially dedicated numbers by title/type of staff for this intervention.

**Staff Title/Type FTEs Allocated Annually**

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**Intervention Partners:**

Identify any partnerships with entities outside the hospital/hospital system.

**Technologies Employed:**

Identify any technologies for which the intervention relies.

**Metrics to Track Success of the Intervention:**

Provide information about one or two specific metrics the hospital/system will use to establish a baseline and then use to track progress over time for each of the ARR interventions. The HSCRC notes that a metric may be used for more than one intervention.

**Metric 1 Name:**

**Rationale for Selection:** (specify relevance/importance for the measure in improving patient processes or outcome(s) and ultimately, reducing readmissions, and the intervention(s) to which this measure applies.)

**Metric 1 Numerator Definition:**

**Metric 1 Numerator Data Source(s):**

**Metric 1 Denominator Definition:**

**Metric 1 Denominator Data Source(s):**

**Metric 2 Name:**

**Rationale for Selection** (specify relevance/importance for the measure in improving patient processes or outcome(s) and ultimately, reducing readmissions, and the intervention(s) to which this measure applies.)

**Metric 2 Numerator Definition:**

**Metric 2 Numerator Data Source(s):**

**Metric 2 Denominator Definition:**

**Metric 2 Denominator Data Source(s):**

As agreed upon by the Hospitals and the HSCRC, the HSCRC will consider as a single entity for purposes of defining the ARR-EOCs specified hospitals within a multi-hospital system.

**Specify here the linked system hospitals and the agreement years to which the linking is applicable:**

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| --- | --- | --- | --- |
| **Hospital** | **Base Year** | **ARR Agreement Year** | **Notes** |
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**Provide a description of the methodology used to link patient records for linked system hospitals.**

If the System Hospitals do not yet have the ability to track intra-system readmissions, **describe here the planned method to establish tracking intra-system readmissions in year 1 and subsequent years (include expected base year and first ARR year).**

1. Adjustments as a result of data issues encountered in the course of analysis deemed minor by HSCRC staff do not require such a discussion; however, staff will document the minor adjustments. [↑](#footnote-ref-1)
2. HSCRC will apply annual update adjustments as defined in Section III Paragraph G. [↑](#footnote-ref-2)