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# 514th MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION
## December 10, 2014

### EXECUTIVE SESSION
### Noon
**(The Commission will begin in public session at noon for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1PM.)**

1. **Organizing Staff and Role of Commission regarding Certificate of Need Process – Authority State Government Article 10-503(a), and 10-508(a)(7)**
2. **Status of Medicare Data Submission and Reconciliation – Authority State Government Article 10-503(a)**
3. **Reviewing Commission Internal Process for Considering Legislation - Authority State Government Article 10-503(a)**

### PUBLIC SESSION OF THE
### HEALTH SERVICES COST REVIEW COMMISSION
### 1:00 p.m.

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

2. **Executive Director's Report**

3. **New Model Monitoring**

4. **Docket Status – Cases Closed**
   2257A – MedStar Health
   2269A – Johns Hopkins Health System
   2270A – St. Agnes Health, Maryland General Hospital, Meritus Health, Western Maryland Health System, and Holy Cross Health
   2274A – Johns Hopkins Health System
   2275A – Johns Hopkins Health System
   2276A – Johns Hopkins Health System
   2277A – University of Maryland Medical Center

5. **Docket Status – Cases Open**
   2265A – Holy Cross Hospital
   2278A – Johns Hopkins Health System
   2279A – MedStar Health
   2280A - Johns Hopkins Health System
   2281A – Riverside Health of Maryland

6. **Draft Recommendation for Modifications to the MHAC program for FY 2017**

7. **Draft Recommendation for Modifications to the Readmission Reduction Incentive Program for FY 2017**

8. **Draft Recommendations for Total Amount at Risk for Quality Programs for FY 2017**

9. **Draft Report and Recommendation on the NSPII Program**

10. **Draft Report on Medicaid Savings resulting from the All-Payer Model**

11. **Final Recommendation on Modifying Medicaid Current Financing Calculation for CY 2015**

12. **Hearing and Meeting Schedule**

# Executive Director's Report

The Executive Director's Report will be distributed during the Commission Meeting

# New Model Monitoring Report

The Report will be distributed during the Commission Meeting

# Cases Closed

The closed cases from last month are listed in the agenda

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

AS OF DECEMBER 3, 2014

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

| Docket Number | Hospital Name | Date Docketed | Decision Required by: | Rate Order Must be Issued by: | Purpose | Analyst's Initials | File Status |
|---|---|---|---|---|---|---|---|
| 2265A | Holy Cross Hospital | 9/5/2014 | N/A | N/A | N/A | DNP | OPEN |
| 2278A | Johns Hopkins Health System | 11/13/2014 | N/A | N/A | N/A | DNP | OPEN |
| 2279A | MedStar Health | 11/20/2014 | N/A | N/A | N/A | DNP | OPEN |
| 2280A | Johns Hopkins Health System | 11/21/2014 | N/A | N/A | N/A | DNP | OPEN |
| 2281A | Riverside Health | 12/2/2014 | N/A | N/A | N/A | DNP | OPEN |

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

| | | | |
|---|---|---|---|
| **IN RE: THE APPLICATION FOR** | * | **BEFORE THE MARYLAND HEALTH** | |
| **ALTERNATIVE METHOD OF RATE** | * | **SERVICES COST REVIEW** | |
| **DETERMINATION** | * | **COMMISSION** | |
| **JOHNS HOPKINS HEALTH** | * | **DOCKET:** | **2014** |
| **SYSTEM** | * | **FOLIO:** | **2088** |
| **BALTIMORE, MARYLAND** | * | **PROCEEDING:** | **2278A** |

**Staff Recommendation**

**December 10, 2014**

## I. INTRODUCTION

Johns Hopkins Health System (System) filed an application with the HSCRC on November 14, 2014 on behalf of Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center (the Hospitals) for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC for participation in an amended global rate arrangement for solid organ transplant, bone marrow transplant, and cardiovascular services with Olympus Managed Health for a period of one year beginning January 1, 2015.

## II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by Johns Hopkins HealthCare, LLC ("JHHC"), which is a subsidiary of the System. JHHC will manage all financial transactions related to the global price contract including payments to the Hospitals and bear all risk relating to regulated services associated with the contract.

## III. FEE DEVELOPMENT

The hospital portion of the new global rates was developed by calculating mean historical charges for patients receiving kidney, bone marrow transplants, and cardiovascular services at the Hospitals. The remainder of the global rate is comprised of physician service costs. Additional per diem payments were calculated for cases that exceed a specific length of stay outlier threshold.

## IV. IDENTIFICATION AND ASSESSMENT OF RISK

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

## V. STAFF EVALUATION

Staff found that the experience under this arrangement for the last year was favorable.

## VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for solid organ, bone marrow transplant, and cardiovascular services for a one year period commencing January 1, 2014. The Hospitals will need to file a renewal application for review to be considered for continued participation. Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospitals for the approved contract. This document would formalize the understanding between the Commission and the Hospitals, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

| | | | |
|---|---|---|---|
| **IN RE: THE ALTERNATIVE** | * | **BEFORE THE HEALTH** | |
| **RATE APPLICATION OF** | * | **SERVICES COST REVIEW** | |
| **MEDSTAR HEALTH** | * | **COMMISSION** | |
| **SYSTEM** | * | **DOCKET:** | **2014** |
| | * | **FOLIO:** | **2089** |
| **COLUMBIA, MARYLAND** | * | **PROCEEDING:** | **2279A** |

**Final Recommendation**

**December 10, 2014**

## I. Introduction

On November 20, 2014, MedStar Health filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of Franklin Square Hospital, Good Samaritan Hospital, Harbor Hospital, and Union Memorial Hospital (the "Hospitals"). MedStar Health seeks approval for MedStar Family Choice ("MFC") to participate in a Centers for Medicare and Medicaid Services (CMS) approved Medicare Advantage Plan. MedStar Family Choice is the MedStar entity that assumes the risk under this contract. The Hospitals are requesting an approval for two years beginning January 1, 2015.

## II. Background

MFC has been operating a CMS-approved Medicare Advantage Plan under the plan name of MedStar Medicare Choice for the last two years in the District of Columbia. Several months ago CMS granted MFC permission to expand under the same Medicare Advantage plan number to provide coverage to Maryland eligible residents in Anne Arundel, Baltimore, Charles, Howard, Prince George's, St. Mary's counties and Baltimore City. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services, as well as certain non-hospital services, in return for a CMS-determined capitation payment. MFC will pay the Hospitals HSCRC-approved rates for hospital services used by its enrollees.

MFC supplied a copy of its contract with CMS and financial projections for its operations in Maryland.

## III. Staff Review

Staff reviewed the reviewed the CMS contract and the financial information and

projections for CYs 2015.

## IV. Recommendation

Based on the financial projections and the fact that MFC has achieved favorable financial performance in its Maryland Medicaid's Health Choice Program, staff believes that the proposed arrangement for MFC is acceptable under Commission policy.

Therefore, staff recommends that the Commission approve the Hospitals' request to participate in CMS' Medicare Part C Medicare Advantage Program for a period of one year beginning January 1, 2015. The Hospitals must file a renewal application annually for continued participation.

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

| | | | |
|---|---|---|---|
| **IN RE: THE APPLICATION FOR** | * | **BEFORE THE MARYLAND HEALTH** | |
| **ALTERNATIVE METHOD OF RATE** | * | **SERVICES COST REVIEW** | |
| **DETERMINATION *** | | **COMMISSION** | |
| **JOHNS HOPKINS HEALTH** | * | **DOCKET:** | **2014** |
| **SYSTEM** | * | **FOLIO:** | **2090** |
| **BALTIMORE, MARYLAND** | * | **PROCEEDING:** | **2280A** |

**Staff Recommendation**

**December 10, 2014**

## I. INTRODUCTION

On November 21, 2014, Johns Hopkins Health System ("System") filed a renewal application on behalf of its member hospitals, Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, and Howard County General Hospital (the "Hospitals") requesting approval to continue to participate in a revised global price arrangement with Life Trac (a subsidiary of Allianz Insurance Company of North America) for solid organ and bone marrow transplants and cardiovascular services. The Hospitals request that the Commission approve the arrangement for one year beginning January 1, 2015.

## II. OVERVIEW OF APPLICATION

The contract will continue to be held and administered by Johns Hopkins HealthCare, LLC ("JHHC"), which is a subsidiary of the System. JHHC will continue to manage all financial transactions related to the global price contract including payments to the System hospitals and to bear all risk relating to regulated services associated with the contract.

## III. FEE DEVELOPMENT

The hospital portion of the global rates, which was originally developed by calculating mean historical charges for patients receiving th e procedures for which global rates are to be paid, has been adjusted to reflect recent hospital rate increases. The rem ainder of the global rate is comprised of physician service costs. Additiona l per diem payments, calculated for cases that exceeded a specific length of stay outlier threshold, were similarly adjusted.

## IV. IDENTIFICATION AND ASSESSMENT RISK

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

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

## V. STAFF EVALUATION

The staff found that the actual experience under the arrangement for solid organ and bone marrow transplants for the last year has been slightly unfavorable; however, staff believes that the Hospitals can still achieve a favorable performance under the arrangement.

## VI. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for solid organ and bone marrow transplant services for the period beginning January 1, 2015. The Hospitals must file a renewal application annually for continued participation.

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

| | | |
|---|---|---|
| **IN RE: THE ALTERNATIVE** | * | **BEFORE THE HEALTH** |
| **RATE APPLICATION OF** | * | **SERVICES COST REVIEW** |
| **LIFEBRIDGE HEALTH** | * | **COMMISSION** |
| **ADVENTIST HEALTHCARE, INC.** | | |
| | * | **DOCKET: 2014** |
| | * | **FOLIO: 2091** |
| | * | **PROCEEDING: 2281A** |

**Final Recommendation**

**December 10, 2014**

**This is a final recommendation and ready for Commission action.**

## I. Introduction

On December 2, 2014, Riverside Health ("Riverside"), on behalf of LifeBridge Health, and Adventist Healthcare (the "Hospitals"), filed an application for an Alternative Method of Rate Determination ("ARM") pursuant to COMAR 10.37.10.06. The Managed Care Organization ("MCO") and Hospitals seek approval of Riverside to continue to participate in the Medicaid Health Choice Program. Riverside is the entity that assumes the risk under this contract. While Riverside has participated in the Health Choice program in CY 2013 and 2014, this is its first ARM application with the Commission. The MCO and Hospitals are requesting to implement this contract for one year beginning January 1, 2015.

## II. Background

Under the Medicaid Health Choice Program, Riverside, an MCO sponsored partially by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services as well as certain non-hospital services, in return for a State-determined capitation payment. Riverside pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees. Riverside is a relatively small MCO providing services to 2.2% of the total number of MCO enrollees in Maryland.

The MCO supplied information on its most recent financial experience and its preliminary projected revenues and expenditures for the upcoming year based on the revised Medicaid capitation rates.

## III. Staff Review

Staff reviewed the operating financial performance under the contract. Staff reviewed financial information and projections for CYs 2013 and 2014, and preliminary projections for CY 2015. Riverside began operating in February of 2013 – one month into the plan year. Due to start up costs, the MCO's CY 2013 financial experience reported to staff was negative. However, financial performance is expected to be positive in both CYs 2014 and 2015.

## IV. Recommendation

While first year performance was negative, one would expect initial start up costs to create strain on financials in the first year of operation. Staff will continue to monitor performance of CY 2014 and 2015 to ensure that projections hold up. Based on the information provided, staff believes that the proposed arrangement for Riverside is acceptable.

**Therefore:**

**(1) Staff recommends approval of this alternative rate application for a one-year period beginning January 1, 2015.**

**(2) Since sustained losses over an extended period of time may be construed as a loss contract necessitating termination of this arrangement, staff will continue to monitor financial performance for CY 2014 and the MCO's expected financial status into CY 2015. Staff recommends that Riverside report to Commission staff (on or before the September 2015 meeting of the Commission) on the actual CY 2014 experience, preliminary CY 2015 financial performance (adjusted for seasonality) of the MCO, as well as projections for CY 2016.**

**(3) Consistent with its policy paper outlining a structure for review and evaluation of**

**applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the continued adherence to the standard Memorandum of Understanding with the Hospitals for the approved contract. This document formalizes the understanding between the Commission and the Hospitals, and includes provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the managed care contract, quarterly and annual reporting, the confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract. The MOU also stipulates that operating losses under managed care contracts may not be used to justify future requests for rate increases.**

# Draft Recommendation for Modifying the Maryland Hospital Acquired Conditions Program for FY 2017

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

**December 10, 2014**

This document contains the draft staff recommendations for updating the Maryland Hospital Acquired Conditions (MHAC) Program for FY 2017. Comments may be submitted via hard copy mail to the Commission's address or email to Dianne.feeney@maryland.gov and are due by COB Monday, 12/22/14.

# A. Introduction

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

The MHAC program was implemented in state FY 2011. In order to enhance our ability to incentivize hospital care improvements and meet the MHAC reduction targets in the CMMI All-payer model demonstration contract that began on January 1, 2014, Commission staff developed recommendations with significant changes to the MHAC existing policy within the context of the Performance Measurement and Payment Models Workgroup activity. The Commission approved the updated recommendations at the April 2014 meeting that modified the measurement, scoring and payment scaling methodologies to translate scores into rate adjustments for the MHAC initiative. These updates were effective for performance in calendar year 2014 (beginning January 1, 2014) and are to be applied to FY 2016 rates for each hospital. Among these changes were measuring hospital performance using observed to expected ratio values for each PPC rather than the additional incremental cost of the PPCs measured at each hospital, and shifting from relative scaling to pre-established PPC performance targets for payment adjustments. The revised approach also established a statewide MHAC improvement target with tiered amounts of revenue at risk based on whether or not the target is met, and the allocation of rewards for FY 2016 consistent with the amount of revenue in penalties collected.

This recommendation proposes to continue with the current MHAC initiative methodology for FY 2017 with updates to the policy that allow for rewards not limited to the penalties collected, and to the statewide improvement target for applying tiered scaling amounts.

# B. Background

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

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

The CMS HAC measures for FY 2016 are listed in Appendix I.

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

The MHAC program currently uses 65 Potentially Preventable Complications (PPCs) developed by 3M Health Information Systems.

In the process of developing the MHAC updated recommendations for FY 2016, staff vetted several guiding principles for the revised MHAC program that overlap significantly with those identified by the MHA. They include:

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

To achieve a policy that supports the guiding principles, staff's approved recommendations effective for CY 2014 performance and applied to rate year FY 2016(see detailed description in Appendix II) included:

- Using Observed (O)/Expected (E) value for each PPC to measure each hospitals' performance
- Establishing appropriate exclusion rules to enhance measurement fairness and stability.
- Prioritizing PPCs that are high cost, high volume, have opportunity to improve, and are of national concern in the final hospital score through grouping the PPCs and weighting the scores of PPCs in each group commensurate with the level of priority.
- Calculating rewards/penalties using preset positions on the scale based on the base year scores.
- Based on performance trends and CMMI contract goals, establishing annual statewide targets with tiered scaling, with a statewide target set at 8% improvement with 1% of permanent revenue at risk if the target is met, and 4% at risk and no rewards paid if the target is missed; penalties were limited to 0.5% of permanent inpatient revenue statewide.

## C. Assessment

HSCRC continues to solicit input from stakeholder groups comprising the industry and including payers to determine appropriate direction regarding areas of needed updates to the programs. These include the measures used, and the program's methodology components.

The Performance Measurement Workgroup has deliberated pertinent issues and potential changes to Commission policy for FY 2017 that may be necessary to enhance our ability to continue to improve quality of care and reduce costs caused by hospital acquired complications, as well as to achieve the reduction target set forth in the contract with CMMI— a 30% reduction in MHACs over five years. In its October and November meetings, the Workgroup discussed issues related to:

- PPC measurement trends,
- Present on admission (POA) auditing,
- The stability of the PPC measures themselves over time,

- The appropriate time period for establishing benchmarks for FY 2017,
- The reward and penalty structure of the program, and,
- A revised annual statewide reduction target for the MHAC program on which to base tiered payment of rewards and penalties.

### 1. *Updated PPC Measurement Trends*

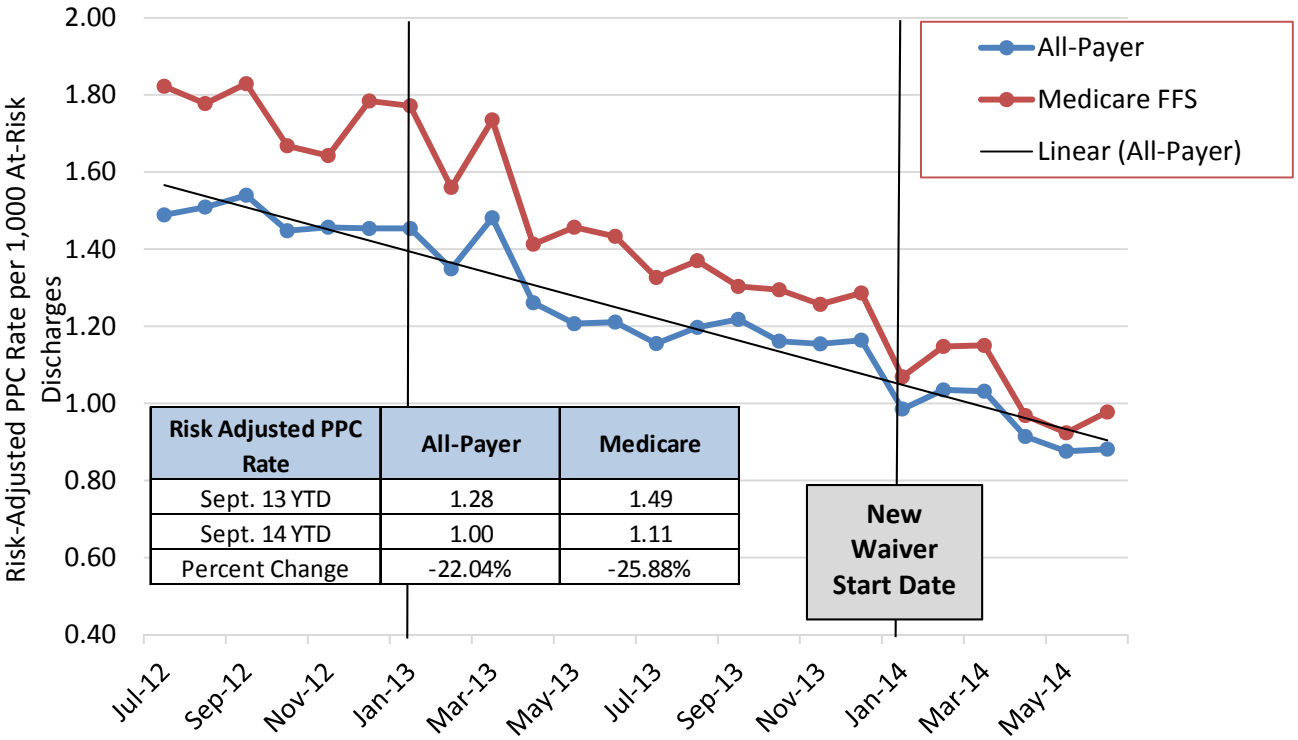
As illustrated in Figure 1 below, Maryland has seen a significant drop from year to year from 2010 to 2014 in the statewide PPC rates with a total rate per 1,000 decrease of 39.6% unadjusted, and an average annual risk adjusted decrease of 13.9%.

**Figure 1. PPC Reduction Trends FY 10 to FY 14**

| Potentially Preventable Complication (PPC) Rates in Maryland- State FY2010-FY2014 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PPC RATES (FY2010 NORMS, vs. 30) | | | | PPC RATES (CY2013 NORMS, vs. 31) | | | Annual Change (FY2010 Norms, vs. 30) | | | Annual Change (CY2013 Norms, vs. 31) | | FY2010 Norms, vs. 30 | |
| | FY10 | FY11 | FY12 | FY13 | FY13 | FY14 | | FY11 | FY12 | FY13 | FY14 | | Annual Change | Total Change |
| TOTAL NUMBER OF COMPLICATIONS | 53,494 | 48,416 | 42,118 | 34,200 | 34,143 | 26,900 | | -9.5% | -13.0% | -18.8% | -21.2% | | **-15.6%** | 50.4% |
| UNADJUSTED COMPLICATION RATE PER 1,000 AT RISK CASES | 1.92 | 1.82 | 1.65 | 1.41 | 1.40 | 1.16 | | -5.2% | -9.3% | -14.5% | -17.1% | | **-11.6%** | 60.8% |
| RISK ADJUSTED COMPLICATION RATE PER 1,000 AT RISK CASES | 1.92 | 1.77 | 1.58 | 1.30 | 1.40 | 1.13 | | -7.8% | -10.7% | -17.7% | -19.3% | | **-13.9%** | 54.7% |

In addition to the annual change in PPC rates, staff also analyzed monthly year to date PPC Medicare and all-payer changes and discussed the findings at a public Commission meeting and with the Workgroup. As Figure 2 below illustrates, there was a sharp decrease in the rate in January 2014, but the linear trend line decrease is constant and consistent for September 2013 year to date (YTD) compared to September 2014 YTD.

**Figure 2. 2013 and 2014 Monthly YTD PPC Rate Comparisons**




| Risk Adjusted PPC Rate | All-Payer | Medicare |
|---|---|---|
| Sept. 13 YTD | 1.28 | 1.49 |
| Sept. 14 YTD | 1.00 | 1.11 |
| Percent Change | -22.04% | -25.88% |

Note: Based on final data for January 2013 - June 2014.

### 2. *Present on Admission (POA) Auditing*

To a very large extent, POA coding drives MHAC assignment. Auditing POA, then, is important in order to validate or discover to what extent that change in PPC rates is related to clinical care rather than hospital coding practices. Staff discussed with the Workgroup modifying the plans for auditing POA in 2014.

- For FY 2014, the HSCRC is primarily focusing on auditing 10 hospitals that have had significant improvements in PPC rates.
- Cases selected for audit (N = 230)
    - 50% random sample for ICD-9 Audits
    - 50% for POA audits (used to be 30%); select from a file of discharges at-risk for PPC's with large improvements and those where the PPC status changed between the preliminary and final data submission.
- Other hospital selection factors include hospital size, date of last audit (not auditing in 2013 or 2014), percent change between preliminary and final data submission.

Staff will present findings of the POA audits in public Workgroup meetings and discuss any implications for considering adjustments to the MHAC program based on the findings.

### 3. *Stability of PPC Measures Over Time*

Workgroup members expressed concern over the stability of individual PPC measures, in particular noting that some PPCs rates could potentially increase rather than decrease over time

as definitions for the PPCs are potentially interpreted differently from hospital to hospital, and measurement practices evolve over time. "The more you look, the more you find" was an example raised for infection PPCs, as an example.

To explore the question of hospital-specific PPC stability and also that of hospital PPC scores, staff analyzed the correlations for the following performance results:

- Individual PPC rates for FY2012, FY2013, FY2014
- Hospital PPC scores for FY2013 and FY2014, for both improvement and attainment.

Appendix III contains the individual PPC rates per 1,000 correlation results that indicate majority of the PPC rates for hospitals were statistically significantly correlated from FY2012 through FY2014. Figure 3 below illustrates the correlation in improvement and attainment scores that the staff modelled. The results indicate that there was statistically significant correlation for attainment but not for improvement. Based upon these results, staff are less concerned about the stability of measurement of the PPCs but this must continue to be monitored to ensure that the measure is reliable and valid.

**Figure 3. Correlation of FY2013 and FY2014 Improvement and Attainment Scores**

| | Correlation Coefficient | p-value |
|---|---|---|
| Attainment Scores FY13 and FY14 | 0.57464 | <0.0001 |
| Improvement Scores FY13 and FY14 | -0.03931 | 0.7977 |

### *4. Setting PPC Benchmarks for FY 2017*

The Workgroup discussed issues to consider in setting the base year performance benchmarks. Because of the sharp decrease in PPC rates in January 2014, staff supported the position of setting PPC benchmarks using FY 2014 performance data with an adjustment that recognized the sharp one month decrease; this would entail weighting more heavily the results in the latter 6 months of the fiscal year in setting the benchmarks. However based upon Workgroup concerns with lowering the benchmarks and the sustainability of the current improvement results, the staff will use FY 2014 rates to set benchmarks for FY2017.

### *5. MHAC Reward and Penalty Structure*

Staff reviewed with the Workgroup modeling of the rewards and penalties for FY 2016 using data for the first 6 months of CY 2014 (FY2014 Qtrs 3 and 4). A table with hospital specific results can be found in Appendix IV. Workgroup members discussed the impact of a revenue neutrality adjustment to the MHAC program, specifically noting that limiting the rewards to the penalties collected did not recognize the effort expended to achieve the performance levels for the better performing hospitals. As was discussed, Figure 4 below illustrates that total

rewards are reduced to ~10% of what would have been earned if they were not capped at the penalties collected.

Staff will be discussing possibility of removing the cap on rewards at the payment and performance work group meetings in December and provide a final recommendation to the Commission at January meeting.

**Figure 4. MHAC Modeling of Total Rewards and Penalties Using FY 2014 Qtrs 3 and 4 Data**

| | Count of Hospitals receiving Reduction or Reward | Total Revenue | Revenue Neutral Adjustment |
|---|---|---|---|
| Total Reduction | 5 | $ (1,035,398.00) | $ (1,035,398.00) |
| Total Reward | 22 | $ 9,901,152.00 | $1,035,398.00 |

### *6. Annual Statewide MHAC Reduction Target and Score Scaling FY 2017*

The Workgroup discussed options for the revised annual MHAC reduction target. Some participants noted that the state has achieved ~23% of that required by the All-payer Model contract with CMMI in the first year. Staff noted the need to continue to improve care and reduce cost. Staff also noted that using FY 2014 to set benchmarks does not account for the additional 6 months from July to December 2014 where the MHAC rates would continue to improve. Therefore, staff advocates for a target of 7% improvement from FY2015 to CY2015, which is equal to 5% annual improvement rate and on par with the improvement trends the state has been observing.

Staff also advocates for no change in the scaling approach by keeping constant the tiered score scaling with no rewards if the statewide target is not met (Appendix V).

## D. Recommendations

Based on the work completed to date on updating the MHAC program for FY 2017, staff makes the following draft recommendations:

1. The statewide reduction target should be set at 7 % comparing FY2014 to CY2015 risk adjusted PPC rates.

2. The program should continue to use a tiered approach where a lower level of revenue at risk is set if the statewide target is met versus not met as modelled in FY2016 policy

3. Rewards should be distributed only if the statewide target is met, and should not be limited to the penalties collected.

# Appendix I. CMS HAC Measures for FY 2016

## CMS HAC MEASURES Implemented Since FY 2012

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

## CMS HAC Measures Implemented FY 2015

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

# Appendix II: PPC Measurement Definitions, Points Calculation, PPC Tiers and Weighting

***Definitions***

The PPC measure would then be defined as:

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

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

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

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

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

Weighted mean of top quartile O/E ratio

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

***Performance Points***

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

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

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

- Attainment Points: [9 * ((Hospital's performance period score - threshold)/ (benchmark –threshold))] + .5, where the hospital performance period score falls in the range from the threshold to the benchmark

- Improvement Points: [10 * ((Hospital performance period score -Hospital baseline period score)/(Benchmark - Hospital baseline period score))] -.5, where the hospital performance score falls in the range from the hospital's baseline period score to the benchmark.

***PPC Tiers: Tier A Scores Weighted 60%, Tier B 40% and Tier C 20%***

| Tier A |
| --- |
| Selected as high cost, high volume statewide plus those that match CMS HAC policy of AHRQ Patient Safety Indicators |
| |
| 3 Acute Pulmonary Edema and Respiratory Failure without Ventilation |
| 4 Acute Pulmonary Edema and Respiratory Failure with Ventilation |
| 5 Pneumonia & Other Lung Infections |
| 6 Aspiration Pneumonia |
| 7 Pulmonary Embolism |
| 9 Shock |
| 14 Ventricular Fibrillation/Cardiac Arrest |
| 16 Venous Thrombosis |
| 24 Renal Failure without Dialysis |
| 28 In-Hospital Trauma and Fractures |
| 31 Decubitus Ulcer |
| 35 Septicemia & Severe Infections |
| 37 Post-Operative Infection & Deep Wound Disruption Without Procedure |
| 38 Post-Operative Wound Infection & Deep Wound Disruption with Procedure |
| 40 Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Proc |
| 42 Accidental Puncture/Laceration During Invasive Procedure |
| 49 Iatrogenic Pneumothrax |
| 54 Infections due to Central Venous Catheters |
| 65 Urinary Tract Infection without Catheter |
| 66 Catheter-Related Urinary Tract Infection |

| Tier B |
| --- |
| Selected as remaining PPCs with high Medicare percentage (>60%) and high number of Maryland hospitals (>43) |
| |
| 8 Other Pulmonary Complications |
| 10 Congestive Heart Failure |
| 11 Acute Myocardial Infarction |
| 17 Major Gastrointestinal Complications without Transfusion or Significant Bleeding |
| 18 Major Gastrointestinal Complications with Transfusion or Significant Bleeding |
| 19 Major Liver Complications |
| 27 Post-Hemorrhagic & Other Acute Anemia with Transfusion |
| 41 Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc |
| 48 Other Complications of Medical Care |

| Tier C |
| --- |
| Remaining PPCs |
| 1 Stroke & Intracranial Hemorrhage |
| 2 Extreme CNS Complications |
| 12 Cardiac Arrythmias & Conduction Disturbances |
| 13 Other Cardiac Complications |
| 15 Peripheral Vascular Complications Except Venous Thrombosis |
| 20 Other Gastrointestinal Complications without Transfusion or Significant Bleed |
| 21 Clostridium Difficile Colitis |
| 23 GU Complications Except UTI |
| 25 Renal Failure with Dialysis |
| 26 Diabetic Ketoacidosis & Coma |
| 29 Poisonings Except from Anesthesia |
| 30 Poisonings due to Anesthesia |
| 32 Transfusion Incompatibility Reaction |
| 33 Cellulitis |
| 34 Moderate Infectious |
| 36 Acute Mental Health Changes |
| 39 Reopening Surgical Site |
| 43 Accidental Cut or Hemorrhage During Other Medical Care |
| 44 Other Surgical Complication - Mod |
| 45 Post-procedure Foreign Bodies |
| 46 Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body |
| 47 Encephalopathy |
| 50 Mechanical Complication of Device, Implant & Graft |
| 51 Gastrointestinal Ostomy Complications |
| 52 Inflammation & Other Complications of Devices, Implants or Grafts Except Va Infection |
| 53 Infection, Inflammation & Clotting Complications of Peripheral Vascular Cathe Infusions |
| 55 Obstetrical Hemorrhage without Transfusion |
| 56 Obstetrical Hemorrhage wtih Transfusion |
| 57 Obstetric Lacerations & Other Trauma Without Instrumentation |
| 58 Obstetric Lacerations & Other Trauma With Instrumentation |
| 59 Medical & Anesthesia Obstetric Complications |
| 60 Major Puerperal Infection and Other Major Obstetric Complications |
| 61 Other Complications of Obstetrical Surgical & Perineal Wounds |
| 62 Delivery with Placental Complications |
| 63 Post-Operative Respiratory Failure with Tracheostomy |
| 64 Other In-Hospital Adverse Events |

# APPENDIX III. Hospital PPC Rate per 1,000 Correlation Results

| PPC Number | PPC Description | Correlation Coefficient FY12-FY13 | Correlation Coefficient FY13-FY14 | Correlation Coefficient FY12-FY14 |
|---|---|---|---|---|
| 1 | Stroke & Intracranial Hemorrhage | 0.435 | 0.598 | 0.558 |
| 2 | Extreme CNS Complications | 0.043 | 0.345 | 0.154 |
| 3 | Acute Pulmonary Edema and Respiratory Failure without Ventilation | 0.770 | 0.695 | 0.656 |
| 4 | Acute Pulmonary Edema and Respiratory Failure with Ventilation | 0.806 | 0.866 | 0.760 |
| 5 | Pneumonia & Other Lung Infections | 0.524 | 0.453 | 0.317 |
| 6 | Aspiration Pneumonia | 0.592 | 0.397 | 0.362 |
| 7 | Pulmonary Embolism | 0.661 | 0.593 | 0.669 |
| 8 | Other Pulmonary Complications | 0.930 | 0.930 | 0.900 |
| 9 | Shock | 0.789 | 0.570 | 0.579 |
| 10 | Congestive Heart Failure | 0.908 | 0.870 | 0.754 |
| 11 | Acute Myocardial Infarction | 0.565 | 0.237 | 0.328 |
| 12 | Cardiac Arrythmias & Conduction Disturbances | 0.933 | 0.830 | 0.848 |
| 13 | Other Cardiac Complications | 0.683 | 0.413 | 0.339 |
| 14 | Ventricular Fibrillation/Cardiac Arrest | 0.663 | 0.605 | 0.630 |
| 15 | Peripheral Vascular Complications Except Venous Thrombosis | 0.347 | 0.522 | 0.479 |
| 16 | Venous Thrombosis | 0.797 | 0.737 | 0.675 |
| 17 | Major Gastrointestinal Complications without Transfusion or Significant Bleeding | 0.583 | 0.609 | 0.524 |
| 18 | Major Gastrointestinal Complications with Transfusion or Significant Bleeding | 0.508 | 0.032 | 0.378 |
| 19 | Major Liver Complications | 0.437 | 0.276 | 0.149 |
| 20 | Other Gastrointestinal Complications without Transfusion or Significant Bleeding | 0.106 | 0.118 | 0.323 |
| 21 | Clostridium Difficile Colitis | 0.652 | 0.641 | 0.661 |
| 23 | GU Complications Except UTI | 0.372 | 0.231 | 0.431 |
| 24 | Renal Failure without Dialysis | 0.723 | 0.680 | 0.582 |
| 25 | Renal Failure with Dialysis | 0.132 | 0.193 | 0.426 |
| 26 | Diabetic Ketoacidosis & Coma | 0.568 | 0.810 | 0.825 |
| 27 | Post-Hemorrhagic & Other Acute Anemia with Transfusion | 0.685 | 0.583 | 0.518 |
| 28 | In-Hospital Trauma and Fractures | 0.242 | 0.167 | 0.142 |
| 29 | Poisonings Except from Anesthesia | -0.074 | 0.029 | -0.079 |
| 31 | Decubitus Ulcer | 0.715 | -0.021 | -0.068 |
| 32 | Transfusion Incompatibility Reaction | 1.000 | -0.023 | -0.023 |
| 33 | Cellulitis | 0.664 | 0.756 | 0.711 |

| | | | | |
|---|---|---|---|---|
| 34 | Moderate Infectious | 0.691 | 0.658 | 0.634 |
| 35 | Septicemia & Severe Infections | 0.503 | 0.399 | 0.303 |
| 36 | Acute Mental Health Changes | 0.681 | 0.705 | 0.584 |
| 37 | Post-Operative Infection & Deep Wound Disruption Without Procedure | 0.520 | 0.504 | 0.699 |
| 38 | Post-Operative Wound Infection & Deep Wound Disruption with Procedure | 0.647 | 0.275 | 0.563 |
| 39 | Reopening Surgical Site | 0.570 | 0.667 | 0.615 |
| 40 | Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Proc | 0.643 | 0.559 | 0.517 |
| 41 | Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc | 0.396 | 0.346 | 0.131 |
| 42 | Accidental Puncture/Laceration During Invasive Procedure | 0.725 | 0.348 | 0.430 |
| 43 | Accidental Cut or Hemorrhage During Other Medical Care | 0.798 | 0.761 | 0.326 |
| 44 | Other Surgical Complication - Mod | 0.272 | 0.350 | 0.450 |
| 45 | Post-procedure Foreign Bodies | 0.226 | 0.126 | -0.133 |
| 46 | Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body | 0.275 | 0.359 | 0.689 |
| 47 | Encephalopathy | 0.610 | 0.735 | 0.385 |
| 48 | Other Complications of Medical Care | 0.400 | 0.443 | 0.240 |
| 49 | Iatrogenic Pneumothrax | 0.371 | -0.014 | 0.066 |
| 50 | Mechanical Complication of Device, Implant & Graft | -0.028 | 0.579 | 0.103 |
| 51 | Gastrointestinal Ostomy Complications | 0.566 | 0.856 | 0.492 |
| 52 | Inflammation & Other Complications of Devices, Implants or Grafts Except Vascular Infection | 0.571 | 0.273 | 0.434 |
| 53 | Infection, Inflammation & Clotting Complications of Peripheral Vascular Catheters & Infusions | 0.305 | 0.562 | 0.290 |
| 54 | Infections due to Central Venous Catheters | 0.679 | 0.272 | 0.368 |
| 55 | Obstetrical Hemorrhage without Transfusion | 0.798 | 0.831 | 0.586 |
| 56 | Obstetrical Hemorrhage wtih Transfusion | 0.820 | 0.653 | 0.790 |
| 57 | Obstetric Lacerations & Other Trauma Without Instrumentation | 0.770 | 0.753 | 0.496 |
| 58 | Obstetric Lacerations & Other Trauma With Instrumentation | 0.772 | 0.401 | 0.369 |
| 59 | Medical & Anesthesia Obstetric Complications | 0.378 | 0.368 | -0.107 |
| 60 | Major Puerperal Infection and Other Major Obstetric Complications | 0.620 | 0.456 | 0.478 |
| 61 | Other Complications of Obstetrical Surgical & Perineal Wounds | 0.497 | 0.495 | 0.435 |
| 62 | Delivery with Placental Complications | 0.613 | 0.561 | 0.621 |
| 63 | Post-Operative Respiratory Failure with Tracheostomy | 0.864 | 0.559 | 0.857 |
| 64 | Other In-Hospital Adverse Events | 0.838 | 0.791 | 0.686 |

| | | | | |
|---|---|---|---|---|
| 65 | Urinary Tract Infection without Catheter | 0.663 | 0.861 | 0.618 |
| 66 | Catheter-Related Urinary Tract Infection | 0.365 | 0.301 | 0.209 |

Statistically Significant at $p < 0.05$

Results for PPC30 not presented and McGready was removed from analysis.

# APPENDIX IV.

## FY 2014 Q3&Q4 Final Scores Scaling Modeling

| HOSPITAL ID | HOSPITAL NAME | Estimated Inpatient Revenue (FY15*2.6%) | Base Year Score | FINAL WEIGHTED SCORE | %Scaling Adjustment | $ | Revenue Neutral | % |
|---|---|---|---|---|---|---|---|---|
| 210001 | SUBURBAN | $ 181,410,188 | 0.14 | 0.41 | -0.17% | $ (312,776.19) | $ (312,776.19) | -0.17% |
| 210002 | SOUTHERN MARYLAND | $ 163,208,213 | 0.29 | 0.41 | -0.17% | $ (281,393.47) | $ (281,393.47) | -0.17% |
| 210003 | HOWARD COUNTY | $ 167,386,497 | 0.19 | 0.43 | -0.10% | $ (173,158.44) | $ (173,158.44) | -0.10% |
| 210004 | HOLY CROSS | $ 319,596,342 | 0.27 | 0.44 | -0.07% | $ (220,411.27) | $ (220,411.27) | -0.07% |
| 210005 | CARROLL COUNTY | $ 138,209,278 | 0.37 | 0.45 | -0.03% | $ (47,658.37) | $ (47,658.37) | -0.03% |
| 210006 | GARRETT COUNTY | $ 18,724,074 | 0.69 | 0.47 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210008 | ANNE ARUNDEL | $ 310,117,075 | 0.35 | 0.48 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210009 | DOCTORS COMMUNITY | $ 136,225,391 | 0.34 | 0.49 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210010 | FREDERICK MEMORIAL | $ 189,480,763 | 0.36 | 0.50 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210011 | WASHINGTON ADVENTIST | $ 161,698,669 | 0.40 | 0.51 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210012 | MONTGOMERY GENERAL | $ 87,652,208 | 0.36 | 0.51 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210013 | PENINSULA REGIONAL | $ 233,728,496 | 0.20 | 0.51 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210015 | G.B.M.C. | $ 201,533,345 | 0.21 | 0.51 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210016 | UNION MEMORIAL | $ 242,505,500 | 0.25 | 0.52 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210017 | HARBOR | $ 124,002,220 | 0.45 | 0.53 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210018 | BALTIMORE WASHINGTON MEDICAL CENTER | $ 223,155,126 | 0.28 | 0.54 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210019 | ST. AGNES | $ 239,121,556 | 0.44 | 0.55 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210022 | FRANKLIN SQUARE | $ 285,691,170 | 0.38 | 0.55 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210023 | SHADY GROVE | $ 228,731,775 | 0.51 | 0.55 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210024 | UNIVERSITY OF MARYLAND | $ 863,843,449 | 0.28 | 0.56 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210027 | DORCHESTER | $ 25,127,935 | 0.36 | 0.57 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210028 | UPPER CHESAPEAKE HEALTH | $ 148,917,096 | 0.32 | 0.57 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210029 | LAUREL REGIONAL | $ 77,501,975 | 0.45 | 0.59 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210030 | ATLANTIC GENERAL | $ 38,640,762 | 0.64 | 0.61 | 0.00% | 0.00% | 0.00% | 0.00% |
| 210032 | HARFORD | $ 47,089,618 | 0.31 | 0.62 | 0.05% | $ 24,784 | $ 2,592 | 0.01% |
| 210033 | MERCY | $ 233,163,594 | 0.31 | 0.62 | 0.05% | $ 122,718 | $ 12,833 | 0.01% |
| 210034 | JOHNS HOPKINS | $ 1,292,515,919 | 0.21 | 0.62 | 0.05% | $ 680,272 | $ 71,138 | 0.01% |
| 210035 | PRINCE GEORGE | $ 177,243,165 | 0.46 | 0.63 | 0.11% | $ 186,572 | $ 19,510 | 0.01% |
| 210037 | SINAI | $ 429,154,679 | 0.24 | 0.63 | 0.11% | $ 451,742 | $ 47,240 | 0.01% |
| 210038 | WESTERN MARYLAND HEALTH SYSTEM | $ 184,484,266 | 0.35 | 0.63 | 0.11% | $ 194,194 | $ 20,308 | 0.01% |
| 210039 | GOOD SAMARITAN | $ 180,861,011 | 0.56 | 0.63 | 0.11% | $ 190,380 | $ 19,909 | 0.01% |
| 210040 | EASTON | $ 94,828,132 | 0.39 | 0.64 | 0.16% | $ 149,729 | $ 15,658 | 0.02% |
| 210043 | FT. WASHINGTON | $ 17,776,133 | 0.50 | 0.64 | 0.16% | $ 28,068 | $ 2,935 | 0.02% |
| 210044 | UNION HOSPITAL OF CECIL COUNT | $ 67,852,189 | 0.34 | 0.67 | 0.32% | $ 214,270 | $ 22,407 | 0.03% |
| 210045 | UMMC MIDTOWN | $ 133,787,811 | 0.46 | 0.67 | 0.32% | $ 422,488 | $ 44,181 | 0.03% |
| 210048 | NORTHWEST | $ 142,186,717 | 0.22 | 0.67 | 0.32% | $ 449,011 | $ 46,955 | 0.03% |
| 210049 | UM ST. JOSEPH | $ 216,335,128 | 0.28 | 0.67 | 0.32% | $ 683,164 | $ 71,441 | 0.03% |
| 210051 | MERITUS | $ 187,434,497 | 0.22 | 0.68 | 0.37% | $ 690,548 | $ 72,213 | 0.04% |
| 210055 | REHAB & ORTHO | $ 69,104,846 | 0.32 | 0.68 | 0.37% | $ 254,597 | $ 26,624 | 0.04% |
| 210056 | CALVERT | $ 67,385,287 | 0.51 | 0.70 | 0.47% | $ 319,193 | $ 33,379 | 0.05% |
| 210057 | CHARLES REGIONAL | $ 76,338,049 | 0.53 | 0.74 | 0.68% | $ 522,313 | $ 54,620 | 0.07% |
| 210058 | BON SECOURS | $ 78,212,787 | 0.61 | 0.76 | 0.79% | $ 617,469 | $ 64,571 | 0.08% |
| 210060 | HOPKINS BAYVIEW MED CTR | $ 356,396,901 | 0.32 | 0.76 | 0.79% | $ 2,813,660 | $ 294,234 | 0.08% |
| 210061 | ST. MARY | $ 69,520,305 | 0.52 | 0.77 | 0.84% | $ 585,434 | $ 61,221 | 0.09% |
| 210062 | CHESTERTOWN | $ 29,416,674 | 0.74 | 0.78 | 0.89% | $ 263,202 | $ 27,524 | 0.09% |
| 210063 | MCCREADY | $ 3,734,618 | 0.71 | 1.00 | 1.00% | $ 37,346 | $ 3,905 | 0.10% |
| | | | | | | | | |
| | | | | | Total Reduct | $ (1,035,398) | $ (1,035,398) | |
| | | | | | Total Award | $ 9,901,152 | $ 1,035,398 | |
| | | | | | | 0.104573465 | | |

# Appendix V. MHAC Score Tiered Scaling of Final MHAC Scores

| Final MHAC Score | Below State Quality Target | Exceed State Quality Target |
|---|---|---|
| **Scores less than or equal to 0.17** | **-4.00%** | **-1.00%** |
| 0.18 | -3.88% | -0.97% |
| 0.19 | -3.76% | -0.93% |
| 0.20 | -3.65% | -0.90% |
| 0.21 | -3.53% | -0.86% |
| 0.22 | -3.41% | -0.83% |
| 0.23 | -3.29% | -0.79% |
| 0.24 | -3.18% | -0.76% |
| 0.25 | -3.06% | -0.72% |
| 0.26 | -2.94% | -0.69% |
| 0.27 | -2.82% | -0.66% |
| 0.28 | -2.71% | -0.62% |
| 0.29 | -2.59% | -0.59% |
| 0.30 | -2.47% | -0.55% |
| 0.31 | -2.35% | -0.52% |
| 0.32 | -2.24% | -0.48% |
| 0.33 | -2.12% | -0.45% |
| 0.34 | -2.00% | -0.41% |
| 0.35 | -1.88% | -0.38% |
| 0.36 | -1.76% | -0.34% |
| 0.37 | -1.65% | -0.31% |
| 0.38 | -1.53% | -0.28% |
| 0.39 | -1.41% | -0.24% |
| 0.40 | -1.29% | -0.21% |
| 0.41 | -1.18% | -0.17% |
| 0.42 | -1.06% | -0.14% |
| 0.43 | -0.94% | -0.10% |
| 0.44 | -0.82% | -0.07% |
| 0.45 | -0.71% | -0.03% |
| 0.46 | -0.59% | 0.00% |
| 0.47 | -0.47% | 0.00% |
| 0.48 | -0.35% | 0.00% |
| 0.49 | -0.24% | 0.00% |
| 0.50 | -0.12% | 0.00% |
| 0.51 | 0.00% | 0.00% |
| 0.52 | 0.00% | 0.00% |
| 0.53 | 0.00% | 0.00% |
| 0.54 | 0.00% | 0.00% |

| | | |
|---|---|---|
| 0.55 | 0.00% | 0.00% |
| 0.56 | 0.00% | 0.00% |
| 0.57 | 0.00% | 0.00% |
| 0.58 | 0.00% | 0.00% |
| 0.59 | 0.00% | 0.00% |
| 0.60 | 0.00% | 0.00% |
| 0.61 | 0.00% | 0.00% |
| 0.62 | 0.00% | 0.05% |
| 0.63 | 0.00% | 0.11% |
| 0.64 | 0.00% | 0.16% |
| 0.65 | 0.00% | 0.21% |
| 0.66 | 0.00% | 0.26% |
| 0.67 | 0.00% | 0.32% |
| 0.68 | 0.00% | 0.37% |
| 0.69 | 0.00% | 0.42% |
| 0.70 | 0.00% | 0.47% |
| 0.71 | 0.00% | 0.53% |
| 0.72 | 0.00% | 0.58% |
| 0.73 | 0.00% | 0.63% |
| 0.74 | 0.00% | 0.68% |
| 0.75 | 0.00% | 0.74% |
| 0.76 | 0.00% | 0.79% |
| 0.77 | 0.00% | 0.84% |
| 0.78 | 0.00% | 0.89% |
| 0.79 | 0.00% | 0.95% |
| **Scores greater than or equal to 0.80** | **0.00%** | **1.00%** |

| | | |
|---|---|---|
| **Penalty threshold:** | **0.51** | **0.46** |
| **Reward Threshold** | **No rewards** | **0.61** |

*Minimum and maximum scaling scores based on CY 2013 Final Data Attainment Scores. Not changed for RY17 MHAC Program.

# Draft Recommendation for Updating the Hospital Readmission Reduction Incentive Program for FY 2017

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

**December 10, 2014**

This document contains the draft staff recommendations for updating the Maryland Hospital Readmission Reduction Incentive Program for FY 2017. Comments may be submitted via hard copy mail to the Commission's address or email to Dianne.feeney@maryland.gov and are due by COB Monday, 12/22/14

## A. Introduction

The United States health care system currently experiences an unacceptably high rate of unnecessary hospital readmissions. These excessive readmissions are a symptom of our fragmented payment system and result in considerable unnecessary cost and substandard care quality.
Maryland's readmission rates are high compared to the national levels for Medicare. The Center for Medicare and Medicaid Innovation All-Payer Model Agreement (or "waiver"), which began on January 1, 2014, has established readmission reduction targets that require Maryland hospitals to be equal or below rates of Medicare readmissions by 2018, with annual progress toward this goal. In order to enhance our ability to incentivize hospital care improvements and meet the target, the Commission approved the Hospital Readmission Reduction Incentive Program policy to be applied to FY 2016 rates where hospitals achieving at least a 6.76% inter-hospital readmission reduction target for CY 2014 performance compared to CY2013 performance would earn an additional 0.5% in revenue.

The purpose of this document is to describe the proposed updated Readmission Reduction Incentive Program for FY 2017 designed to provide incentives for hospitals to improve overall care coordination and substantially reduce readmissions.

## B. Background

Our fragmented system for reimbursing health services in this country, for the most part, has provided large disincentives for hospitals and other providers to construct efficient and effective coordinated care models.

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

. The Global Budget Revenue (GBR) and Total Patient Revenue (TPR) arrangements now in place for all hospitals in the State provide for a fixed amount of revenue a hospital may generate during a particular year. These revenue arrangements provide incentives to construct efficient and effective coordinated care models. (Prior to the GBR, most hospitals participated in an episode payment program that bundled readmissions into the index DRG payment levels.) In May 2013, the Commission approved a Shared Savings Policy where hospital inpatient revenues are reduced by 0.3% of inpatient revenues to provide similar cost savings as the federal Medicare Readmission Reduction program. This amount was scaled based on observed versus expected readmissions levels within each hospital.

In April 2014, the Commission approved a second readmission program to provide a positive adjustment for high performing hospitals that meet pre-determined reduction targets for readmissions.

Based on the discussions at the Performance Measurement Workgroup in 2014, the guiding principles vetted for the Hospital Readmission Reduction Program include:

- Measurement used for performance linked with payment must include all patients regardless of payer.
- Measurement must be fair to hospitals.
- The initial and subsequent years' targets must be established to reasonably support the overall goal of achieving the reductions needed to be equal or lower than the national Medicare readmission rate by CY 2018.
- Measure specifications used for the program should be consistent with the CMS/CMMI measure of readmissions.

The detailed definitions and key methodology components for RY 2017 are described in Appendix I.

## C. Assessment

### *1. Maryland's High Readmission Rates*

Since access to national Medicare data has been delayed, HSCRC staff was not able to verify trends in Maryland and national readmission rates. CMMI staff is also working on revisions to the proposed Medicare readmission rate for the waiver test to remove planned readmissions from the measure and improve the algorithm to account of breaks in Medicare coverage. We hope to receive updated information during the next several months.

Staff analyzed CMS data comparing Maryland hospitals rates to all US hospitals using CMS' Hospital Readmissions Reduction Program data for 30-day readmission of patients with pneumonia, heart failure (CHF), heart attack (AMI), hip/knee arthroplasty and chronic obstruction pulmonary disease (COPD). This comparison reveals that the majority of Maryland hospitals have readmission rates above the national average for all conditions measured in the CMS program (Figure 1). Hospital specific rates were also presented to the Performance Measurement Workgroup (Appendix II).

**Figure 1: Maryland Hospitals Excess Readmission Ratios as Measured by the CMS' Hospital Readmissions Reduction Program and Applied to FFY 2015 Medicare Rates Outside of Maryland**

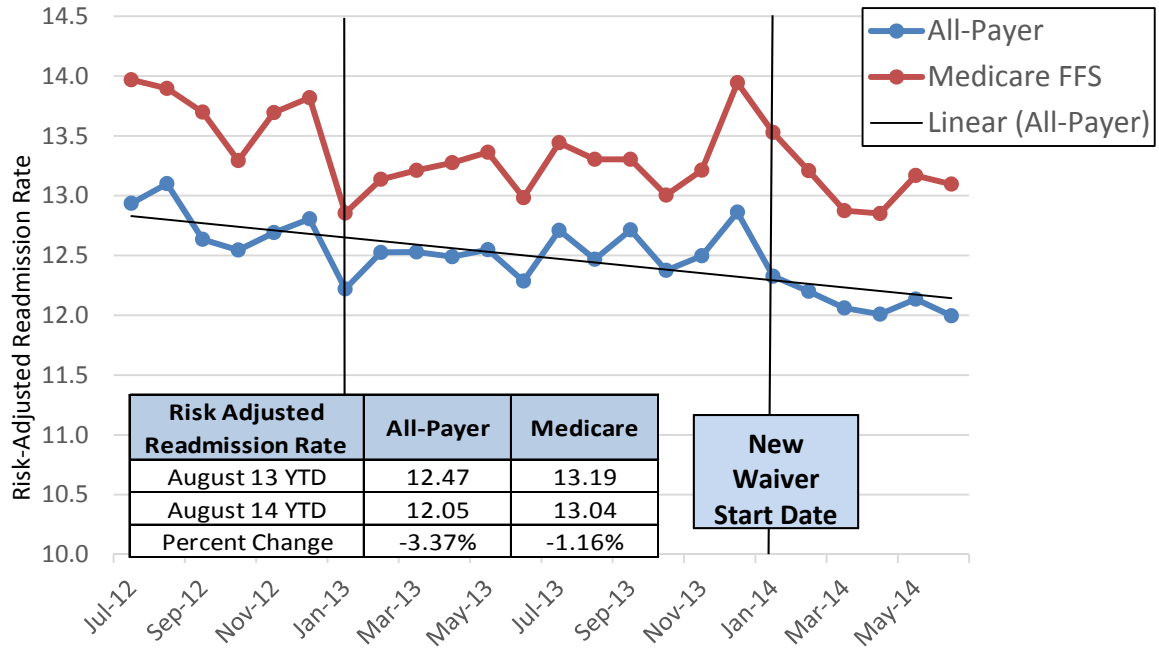
| Hospital Name | Pneumonia | Heart Failure | Acute Myocardial Infarction | Hip/Knee Arthroplasty | Chronic Obstructive Pulmonary Disease |
|---|---|---|---|---|---|
| Number of Total Cases | 19,363 | 26,474 | 9,002 | 18,204 | 20,666 |
| Hospital Average Ratio | 1.04 | 1.04 | 1.02 | 1.09 | 1.02 |
| Percent of Hospitals Above National Average | 61% | 70% | 61% | 59% | 59% |

**Data Source:** FY 2015 IPPS Hospital Readmissions Reduction Program Supplemental Data File (Final Rule and Correction Notice)

2. *Maryland's Progress in Meeting Readmission Reduction Target*

Using HSCRC data, staff and the Commission monitor Maryland all-payer and Medicare fee for service monthly readmission trends to assess year to date progress in meeting the established first year hospital specific reduction target of 6.76%. As Figure 2 below illustrates, Maryland's all-payer risk adjusted readmission rate for calendar YTD August 2014 is 3.37% lower than the calendar YTD August 2013 rate.

**Figure 2. All-Payer and Medicare FFS Monthly YTD Readmission Trends**




| Risk Adjusted Readmission Rate | All-Payer | Medicare |
|---|---|---|
| August 13 YTD | 12.47 | 13.19 |
| August 14 YTD | 12.05 | 13.04 |
| Percent Change | -3.37% | -1.16% |

Note: Line Graph based on final data for January 2013 - June 2014.

3. *Factors Considered in Updating Annual Target*

Staffed analyzed data on readmission rates for potential correlations with other factors that may be considered in setting updated hospital-specific and statewide targets. In reevaluating the discussion of setting different targets for hospitals with varying readmission rates, staff found no correlation between readmission rate reductions in the performance and base periods. In examining hospital specific reductions, staff noted that one of the two hospitals with the lowest readmission rates, improved significantly, while the other hospital experienced an increase in readmission rate.

Staff considered patient socioeconomic—e.g., income, education, and occupation— and demographic—e.g., age, race, ethnicity, primary language— (SES/D) factors for making adjustments to the readmission targets that could be applied at the hospital level since these factors influence outcomes through a variety of pathways. There is growing emphasis on SES/D factors as overall quality has improved, but disparities have not, and there are increasing financial stakes for improving quality and disparities. The passage of the IMPACT bill on September 18, 2014 mandates SES-related studies. Ann Greneir, Vice President at the National Quality Forum presented the national developments on using SES/D adjustments in readmission rates at the Performance

Measurement Workgroup October meeting. Although support for using SES/D adjustments is growing, there is not broad consensus on use SES/D adjustment in quality and payment. On one hand, adjusting for SES factors will mask disparities, and on the other hand, there is growing sentiment that adjusting for SES factors is necessary to avoid making incorrect inferences in the context of comparative performance assessment. Staff is committed to working on analyzing the feasibility of adding SES/D adjustments to the readmission reduction incentive policy in the near term and creating a payment adjustment rewarding hospitals with lower readmission rates (based on attainment). In the meantime, staff used percent Medicaid adjustments as a proxy to evaluate the impact of SES on improvements in readmission rates and found no correlation between the two factors. Although SES may impact the absolute readmission rates, evidence on how these factors impact the change in readmission rates is not well developed.

Another factor that staff examined is the relationship between all-payer and Medicare readmission rates. There continues to be a reasonably significant correlation between all-payer and Medicare readmission rates, therefore, setting an all payer target will likely be effective in reducing Medicare readmissions as well. These findings are displayed in Appendix II.

The last factor analyzed is the impact of changes in the denominator on readmission rates. The percent changes in the index admissions appear to have no correlation with the changes in readmission rates. In fact, hospitals that had greatest declines in readmission rates also had greater declines in their denominators (Appendix III).

Changes in inpatient and observation stays due to two-midnight rule continues to be an issue in assessing the trends in national and Maryland readmission rates. In the absence of national claims data, it is difficult to predict the impact and compare Maryland and national trends. The current timelines to receive national claims data is February 2015.

### *4. Readmission Reduction Target*

Setting targets annually through 2018 continues to be problematic as there are no national projected numbers for admissions or readmissions nor are there projected reduction targets.

According to the all-payer model demonstration contract, "If in a given Performance Year Regulated Maryland Hospitals, in aggregate, fail to outperform the national Readmissions Rate change by an amount equal to or greater than the cumulative difference between the Regulated Maryland Hospital and national Readmission Rates in the base period divided by five, CMS shall follow the corrective action and/or termination [of the exemption from the national Medicare readmissions reduction program] provisions of the Waiver of Section 1886(q) as set forth in Section 4.c and in Section 14."

Staff and stakeholders are concerned with the accuracy of readmission estimates in CMMI data and will work with CMMI to finalize and verify the readmission rates to accurately determine the statewide Medicare readmission reduction target.

### *5. Payment Incentive Structure*

FY 2016 approved policy provided 0.5 % positive adjustment for hospitals that met or exceeded the improvement target of 6.76%. Appendix IV provides trends in risk adjusted readmission rates

through August 2014. Approximately, one third of the hospitals improved beyond the target. As a result, it is projected that these hospitals will be eligible to receive the reward subject to an confirmation that the improvement is not achieved through a substantial increase in observation cases. On the other hand, one third of hospitals experienced increases in the readmission rates, which is concerning to both staff and stakeholders. Staff is recommending increasing the financial impact of the readmission program by instituting both positive and negative adjustments and placing higher amounts of revenue at risk. In order to align the program with the All-Payer Model Agreement requirements, staff proposes for the payment policy to use a cumulative improvement rate that establishes CY 2013 readmission rates as the base.

In addition, staff is recommending a tiered scaling approach where the financial impact differs based on the State's progress in achieving a Medicare readmission reduction annual target. Figure 3 provides two options for scaling that will be discussed at the Payment and Performance Measurement Workgroup meetings in December.

**Figure 3: Sample Payment Adjustments Scale using Cumulative Benchmark Examples: Example benchmark=(CY2014 benchmark+1)*(Cy2015 benchmark+1)-1=(6%+1)*(4%+1)-1=10%**

| Option 1: | | | | Option 2: | | |
|---|---|---|---|---|---|---|
| | Payment Adjustments | | | | Payment Adjustments | |
| All Payer Readmission Rate Change CY13-CY15 | Medicare Readmission Reduction Target Not Achieved | Medicare Readmission Reduction Target Achieved | | All Payer Readmission Rate Change CY13-CY15 | Medicare Readmission Reduction Target Not Achieved | Medicare Readmission Reduction Target Achieved |
| -10% or LOWER | 0.50% | 1.00% | | -10% or LOWER | 0.50% | 1.00% |
| -9.9% | 0.00% | 0.00% | | -9.9% | -0.30% | 0.00% |
| -8% | 0.00% | 0.00% | | -8% | -0.48% | 0.00% |
| -7% | 0.00% | 0.00% | | -7% | -0.57% | 0.00% |
| -6% | 0.00% | 0.00% | | -6% | -0.67% | 0.00% |
| -5% | 0.00% | 0.00% | | -5% | -0.76% | 0.00% |
| -4% | 0.00% | 0.00% | | -4% | -0.86% | 0.00% |
| -3% | 0.00% | 0.00% | | -3% | -0.95% | 0.00% |
| -2% | 0.00% | 0.00% | | -2% | -1.05% | 0.00% |
| -1% | 0.00% | 0.00% | | -1% | -1.14% | 0.00% |
| 0% | 0.00% | 0.00% | | 0% | -1.24% | 0.00% |
| 1% | -0.25% | -0.125% | | 1% | -1.33% | -0.125% |
| 2% | -0.50% | -0.250% | | 2% | -1.43% | -0.250% |
| 3% | -0.75% | -0.375% | | 3% | -1.52% | -0.375% |
| 4% | -1.00% | -0.500% | | 4% | -1.62% | -0.500% |
| 5% | -1.25% | -0.625% | | 5% | -1.71% | -0.625% |
| 6% | -1.50% | -0.750% | | 6% | -1.81% | -0.750% |
| 7% | -1.75% | -0.875% | | 7% | -1.90% | -0.875% |
| 8% | -2.00% | -1.000% | | 8% | -2.00% | -1.000% |
| Higher than 8% | -2.00% | -1.000% | | Higher than 8% | -2.00% | -1.000% |

## D. Recommendations

Staff provides the following draft recommendations for a readmission reduction incentive program for CY 2015 performance applied to rate year 2017:

1. Adapt a payment incentive program with both rewards for hospitals achieving or exceeding the benchmark and payment reductions for hospitals with readmission rate increases or failure to make adequate improvements.

2. Use a tiered approach where a statewide Medicare readmission target must be met to avoid maximum penalties at risk for the program.

3. Continue to set a benchmark for a minimum required readmission rate reduction where rewards may be earned based on all payer readmission reductions.

4. Develop readmission reduction targets for CY 2015 compared to CY 2013 readmission rates by March 2014, taking into consideration the final Medicare rates obtained from CMMI.

# Appendix I. HSCRC Methodology for Readmissions FY2017

## READMISSIONS

CY 2013 inpatient data, with EIDs (base year), is used to calculate the readmission rates for all-payer and Medicare patients.

## EXCLUSIONS

The following were removed from the readmission rate calculations:

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

## RESULTS

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

The key methodology components of the Readmission Reduction Incentive Program are described below.

- **Readmission definition**- Total readmissions/total admissions to any acute hospital[1]
- **Broad patient inclusion-** For greater impact and potential for reaching the target the measure should include all payers and any acute hospital readmission in the state.

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

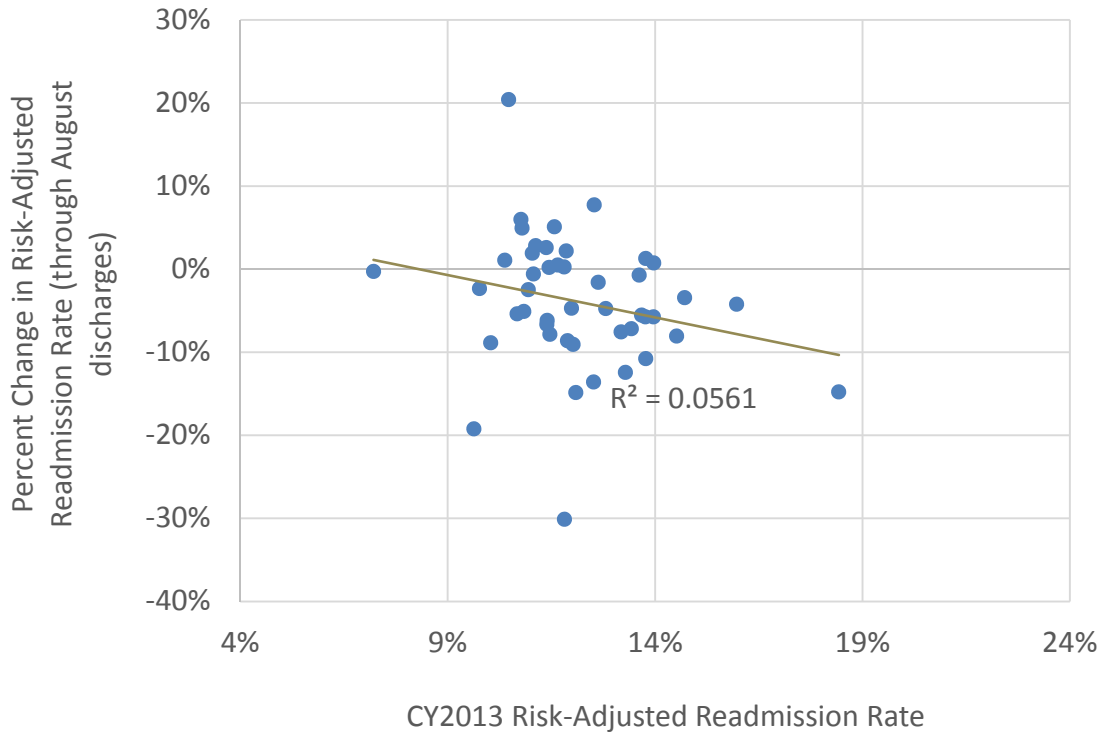
- **Patient exclusion adjustments–** To enhance fairness of the methodology, planned admissions (using the updated CMS Algorithm) and deliveries should be excluded from readmission counts.
- **Scale positive and negative incentives**- If statewide Medicare readmission reduction target is met, hospitals that reach or exceed the hospital-specific improvement target have the opportunity to earn the incentives and hospital will be assessed penalties if they have in increase in readmission rates. If the statewide Medicare readmission reduction target is not met, hospitals will have an opportunity to earn a reduced incentive, and hospitals will be assessed penalties if they do not meet the minimum improvement target.
- **Performance measurement consistent across hospitals**- A uniform improvement benchmark for all hospitals was established for the first year and will be evaluated annually. Given the debate whether socio-economic and demographic factors should be used in readmission risk adjustment and that arguments could be made to lower readmission targets for high readmission hospitals if they serve hard to reach populations, staff recommends using a uniform achievement benchmark for all hospitals.
  **Monitor for unintended consequences**- Observation and ED visits within 30 Days of an inpatient stay will be monitored; adjustments to the positive incentive will be made if observation cases within 30 days increase faster than the other observations in a given hospital.

# Appendix II. CMS Medicare Readmission Rates for FFY2015

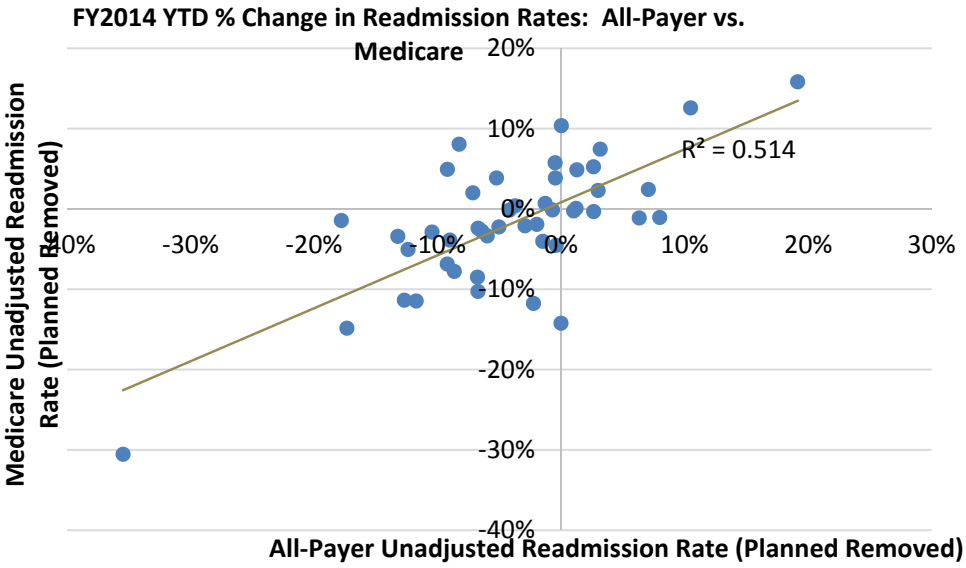
| Hospital Name | Number of Pneumonia Cases | Excess Readmission Ratio for Pneumonia | Number of Heart Failure Cases | Excess Readmission Ratio for Heart Failure | Number of Acute Myocardial Infarction Cases | Acute Myocardial Infarction Excess Readmission Ratio | Number of Hip/Knee Arthroplasty Cases | Hip/Knee Arthroplasty Excess Readmission Ratio | Number of Chronic Obstructive Pulmonary Disease Cases | Chronic Obstructive Pulmonary Disease Excess Readmission Ratio | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NORTHWEST HOSPITAL CENTER | 628 | 1.21 | 797 | 1.20 | 151 | 1.07 | 180 | 0.92 | 599 | 1.15 | 1.11 |
| DOCTORS' COMMUNITY HOSPITAL | 410 | 1.25 | 490 | 1.01 | 38 | 0.99 | 170 | 1.33 | 371 | 0.93 | 1.10 |
| SINAI HOSPITAL OF BALTIMORE | 391 | 1.09 | 928 | 1.02 | 466 | 1.01 | 676 | 1.38 | 363 | 1.00 | 1.10 |
| MEDSTAR MONTGOMERY MEDICAL CENTER | 429 | 1.04 | 437 | 1.17 | 99 | 1.10 | 314 | 1.15 | 380 | 1.05 | 1.10 |
| SHADY GROVE ADVENTIST HOSPITAL | 677 | 1.07 | 515 | 1.09 | 194 | 1.04 | 574 | 1.23 | 430 | 1.07 | 1.10 |
| SAINT AGNES HOSPITAL | 862 | 1.01 | 761 | 1.07 | 184 | 0.89 | 390 | 1.51 | 670 | 1.00 | 1.10 |
| UNIVERSITY OF MD CHARLES REGIONAL MEDICAL CENTER | 348 | 1.07 | 428 | 1.00 | 25 | 1.09 | 190 | 1.28 | 608 | 1.01 | 1.09 |
| SOUTHERN MARYLAND HOSPITAL CENTER | 386 | 1.12 | 694 | 1.07 | 171 | 1.08 | 161 | 1.03 | 427 | 1.14 | 1.09 |
| UNIVERSITY OF MARYLAND MEDICAL CENTER | 165 | 1.13 | 329 | 1.14 | 512 | 1.12 | 57 | 1.04 | 122 | 1.00 | 1.09 |
| UNIVERSITY OF MD SHORE MEDICAL CTR AT CHESTERTOWN | 190 | 0.96 | 265 | 1.01 | 29 | 1.03 | 77 | 1.33 | 263 | 1.10 | 1.08 |
| MEDSTAR HARBOR HOSPITAL | 278 | 0.91 | 409 | 1.16 | 64 | 0.97 | 209 | 1.30 | 436 | 1.06 | 1.08 |
| LAUREL REGIONAL MEDICAL CENTER | 103 | 1.02 | 176 | 1.02 | 46 | 1.09 | 78 | 1.20 | 127 | 1.07 | 1.08 |
| CALVERT MEMORIAL HOSPITAL | 380 | 1.10 | 556 | 1.02 | 70 | 0.97 | 149 | 1.33 | 403 | 0.98 | 1.08 |
| UNION HOSPITAL OF CECIL COUNTY | 353 | 1.02 | 290 | 1.05 | 87 | 1.07 | 206 | 1.25 | 590 | 1.01 | 1.08 |
| PRINCE GEORGES HOSPITAL CENTER | 102 | 1.10 | 265 | 1.11 | 144 | 1.06 | 25 | 1.00 | 157 | 1.11 | 1.08 |
| MERCY MEDICAL CENTER INC | 199 | 1.06 | 340 | 1.03 | 28 | 1.09 | 1037 | 1.19 | 239 | 0.98 | 1.07 |
| JOHNS HOPKINS BAYVIEW MEDICAL CENTER | 485 | 1.15 | 850 | 1.10 | 181 | 1.10 | 432 | 0.91 | 575 | 1.09 | 1.07 |
| UNIVERITY OF MD BALTO WASHINGTON MEDICAL CENTER | 1014 | 1.19 | 1198 | 1.16 | 264 | 0.93 | 404 | 0.99 | 1167 | 1.06 | 1.07 |
| MEDSTAR GOOD SAMARITAN HOSPITAL | 352 | 1.25 | 1037 | 1.01 | 150 | 1.11 | 578 | 0.91 | 518 | 1.06 | 1.07 |
| ANNE ARUNDEL MEDICAL CENTER | 849 | 1.08 | 1151 | 1.09 | 365 | 1.09 | 1849 | 1.01 | 785 | 1.05 | 1.06 |
| HOWARD COUNTY GENERAL HOSPITAL | 692 | 1.15 | 590 | 1.11 | 131 | 0.96 | 104 | 1.05 | 654 | 1.03 | 1.06 |
| MEDSTAR FRANKLIN SQUARE MEDICAL CENTER | 726 | 1.00 | 1297 | 0.99 | 314 | 1.00 | 308 | 1.27 | 1134 | 1.02 | 1.06 |
| HOLY CROSS HOSPITAL | 391 | 1.03 | 607 | 1.07 | 142 | 1.03 | 314 | 1.10 | 373 | 0.99 | 1.05 |
| ATLANTIC GENERAL HOSPITAL | 297 | 0.98 | 311 | 0.89 | 27 | 1.10 | 232 | 1.14 | 369 | 1.05 | 1.03 |
| UNIVERSITY OF MARYLAND HARFORD MEMORIAL HOSPITAL | 173 | 1.01 | 263 | 0.98 | 51 | 1.02 | 55 | 1.08 | 311 | 1.04 | 1.03 |
| FREDERICK MEMORIAL HOSPITAL | 982 | 1.04 | 926 | 0.98 | 280 | 0.99 | 608 | 1.05 | 904 | 1.05 | 1.02 |
| CARROLL HOSPITAL CENTER | 600 | 1.04 | 760 | 0.98 | 213 | 1.01 | 535 | 1.10 | 702 | 0.98 | 1.02 |
| UNIVERSITY OF MD SHORE MEDICAL CENTER AT EASTON | 558 | 1.01 | 931 | 0.99 | 105 | 1.06 | 511 | 1.03 | 779 | 1.02 | 1.02 |
| UNIVERSITY OF M D UPPER CHESAPEAKE MEDICAL CENTER | 410 | 0.94 | 800 | 1.02 | 269 | 1.06 | 388 | 1.05 | 788 | 0.98 | 1.01 |
| SUBURBAN HOSPITAL | 557 | 0.97 | 637 | 1.04 | 360 | 1.02 | 997 | 0.95 | 269 | 1.06 | 1.01 |
| CENTER | 756 | 1.05 | 881 | 1.05 | 393 | 1.02 | 605 | 0.94 | 939 | 0.98 | 1.01 |
| WASHINGTON ADVENTIST HOSPITAL | 222 | 1.00 | 480 | 1.09 | 439 | 1.01 | 106 | 0.99 | 252 | 0.95 | 1.01 |
| CENTER | 80 | 0.96 | 157 | 0.98 | 40 | 1.01 | 45 | 1.00 | 122 | 1.06 | 1.00 |
| MEDSTAR SAINT MARY'S HOSPITAL | 300 | 0.92 | 440 | 1.08 | 70 | 1.00 | 318 | 0.88 | 459 | 1.02 | 0.98 |
| GARRETT COUNTY MEMORIAL HOSPITAL | 137 | 0.90 | 173 | 1.08 | 38 | 0.98 | 177 | 0.84 | 149 | 1.06 | 0.97 |
| GREATER BALTIMORE MEDICAL CENTER | 569 | 0.93 | 540 | 0.92 | 47 | 0.98 | 510 | 1.12 | 369 | 0.89 | 0.97 |
| MEDSTAR UNION MEMORIAL HOSPITAL | 253 | 0.97 | 636 | 0.94 | 653 | 0.99 | 1146 | 0.96 | 308 | 0.90 | 0.95 |
| SAINT JOSEPH MEDICAL CENTER | 299 | 1.00 | 784 | 0.96 | 543 | 0.87 | 1158 | 0.98 | 395 | 0.94 | 0.95 |
| UNIVERSITY OF MARYLAND ST JOSEPH MEDICAL CENTER | 50 | 0.95 | 160 | 0.96 | 82 | 0.97 | 266 | 0.93 | 82 | 0.93 | 0.95 |
| MERITUS MEDICAL CENTER | 1174 | 0.97 | 587 | 0.99 | 281 | 0.91 | 781 | 0.78 | 717 | 0.99 | 0.93 |
| PENINSULA REGIONAL MEDICAL CENTER | 857 | 0.91 | 1290 | 0.92 | 734 | 0.91 | 931 | 0.88 | 670 | 0.87 | 0.90 |
| FORT WASHINGTON HOSPITAL | 105 | 0.99 | 189 | 1.13 | 3 | | 71 | 1.08 | 148 | 1.23 | 1.11 |
| JOHNS HOPKINS HOSPITAL, THE | 323 | 1.10 | 730 | 1.02 | 496 | 1.06 | 12 | | 227 | 0.98 | 1.04 |
| BON SECOURS HOSPITAL | 86 | 0.99 | 188 | 1.06 | 9 | | 2 | | 112 | 1.02 | 1.03 |
| UNIVERSITY OF MD MEDICAL CENTER MIDTOWN CAMPUS | 110 | 1.03 | 144 | 1.04 | 9 | | 14 | | 146 | 1.00 | 1.02 |
| EDWARD MCCREADY MEMORIAL HOSPITAL | 52 | 0.96 | 50 | 1.00 | 5 | | 0 | | 56 | 0.95 | 0.97 |
| UNIV OF MD REHABILITATION & ORTHOPAEDIC INSTITUTE | 3 | | 7 | | 0 | | 254 | 1.28 | 2 | | 1.28 |
| LEVINDALE HEBREW GERIATRIC CENTER AND HOSPITAL | 0 | | 0 | | 0 | | 0 | | 0 | | NA |
| | | | | | | | | | | | |
| **Number of Cases** | | 19,363 | | 26,474 | | 9,002 | | 18,204 | | 20,666 | |
| **Hospital Average Ratio** | | 1.04 | | 1.04 | | 1.02 | | 1.09 | | 1.02 | 1.04 |
| **Percent of Hospitals Above National Average** | | **61%** | | **70%** | | **61%** | | **59%** | | **59%** | **83%** |

# Appendix III. Analysis of All-Payer Readmission Rate Correlations with Base Period Rate, Medicare Readmission Rate, and Percent Medicaid Admissions

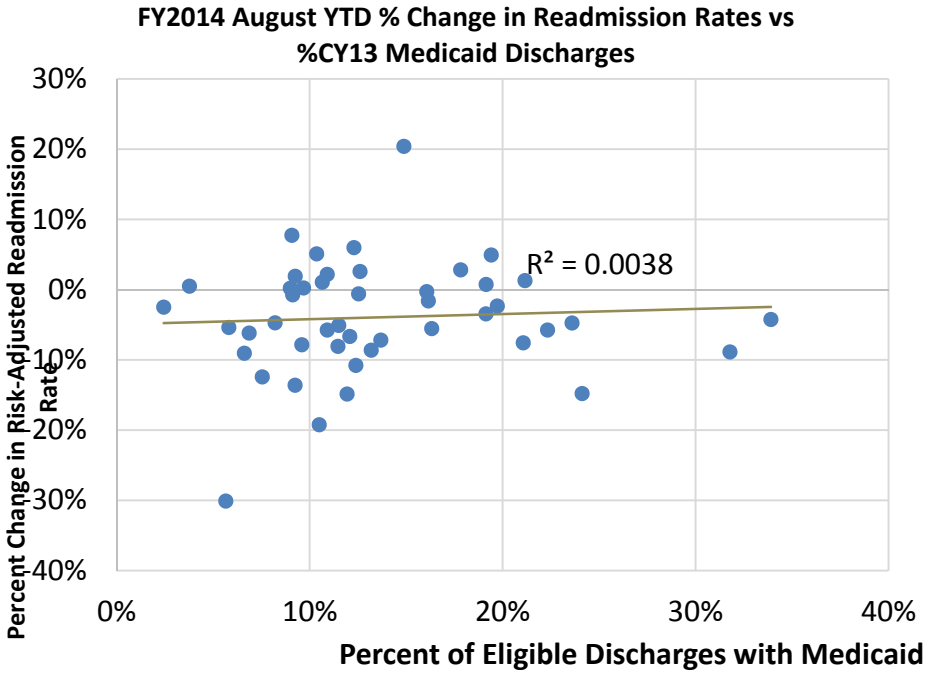
No Correlation of Readmission Reduction Rate of Improvement with Base Year Rate




Higher Correlation of Medicare and All-Payer Readmission Rates



**No Correlation in Readmission Rates with % of Medicaid Admissions**



# Appendix IV: CY 2014 YTD Readmission Improvement Rates

# (as of August Discharges)

| HOSPITAL ID | HOSPITAL NAME | NUMBER OF ELIGIBLE DISCHARGES CY13 YTD* | NUMBER OF READMISSIONS CY13 YTD | CY13 YTD RISK ADJUSTED RATE | CY14 YTD RISK ADJUSTED RATE | Eligible Discharges % change CY13-CY14 YTD | All-Payer % Change from CY13-CY14 YTD |
|---|---|---|---|---|---|---|---|
| 210045 | MCCREADY | 193 | 36 | 12.94% | 9.04% | 12% | -30.11% |
| 210039 | CALVERT | 4,805 | 455 | 9.80% | 7.92% | -15% | -19.24% |
| 210028 | ST. MARY | 5,640 | 653 | 12.19% | 10.38% | -9% | -14.87% |
| 210013 | BON SECOURS | 3,775 | 1,072 | 18.54% | 15.80% | -24% | -14.79% |
| 210051 | DOCTORS COMMUNITY | 6,850 | 1,083 | 12.02% | 10.39% | -17% | -13.60% |
| 210030 | CHESTERTOWN | 1,318 | 244 | 14.13% | 12.37% | -10% | -12.43% |
| 210024 | UNION MEMORIAL | 8,648 | 1,463 | 14.06% | 12.54% | -9% | -10.78% |
| 210018 | MONTGOMERY GENERAL | 5,797 | 757 | 11.91% | 10.83% | 0% | -9.06% |
| 210003 | PRINCE GEORGE | 7,825 | 738 | 10.09% | 9.19% | 11% | -8.88% |
| 210027 | WESTERN MARYLAND HEALTH | 8,620 | 1,082 | 12.49% | 11.41% | -7% | -8.63% |
| 210040 | NORTHWEST | 6,365 | 1,179 | 14.38% | 13.22% | 12% | -8.07% |
| 210058 | REHAB & ORTHO | 1,707 | 192 | 11.85% | 10.92% | -5% | -7.86% |
| 210055 | LAUREL REGIONAL | 4,219 | 524 | 13.11% | 12.12% | -17% | -7.57% |
| 210011 | ST. AGNES | 12,210 | 1,599 | 13.07% | 12.13% | -3% | -7.19% |
| 210062 | SOUTHERN MARYLAND | 9,810 | 1,179 | 11.28% | 10.53% | -6% | -6.66% |
| 210063 | UM ST. JOSEPH | 10,997 | 1,157 | 11.65% | 10.93% | 11% | -6.18% |
| 210043 | BALTIMORE WASHINGTON MEDICAL CENTER | 12,198 | 1,930 | 13.83% | 13.03% | -5% | -5.75% |
| 210008 | MERCY | 12,843 | 1,385 | 13.99% | 13.19% | -14% | -5.74% |
| 210012 | SINAI | 16,823 | 2,424 | 13.52% | 12.77% | -4% | -5.54% |
| 210044 | G.B.M.C. | 13,349 | 1,097 | 10.59% | 10.02% | 0% | -5.40% |
| 210057 | SHADY GROVE | 16,466 | 1,350 | 10.84% | 10.29% | -2% | -5.10% |
| 210034 | HARBOR | 6,123 | 721 | 12.85% | 12.24% | -10% | -4.74% |
| 210023 | ANNE ARUNDEL | 20,913 | 1,784 | 11.87% | 11.31% | -5% | -4.72% |
| 210038 | UMMC MIDTOWN | 4,428 | 986 | 15.93% | 15.25% | -21% | -4.24% |
| 210029 | HOPKINS BAYVIEW MED CTR | 13,784 | 2,215 | 14.61% | 14.10% | -5% | -3.45% |
| 210022 | SUBURBAN | 8,426 | 1,034 | 10.88% | 10.61% | 1% | -2.49% |
| 210032 | UNION HOSPITAL OF CECIL | 3,786 | 436 | 10.32% | 10.08% | -3% | -2.34% |
| 210015 | FRANKLIN SQUARE | 15,696 | 2,038 | 12.76% | 12.56% | 2% | -1.60% |
| 210056 | GOOD SAMARITAN | 7,804 | 1,390 | 13.31% | 13.21% | -14% | -0.73% |
| 210010 | DORCHESTER | 1,528 | 226 | 10.69% | 10.63% | -1% | -0.60% |
| 210017 | GARRETT COUNTY | 1,471 | 89 | 7.11% | 7.08% | -4% | -0.29% |
| 210049 | UPPER CHESAPEAKE HEALTH | 8,826 | 984 | 11.22% | 11.24% | -7% | 0.20% |
| 210048 | HOWARD COUNTY | 12,197 | 1,162 | 11.42% | 11.45% | 4% | 0.25% |
| 210061 | ATLANTIC GENERAL | 2,062 | 295 | 11.04% | 11.09% | 1% | 0.48% |
| 210009 | JOHNS HOPKINS | 32,098 | 5,134 | 13.86% | 13.97% | -1% | 0.74% |
| 210005 | FREDERICK MEMORIAL | 12,475 | 1,258 | 10.43% | 10.54% | -8% | 1.06% |
| 210002 | UNIVERSITY OF MARYLAND | 21,587 | 3,273 | 13.59% | 13.76% | -11% | 1.29% |
| 210006 | HARFORD | 3,079 | 462 | 11.00% | 11.21% | -7% | 1.91% |
| 210033 | CARROLL COUNTY | 7,876 | 948 | 11.79% | 12.05% | -3% | 2.18% |
| 210001 | MERITUS | 11,361 | 1,241 | 11.24% | 11.53% | 4% | 2.59% |
| 210004 | HOLY CROSS | 23,172 | 1,733 | 11.26% | 11.58% | 4% | 2.82% |
| 210016 | WASHINGTON ADVENTIST | 8,572 | 960 | 10.75% | 11.28% | -1% | 4.93% |
| 210035 | CHARLES REGIONAL | 5,550 | 670 | 11.52% | 12.10% | -4% | 5.09% |
| 210019 | PENINSULA REGIONAL | 12,825 | 1,380 | 10.55% | 11.18% | -3% | 5.98% |
| 210060 | FT. WASHINGTON | 1,521 | 208 | 11.80% | 12.71% | -9% | 7.74% |
| 210037 | EASTON | 5,552 | 507 | 9.99% | 12.03% | -2% | 20.40% |
| | | | | | | | |
| STATE | | **423,170** | **52,733** | **12.43%** | **12.04%** | -4% | **-3.18%** |

# Draft Recommendation for Aggregate Revenue Amount At-Risk under Maryland Hospital Quality Programs for FY 2017

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

**December 10, 2014**

This document contains the draft staff recommendations for the aggregate amount at-risk under Maryland hospital quality programs for FY 2017. Comments may be submitted via hard copy mail to the Commission's address or email to Dianne.feeney@maryland.gov and are due by COB Monday, 12/22/14

## A. Introduction

The HSCRC quality-based payment methodologies are important policy tools with great potential to provide strong incentives for hospitals to improve their quality performance over time. Each of the current policies for quality-based payment programs holds revenue at risk directly related to specified performance targets.

- The Quality Based Reimbursement (QBR) program employs revenue neutral scaling of hospitals in allocating rewards and reductions based on performance, with the net increases in rates for better performing hospitals funded by net decreases in rates for poorer performing hospitals.[1]
- For the Maryland Hospital Acquired Conditions (MHAC) program, hospital performance is measured using observed to expected ratio values for each component measure and revenue allocations are performed using pre-established performance targets. The revenue at risk and reward structure is based on a tiered approach that requires statewide targets to be met for higher rewards and reduced reductions.
- The Readmission Shared Savings Program reduces each hospital's approved revenues prospectively based on its risk adjusted readmission rates.
- The hospital Readmission Reduction Incentive Program (RRIP) policy initiated in FY 2015 is designed to be a positive incentive program to reward hospitals that achieve a specified readmission reduction target. For FY 2017, staff is proposing to strengthen this program by increasing the amount of revenue at risk and including both rewards and reductions. Similar to the MHAC program, staff is proposing the use of a tiered approach that requires statewide targets to be met for higher rewards and reduced penalties. Potentially Avoidable Utilization reductions are applied to global budgets to reduce allowed volume growth based on percent of revenue associated with potentially avoidable utilization for each hospital.

This draft recommendation proposes the amount of hospital revenue at-risk for the following programs: 1. Quality-Based Reimbursement; 2. Maryland Hospital Acquired Conditions; and, 3. Readmission Reduction Incentive Program.

The Shared Savings for Readmissions[2] and Potentially Avoidable Utilization programs that also hold revenue at risk based on performance are determined annually commensurate with the hospital rate update factor process.

## B. Background

Maryland has been a leader in initiating quality based payment approaches. Historically, these programs have surpassed the requirements of similar federal programs and as a result Maryland has been exempted from the federal programs. When Maryland entered into the All-Payer Model Agreement with CMS effective January 1, 2014, the continuing exemption process was addressed in

[1] The term "scaling" refers to the differential allocation of a pre-determined portion of base regulated hospital revenue contingent on assessment of the relative quality of hospital performance. The rewards (positive scaled amounts) or reductions (negative scaled amounts) are then applied to each hospital's revenue on a "one-time" basis (and not considered permanent revenue).

[2] For the Readmission Shared Savings adjustment, the HSCRC calculates a case mix adjusted readmission rate for each hospital for the base period and determines a statewide required percent reduction in readmission rates to achieve the revenue for shared savings. Current policy is posted at: http://hscrc.maryland.gov/init-shared-savings.cfm

the Agreement. The Agreement requires that the proportion of Maryland hospitals' revenues held at risk for quality programs be equal to or greater than the proportion of revenue that is held at risk under national Medicare programs. The objective of this requirement is two-fold: a) incentivize hospitals to deliver high quality care in support of the Triple Aim of better care, better health, and lower cost, and b) evaluate the extent to which Maryland quality programs are rewarding value as compared to those of the national Medicare program. The relevant agreement language is as follows.

> *Regulated Revenue at risk: [Maryland] must ensure that the aggregate percentage of Regulated Revenue at risk for quality programs administered by the State is equal to or greater than the aggregate percentage of revenue at risk under national Medicare quality programs. Quality programs include, but are not limited to, readmissions, hospital acquired conditions, and value-based purchasing programs.*

It is important to note that under the All-Payer Model Agreement, Maryland is required to achieve specific reduction targets in total cost of hospital care, potentially preventable conditions, and readmissions in addition to its revenue at risk requirement. In an effort to meet these reduction targets, Maryland restructured its quality programs in such a way that financial incentives are established prior to the performance period in order to motivate quality improvement and sharing of best practices while holding hospitals accountable for their performance.

For FY2016 following maximum amounts of revenue at-risk were already approved by the Commission:

- QBR: 1% maximum penalty, with revenue neutral scaled rewards up to 1%.
- MHAC—4%maximum penalty if statewide improvement target is not met; 1% maximum penalty and revenue neutral rewards up to 1% if statewide improvement target is met.
- RRIP—0.5% positive incentive for any hospital that improves by at least 6.76%.

During the upcoming annual revenue update process for FY 2016, HSCRC staff expects that two additional quality adjustments will be applied.

- Readmissions Shared Savings Program—A savings of 0.4% total hospital revenue (approximating an average 0.6% and maximum reduction of 0.8% of inpatient revenue) based on risk adjusted readmission levels.
- PAU Reduction Program—A reduction of allowed revenue for volume increases associated with potentially avoidable utilization that had a maximum revenue reduction of 0.9% and an average reduction of 0.3% in FY 2015.

Currently staff is in discussions with CMMI regarding the methodology for comparing the Maryland aggregate amount of revenue at risk and the national Medicare aggregate amount-at-risk provided for in the Agreement. In addition to calculating maximum at risk ("potential risk"[3]), CMMI staff expressed a need to measure the actual revenues impacted by the programs ("realized risk"). Discussions on "realized risk" are in progress.

## C. Assessment

CMMI staff proposed that measurement of both the potential and realized aggregate percentage of revenue at-risk occur annually across all quality programs comparing the State fiscal year (July 1 –

[3] Potential risk is defined as maximum percentage of revenue that an individual hospital stands to gain or lose based on their performance within a given quality program.

June 30) to the Federal fiscal year (October 1 – September 30). For example, Maryland's SFY 2015 (July 2014 – June 2015) will be evaluated against CMS' FFY 2015 (October 2014 – September 2015). Some Maryland quality programs are applied to both inpatient and outpatient revenue. For these programs, outpatient revenues at risk will be converted to an equivalent inpatient revenue base (Formula: percent of revenue at risk/percent inpatient revenue). Where applicable, both upside and downside risk will be considered.

Based upon these assumptions, Figure 1 shows the potential risk for each quality program and in aggregate for Maryland and Medicare, as well as the cumulative difference between Maryland and Medicare from 2014 to 2016. CMMI and HSCRC staff are currently discussing how to include the reduction for PAU in the Maryland program totals. For informational purposes, the tables contain two sets of totals--the first excluding the reduction for PAU and the second including the reduction for PAU. CMMI may want to separate the impact of Prevention Quality Indicators (admissions for ambulatory care sensitive conditions) from the other PAU components in evaluating the results.

**Figure 1: Maryland Versus Medicare Quality Programs' Potential Revenue at Risk, 2014-2016**

Maryland - Potential revenue at risk

| **% Inpatient Revenue** | **2014** | **2015** | **2016** | **2017** |
|---|---|---|---|---|
| MHAC | 2% | 3% | 4% | *4%* |
| Readmits | 0.41% | 0.86% | 1.36% | *2.86%* |
| QBR | 0.50% | 0.50% | 1.00% | *2%* |
| PAU GBR | 0.86% | 0.86% | *0.86%* | *0.86%* |
| **Sum without PAU** | 2.91% | 4.36% | 6.36% | 8.86% |
| **Sum with PAU** | 3.77% | 5.22% | 7.22% | 9.72% |

*italics are estimated numbers*

Medicare National - Potential IP revenue at risk

| **% Inpatient Revenue** | **2014** | **2015** | **2016** | **2017** |
|---|---|---|---|---|
| HAC | 0 | 1% | 1% | 1% |
| Readmits | 2% | 3% | 3% | 3% |
| VBP | 1.25% | 1.50% | 1.75% | 2% |
| **Sum** | 3.25% | 5.50% | 5.75% | 6.00% |
| Cumulative MD-US Difference | | | | |
| **Without PAU** | -0.34% | -1.48% | -0.87% | 1.99% |
| **With PAU** | 0.52% | 0.23% | 1.70% | 5.41% |

Staff discussed two alternative methods to measure realized risk with the CMMI. One option is to compare Maryland and Medicare hospital average percent revenue allocated in quality programs by taking the average of all absolute value of all revenue adjustments within each program. A second option is to calculate total revenue allocated in each program and sum all absolute values as a percent of total inpatient revenue in the state. Staff calculated Maryland and Medicare percentages for FY2015

for these options (see Figure 2), revealing that Maryland is slightly above Medicare in terms of average absolute percent for FY2015 or slightly below Medicare when excluding PAU.

**Figure 2. Maryland Versus Medicare Quality Programs Realized Revenue at Risk, 2015**

Maryland: (SFY 15)

| %tile (FY 15) | MHAC | Readmits | QBR | GBR PAU | Sum without PAU | Sum with PAU |
|---|---|---|---|---|---|---|
| 100% | 0.13% | -0.08% | 0.28% | 0.00% | | |
| 75% | 0.06% | -0.59% | 0.08% | -0.14% | | |
| 50% | 0.05% | -0.64% | 0.01% | -0.29% | | |
| 25% | 0.02% | -0.72% | -0.15% | -0.44% | | |
| 0% | -1.00% | -0.86% | -0.50% | -0.86% | | |
| FY 15 Absolute % Average | **0.11%** | **0.64%** | **0.14%** | **0.29%** | **0.89%** | **1.18%** |
| FY 15 Total Value Percent | **0.09%** | **0.67%** | **0.13%** | **0.22%** | **0.89%** | **1.11%** |

CMS National: (FFY 15)

| %tile (FY 15) | HAC | Readmits | VBP | Sum |
|---|---|---|---|---|
| 100% | 0.00% | 0.00% | 1.06% | |
| 75% | 0.00% | -0.06% | 0.15% | |
| 50% | 0.00% | -0.31% | 0.00% | |
| 25% | 0.00% | -0.77% | -0.21% | |
| 0% | -1.00% | -3.00% | -1.37% | |
| FY 15 Absolute % Average | **0.22%** | **0.52%** | **0.24%** | **0.97%** |

## D. Recommendations

Based upon the above assessment, current quality results for CY2014 YTD, and discussions with CMMI on our quality programs, staff's position and rationale for revenue amounts at-risk for FY2017 are outlined below.

1. **QBR—** 2% maximum penalty. This matches Medicare's VBP program and increases the incentive for hospitals to improve HCAHPS scores, which continue to be low compared to the Nation.
2. **MHAC—**4%maximum penalty if statewide improvement target is not met; 1% maximum penalty and revenue neutral rewards up to 1% if statewide improvement target is met. This continues the current FY2016 at-risk revenue levels that have resulted in significant quality improvements.
3. **RRIP—** 2% scaled maximum penalty and 0.5% reward for hospitals which reduced readmission rates at or better than the minimum improvement target if the statewide

Medicare readmission target is not met; 1% scaled maximum penalty and 1% reward for hospitals which reduced readmission rates at or better than the minimum improvement target if the statewide Medicare readmission target is met. The decision to add reductions and increase potential rewards is based on staff and stakeholder concerns regarding the CY2014 YTD improvement and the fact that almost one third of hospitals have had an increase in their readmission rate.

HSCRC staff will convene meetings of the Performance Measurement and Payment Workgroups to deliberate and further refine quality-based programs' aggregate amount at risk and individual component program details prior to the January 2015 Commission meeting.

# Nurse Support Program II (NSP II) Outcomes Evaluation FY 2006 - FY 2015 and Recommendations for Future Funding

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

December 10, 2014

This recommendation is a draft proposal. No Commission action is required at this time. Public comments should be sent to Oscar Ibarra at the above address or by e-mail at Oscar.Ibarra@maryland.gov. For full consideration, comments must be received by January 2, 2015.

## EXECUTIVE SUMMARY

## Nurse Support Program II (NSP II) Outcomes Evaluation FY 2006 – FY 2015 and Recommendations for Future Funding

The Nurse Support Program II (NSP II) was designed to increase the number of hospital bedside nurses by mitigating barriers to nursing education enrollments and graduation. This goal is achieved by expanding academic capacity, including the number of faculty available to teach in Maryland's nursing programs while simultaneously supporting student success. The NSP II has two components, a competitive institutional grant and statewide initiatives. Nine rounds of Competitive Institutional Grant awards totaling $63,374,650 were awarded between fiscal years 2006 and 2015. Statewide initiatives provided $27,997,338 to 950 graduate nursing students and faculty across the State in the forms of scholarships, fellowships, or grants to help them begin or enrich careers as faculty in Maryland schools/departments of nursing. Fifteen community colleges and eleven universities across all geographic regions and types of programs participated in the NSP II. All Maryland nursing programs received one or more institutional grant awards. Notable program outcomes include:

- *New Nursing Faculty Fellowships* resulted in the recruitment and retention of 245 new faculty members (lecture and clinical) at 12 universities and 7 community colleges. Forty-four percent (44%) were from underrepresented groups in nursing. The retention of new full-time faculty is 88%.
- Bachelor degree program (BSN) enrollments were 4,086 in 2005 rising to 6,832 in 2013, a 67% increase. Associate degree (ADN) enrollments rose 27% from 9,507 in 2005 to 12,971 in 2013 with assistance from NSP II programs.
- BSN graduates steadily increased from 1,127 graduates in 2006 to 1,615 graduates in 2013. ADN graduates steadily increased from 1,090 in 2006 to 1,726 graduates in 2013.
- Over 5,800 new pre-licensure nurse graduates can be directly tied to competitive institutional grant program outcomes from 2006-2014.
- The number of new pre-licensure nurse graduates passing the National Council Licensure Examination for Registered Nurses (NCLEX-RN) exam on the first attempt has steadily increased from 1,566 in 2005 to 2,598 in 2013. Just as important, the first attempt pass rates have remained consistent even as access to programs increased, thereby indicating

maintenance and improvements in Maryland's nursing education programs during a time of unprecedented expansion.

- The number of active licensed nurses increased from an average of 58,408 from 2005 to 2007 to an average of 74,497 from 2008 to 2012. MBON data indicate an increase of 27% in the RN workforce, much of which can be attributed to NSP II Programs. This growth rate is in line with recent projections that suggest the absolute size of the RN workforce will grow by 24% nationally between 2009 and 2030. (Auerbach,et al.,2011)

The NSP II has been successful in increasing the number of available hospital bedside nurses. However, there are indicators that suggest the nursing workforce shortage in Maryland is not fully resolved. Current issues impacting the State's nursing workforce include predicted nurse retirements – especially those delayed by an economic recession that is now correcting changes in patient care related to the State's Medicare waiver and the federal Affordable Care Act, hospital migration to magnet status which is associated with better patient outcomes, and changes in hospital health care delivery to a care coordination model. Staff recommends that the Commission consider five actions regarding the future direction of NSP II.

1. Renew NSP II funding for five years, FY 2016 through FY 2020.
2. Establish a work group to develop updated, specific goals for a competitive institutional grant program and statewide initiatives.
3. Adopt goals and metrics that address the following Institutes of Medicine (IOM) recommendations: #4, #5, #6, & #7 (Refer to the Recommendations Section for full detail on the IOM recommendations).
4. Purchase software to manage and report on outcomes data.
5. Review current NSP II statute in the General Assembly Education Article, Section §11-405, particularly the term "bedside nurses" to ensure that the statute meets the current needs of health care and the movement to coordinated care models.

**EXECUTIVE BRIEF**

**Nurse Support Program II (NSP II) Outcomes Evaluation FY 2006 – 2015 and Recommendations for Future Funding**

## INTRODUCTION

The HSCRC established the Nurse Support Program II (NSP II) on May 4, 2005. The NSP II, administered by the Maryland Higher Education Commission (MHEC) in collaboration with the HSCRC, is complementary to the Nurse Support Program I (NSP I), a hospital based program. The NSP II is funded through pooled assessments totaling up to 0.1% of hospital regulated gross patient revenue over a ten year period ending June 30, 2015. The NSP II employs an effective three-prong strategy for increasing the number of nurses in the State with the ultimate goal of reducing hospital costs. These goals are achieved by increasing the number of nursing lecture and clinical faculty, supporting schools and departments of nursing in expanding academic capacity and curriculum, and providing support to enhance nursing enrollments and graduation. This Executive Brief describes program outcomes including program impact on the State's nursing workforce. Findings related to nurse supply and demand, the State's academic capacity to increase enrollments and graduation in nursing programs, entry to practice, and the preparation of teaching and clinical faculty are presented. An examination of current and future nurse workforce issues, post NSP II, is presented as well. The Executive Brief concludes with recommendations for the future of the program.

### *Program Inception and Purpose*

Maryland was one of five states to be granted a Medicare waiver in 1977 which exempted the State from traditional Medicare payments (codified in Section 1814 (b) of the Social Security Act). The HSCRC was established as an independent state agency with full rate setting authority over all general acute care hospitals in Maryland. The HSCRC has the authority to adapt the rate system to changing dynamics within health care. As such, it provides a flexible and stable funding source for the NSP I for hospitals and NSP II for Schools/Departments of Nursing, as part of its larger mission to control costs and ensure the quality of health services. Today, Maryland is the only state that continues to set its own hospital rates for all payers.

In 2003, the nursing shortage in Maryland was worsening despite the efforts of the NSP I hospital based programs. Vacancy rates exceeded 15%, and the cost of agency nurses was over

$144 million (Heller & Sweeney, 2003). There were not enough new nursing graduates to meet hospital workforce demand. Leaders from hospitals and educational institutions realized that a shortage of nursing faculty was restricting the capacity of schools to admit and educate more nurses to meet market demand. A group of stakeholders interested in statewide solutions helped establish NSP II to satisfy the needs of hospitals for bedside nurses through education focused programs that would grow capacity by increasing the number of nursing faculty and nursing students.

In 2006, the Maryland Higher Education Commission (MHEC) and the Maryland Board of Nursing (MBON) completed *The Maryland Nursing Program Capacity Study* requested by Senate Bill 511 (Chapter 487, Acts of 2005). This study built upon the work of the Center for Health Workforce Development and the Statewide Commission on Nursing, which was concluded in 2006. The Nurse Support Program II was established in State statute (Annotated Code of Maryland, Education Article §11-405, Nurse Support Program Assistance Fund) and funded through HSCRC rates. A Memorandum of Agreement between the HSCRC and the Maryland Higher Education Commission was established, whereby MHEC was charged to administer the NSP II programs under the auspices of the HSCRC. The MOU identified the purposes of the NSP II as: 1) increasing the number of bedside nurses in Maryland hospitals; and 2) expanding the capacity of Maryland nursing schools to produce qualified nurses to work in Maryland. These goals were achieved through a competitive institutional grant program and statewide initiatives. Statewide initiatives include activities supporting students and faculty while the competitive institutional grant program increased capacity of the nursing programs (HSCRC and MHEC MOU, 2006). Creating a diverse nursing faculty and workforce also are goals for the program.

***Competitive Institutional Grant Program and Statewide Initiatives***

Two types of programs are supported by the NSP II. These include the Competitive Institutional Grant program and Statewide Initiatives. A brief description of each type of program follows.

*Competitive Institutional Grant Program.* Competitive institutional grants are designed to increase the structural capacity of Maryland nursing schools through shared resources, innovative educational designs, and streamlined processes to produce more nurse faculty, and nursing undergraduate and graduate nurses. Grants support activities such as the establishment

of new degree programs, curriculum enhancement and redesign, student retention initiatives, and simulation and other productivity enhancing instructional technologies. The grants also contribute to the creation of a more diverse nursing faculty and workforce. Many grant projects prepare more graduate level nurses qualified to serve as lecturers and/or clinical faculty at Maryland's higher education institutions.

*Statewide Initiatives.* Statewide initiatives include the *New Nurse Faculty Fellowships* (NNFF), the *Nurse Educator Doctoral Grants for Practice and Dissertation Research* (NEDG), and the *Hal and Jo Cohen Graduate Nursing Faculty Scholarship and Living Expenses Grant* (GNF/LEG). The NNFF provides funding for newly hired nursing faculty to support their research and teaching. Funds assist faculty with the work necessary to gain tenure, and support faculty retention. The NEDG provides funds to support doctoral nursing students during their critical final phase of graduate study — the dissertation or capstone project. Research suggests that this is a critical retention junction as many students drop out at this point. The NEDG, a relatively new program, appears to positively impact retention and completion. The Hal and Jo Cohen graduate financial aid programs provide powerful incentives for currently practicing nurses and others to pursue graduate level education and faculty positions in both classroom and/or clinical settings.

***Program Sunset and Evaluation Methodology***

The last round of funding that supports the NSP II ends in FY 2015. At the request of the HSCRC, MHEC and HSCRC staff conducted a comprehensive program review. Assistance was provided by a Nursing Faculty Advisory Group, representatives of the Maryland Hospital Association, and NSP I Nurse Residency leaders with the Maryland Organization of Nurse Executives. NSP II competitive institutional grant recipients were instrumental in the collection of project outcomes data and collaborated with nurse executive leaders on hospital based measures.

Data were collected and compiled for all NSP II funded projects for all years of activity for which data were available. Excel and SPSS were used to compile and analyze the data. Both quantitative and qualitative data analysis was applied, most notably descriptive statistics, case study, and thematic analysis. Outcomes were compared to project goals. A summary of important outcomes is discussed in the following section. Findings on the most successful strategies utilized by NSP II and suggested revisions for improvement are included in the review of activities and

outcomes.

## NSP II PROGRAM EVALUATION AND OUTCOMES 2006-2014

### *Competitive Institutional Grants Overview*

Nine rounds of institutional competitive grants were awarded between July 1, 2005 and June 30, 2014, totaling $63,374,650. A total of 109 institutional multi-year grants were awarded through a competitive review process. Fifteen community colleges and eleven universities received funding. Grant recipients included schools or departments of nursing at public universities including the State's four historically black institutions, independent colleges and universities, and community colleges. The distribution of awards was geographically diverse with three institutions in Western Maryland, two institutions on the Eastern Shore, three institutions in Northern Maryland, and one institution in Southern Maryland. The remaining institutions are located in the central region of the State and Baltimore City. Grant recipients received funds in installments over the life of the grant contingent upon adequate yearly progress. Forty-one (41) projects have successfully concluded allowing for a detailed analysis of the strategies used by the most successful awardees. Sixty-eight (68) awards remain open, some with annual payments extending into FY 2017 (with funds accrued through FY 2015). While these projects have not yet concluded, annual outcomes to date are included in the data analysis.

### *Statewide Initiatives Overview*

There were eight funding cycles for the NNFF and GNF/LEG. There were two funding cycles for the NEDG. A total of $27,997,338 has been disbursed to date through these programs. Nurses either committed to become nursing faculty through attainment of graduate education, advanced their careers (tenure-track) as faculty through earning doctoral education, or joined an institution as a new faculty member. A description of each program within the Statewide Initiatives follows.

*New Nursing Faculty Fellowships (NNFF).* The Nurse Support Program II provides funding for New Nursing Faculty Fellowships to newly hired faculty. These fellowships assisted Maryland nursing programs in recruiting and retaining new nursing faculty to produce the additional nursing graduates required by Maryland's hospitals. Since FY 2007, 245 new faculty members have been recruited through this program and received a total $4,105,000. Each fellowship is funded for three years. The retention rate for these faculty is currently 88%. Overall, 44% (n=108) were from underrepresented groups in nursing (ethnic and racial minorities and males). The participating Academic Deans and Directors unequivocally stated that this program was an effective tool that

helped them recruit and retain new highly qualified professors. The NNFF recipients were allowed to use funds to pay down student loans, attend and present at professional conferences, conduct research, develop publications for refereed journals (a tenure-track requirement), and other professional development activities.

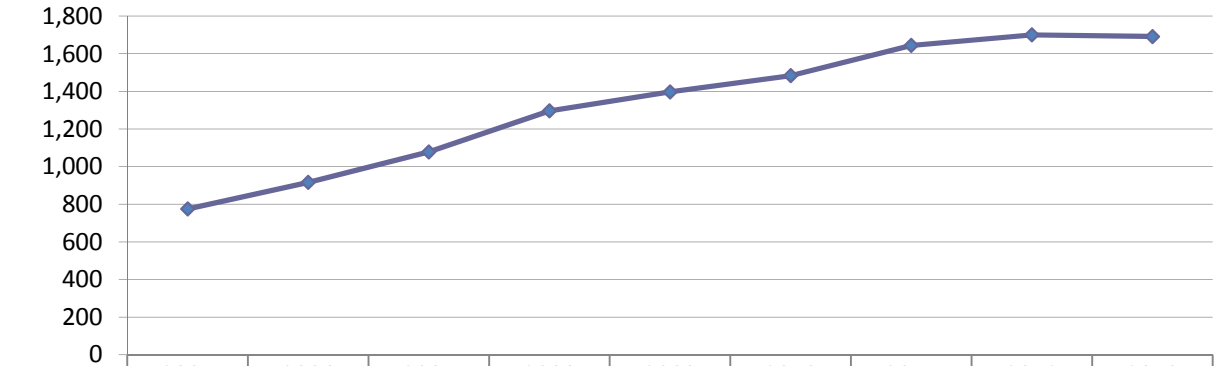
*Nurse Educator Doctoral Grants for Practice and Dissertation Research (NEDG).* The NEDG provides grants to doctoral students, some of whom may be serving as nursing instructors or assistant professors, to complete the final phase of their doctoral program -- the dissertation (Doctorate of Philosophy, PhD) or capstone (Doctorate of Nursing Practice, DNP). Funds may be used to offset research, tuition, and other educational costs related to expediting degree completion. Since inception in 2012, at the request of the HSCRC, there have been 26 awards totaling $630,000. After doctoral completion, the newly conferred PhDs and DNPs provide the abstracts and citations of their dissertations, capstone project papers, and any published work or other scholarly projects. Many doctoral projects are focused on educational issues in nursing: e.g., simulation, medication errors, student retention, faculty shortage and teaching modalities that inform best practices in nursing education and clinical practice.

*Hal and Jo Cohen Graduate Nursing Faculty Scholarship and Living Expenses Grant (GNF/LEG).* The GNF and LEG supported registered nurses to enter graduate nursing programs in Maryland and to complete the coursework to be qualified as nurse faculty. The scholarship is contingent upon a service obligation to teach nursing in nursing programs in Maryland. Recipients who are unable to meet the service obligation must repay the GNF through a bond repayment plan. The scholarship supports Masters and Doctoral degree enrollment, as well as a post-graduate teaching certificate. Since FY 2007, a total of 679 nurses have been awarded $19,068,978 in scholarships for tuition and living expense grants. Most of these recipients were nurses pursuing Masters Degrees (a pre-requisite for doctoral level study). Nine recipients have completed their teaching service obligation; 159 are working as Maryland nursing faculty in fulfillment of the service obligation; 156 recent graduates are seeking teaching positions, 30 are in repayment and 10 have completed repayment. The remaining students are enrolled in graduate degree programs (Masters or Doctoral level).

***Post-Nursing Licensure Masters and Doctoral Degree Enrollments***

The most salient goal of the NSP II program is to increase the academic capacity of nursing programs in order to produce more qualified nurses. One way this goal is being achieved is by "growing our own" nursing faculty. The competitive institutional grant and statewide initiatives support projects that expand the pool of nurses and nursing students with the graduate credentials necessary to become faculty members. These programs also provide incentives to pursue teaching versus practice given that nursing practice commands much higher salaries than college-level teaching. Four new Masters degree programs and four new Doctorate of Nursing Practice (DNP) degree programs are directly attributable to the NSP II. These new programs have enrolled 1,445 new Masters and 526 new Doctoral students since opening for business from 2007-2012. Simultaneously, enrollments in existing programs were significantly expanded. Graduate nursing student enrollments have increased by 219% between 2005 and 2013 with support from NSP II funds. Total doctoral enrollments have increased from 87 in 2005 to 229 in 2013, representing a 245% increase. In addition, many students completed teaching certificates specifically designed to prepare nursing educators developed through the support of NSP II. Refer to the Charts 1 and 2 below.

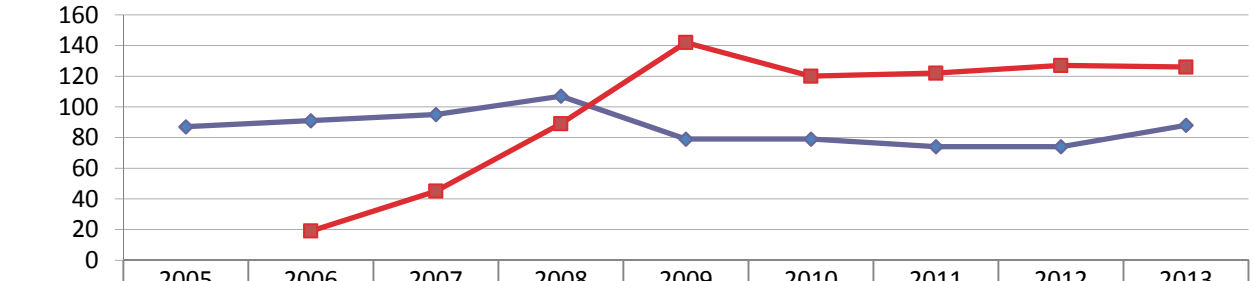
**Chart 1: Masters of Science, Nursing (MSN) Enrollments 2005 - 2013**




| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|
| MSN | 775 | 916 | 1,078 | 1,296 | 1,397 | 1,483 | 1,644 | 1,700 | 1,691 |

*Source: Maryland Higher Education Commission Enrollment Data System*

**Chart 2: Doctoral Level Nursing Enrollments (PhD, DNP)**




| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|
| PhD | 87 | 91 | 95 | 107 | 79 | 79 | 74 | 74 | 88 |
| DNP | | 19 | 45 | 89 | 142 | 120 | 122 | 127 | 126 |

*Source: Maryland Higher Education Commission Enrollment Data System*

***Post-Nursing Licensure Masters and Doctoral Degree Production***

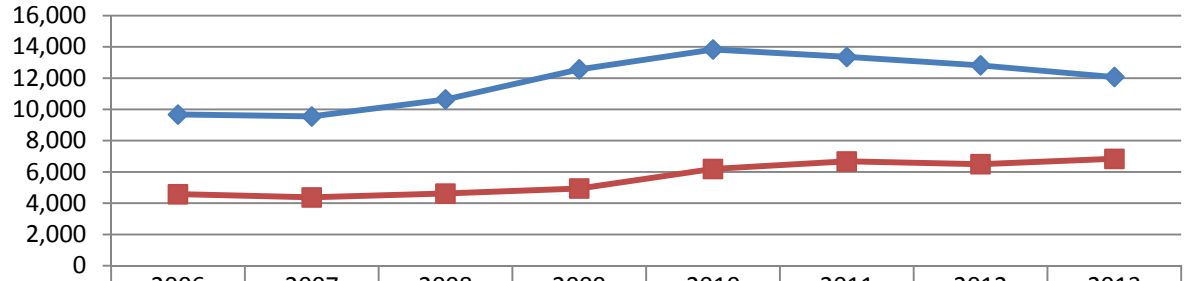
Graduates from Masters' programs have increased by 219% between 2005 and 2013 with support from NSP II funds. Doctoral degree conferment has increased as well. Since the first graduates in 2006, 621 new Masters and 203 new Doctoral degrees can be directly attributed to the grant from measurable outcomes reported by project directors on annual and final reports. In addition, 38 Nurse Educator Teaching Certificates were completed at post-graduate programs.

***NSP II Impact on Enrollments in Undergraduate Nursing Programs***

The NSP II strives to increase student enrollments and degree production in all levels of undergraduate nursing programs - both two and four-year degrees. By increasing the number of nursing faculty through the production of graduate level preparation, undergraduate programs can likewise grow. Associate Degree Nursing (ADN) program enrollments were 9,670 in 2006 compared to 12,071 in 2013 (45% increase). ADN enrollments leveled off after 2010 due to increasing emphasis on student retention in the ADN program, changes to the federal Pell Grant program, and increasing demand for Bachelor of Science in Nursing (BSN) prepared nurses as hospitals sought Magnet status. Refer to the table below. New graduate RNs complete either ADN or BSN programs prior to the licensing examination. After passing licensure, the ADN RNs may continue to BSN completion. All BSN nurses may then continue in post-graduate Masters or Doctoral programs. There is a growing demand for seamless progression from the ADN to the BSN. Recently, NSP II-funded new models for dual

enrollment are increasing the RN to BSN options available to current registered nurses holding with two-year degrees. During the same time period, enrollments in baccalaureate nursing program increased from 4,571 in 2006 to 6,832 in 2013 (67%). between 2005 through 2013. After a brief leveling between 2011 and 2012, BSN student enrollments appear to be increasing again.

**Chart 5: Associate (ADN) and Bachelor (BSN) Degree Enrollments 2006 - 2013**




| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|
| ADN | 9,670 | 9,546 | 10,635 | 12,561 | 13,829 | 13,356 | 12,818 | 12,071 |
| BSN | 4,571 | 4,367 | 4,611 | 4,935 | 6,189 | 6,669 | 6,490 | 6,832 |

*Source: Maryland Higher Education Commission Enrollment Data System*

***Degree Production (ADN and BSN)***

In 2013, 1,726 ADNs were awarded compared to 1,090 in 2006 (58% increase). Furthermore, ADNs increased steadily each year from 2007 forward as the NSP II program implementations gained strength (Chart 6). These same associate degree trained nurses are able to take advantage of ADN to BSN programs supported by NSP II funds. Similarly, in 2013, there were 1,615 BSN degrees awarded compared to 1,127 in 2006. This is a 43% increase. BSN production increased most dramatically in 2011, 2012, and 2013 reflecting new students who entered BSN programs in 2008 or later, as NSP II supported programs were fully ramped up.

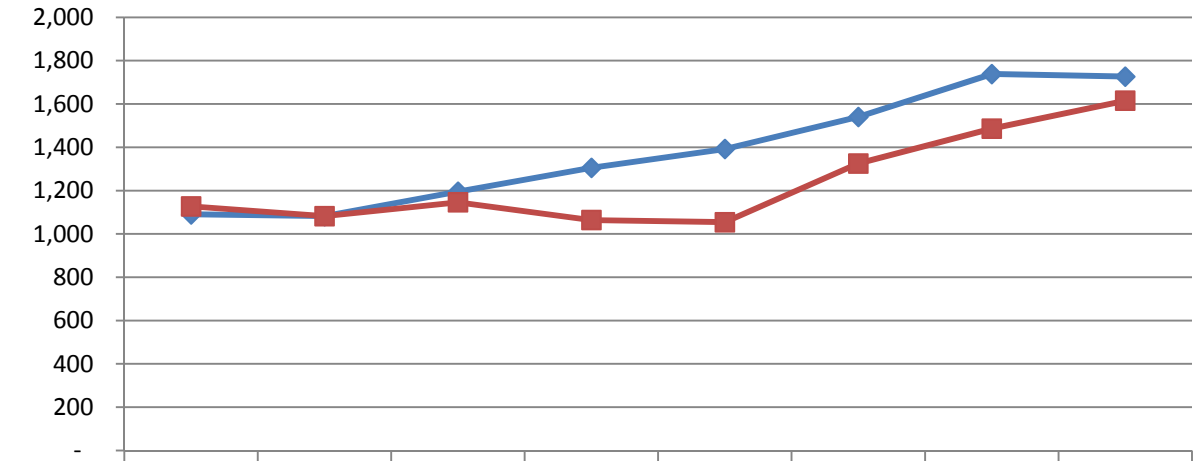
While some undergraduate nursing degree increase is attributable to natural growth, data provided by NSP II competitive institutional grant project directors suggest that ***over 5,800 or 27% of all undergraduate nursing degrees produced between 2006-2013 are directly attributable to the NSP II competitive institutional grant program focused on student retention initiative, redesigned curriculum options, and new programs.*** This number does not include the number of new students admitted and graduated due to an



*Source: Maryland Higher Education Commission Enrollment Data System*

increase in the number of faculty recruited through statewide initiatives. In addition, a new NSP II funded RN (ADN) to BSN program in Western Maryland and expansion of similar existing programs produced 506 new BSNs who were formerly RNs with two-year degree credentials.

**Chart 6: Pre-Nursing Licensure Undergraduate Degrees 2006 - 2013**



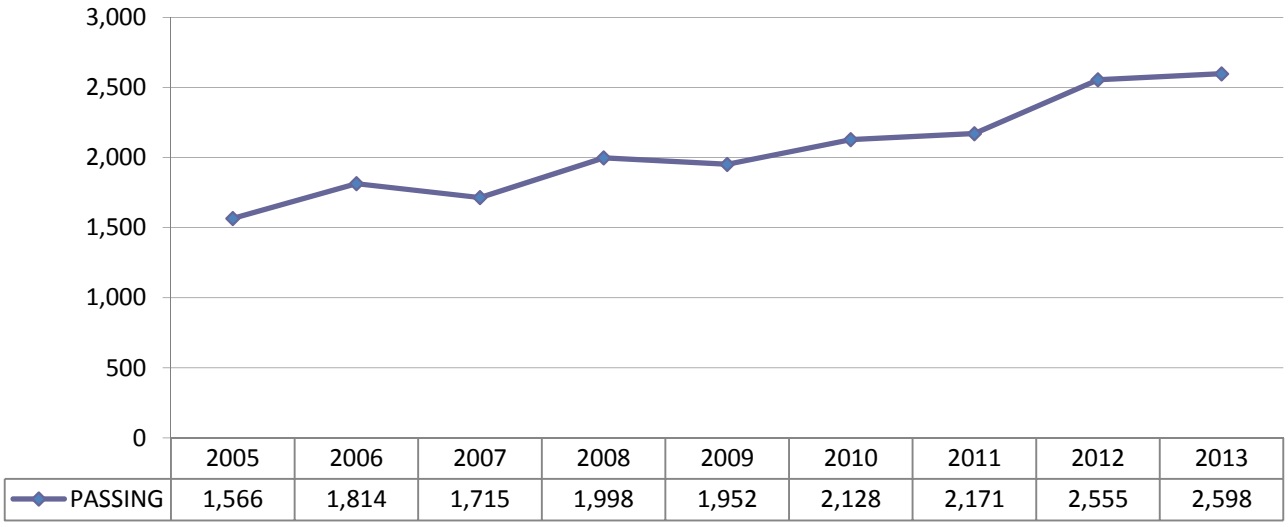

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|
| ADN | 1,090 | 1,082 | 1,195 | 1,305 | 1,392 | 1,540 | 1,738 | 1,726 |
| BSN | 1,127 | 1,082 | 1,146 | 1,064 | 1,054 | 1,325 | 1,486 | 1,615 |

*Source: Maryland Higher Education Commission Degree Information System*

***NCLEX Pass Rates***

The number of Maryland nursing graduates passing the National Council Licensure Examination (NCLEX) exams on the first attempt has steadily increased over the course of the NSP II Program from a baseline of 1,566 in 2005 to 2,598 in 2013 (Chart 7). This represents a 66% increase in the number of newly licensed RNs passing licensure on the first attempt across the State. The percentage of students passing the NCLEX in one or more attempts was 87% in 2005 and 86% in 2013 suggesting that even as access to nursing programs expanded, quality as demonstrated by the NCLEX pass rate has been reasonably maintained.

**Chart 7: Number of Nursing Students Passing NCLEX-RN (First Attempt) 2005 - 2013**




| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|
| PASSING | 1,566 | 1,814 | 1,715 | 1,998 | 1,952 | 2,128 | 2,171 | 2,555 | 2,598 |

*Source: Maryland Board of Nursing*

***NSP II Impact the Nursing Workforce - Diversity, Nurse Vacancy Rates, Agency Nurse Use and Cost***

The Maryland nursing workforce shortage has been mitigated by NSP II educational interventions targeting institutions and individuals. At the institutional level, competitive grants increased educational capacity of schools to enroll and graduate new nurses. At the individual level, financial aid and fellowships were awarded to nurses who committed to become and/or be retained as nursing faculty in Maryland.

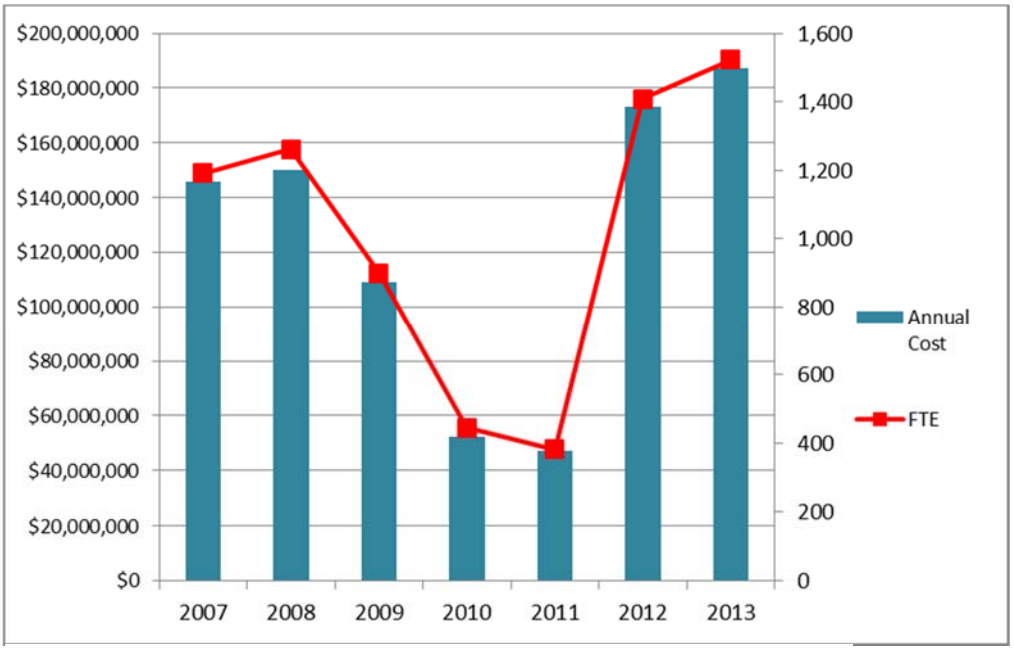
*Diversity*. In addition to increasing the number of nurses, NSP II programs helped to educate a more diverse cadre of nurses by engaging Maryland's historically black colleges and universities (HBCU) and urban and rural serving community colleges. While MHEC and the HSCRC have not been able to collect needed demographic workforce data, it is well understood that Maryland's HBCUs and community colleges serve a highly diverse student body by race/ethnicity, age and socio-economic status.

The NSP II has also impacted hospital nurse vacancy rates, agency nurse use, and costs. A more detailed discussion of the impact on vacancy rates, agency nurse use and costs follows.

*Nurse Vacancy Rates.* In 2002, prior to NSP II, the Maryland hospital nurse vacancy rate was 15.6%. By 2007, shortly after NSP II was implemented, the Maryland hospital nurse vacancy rate had dropped to 10.2%. In 2011, it dropped to 5.6% and hovered around 5.3% through 2012. To compensate for nurse vacancies, hospitals were forced to use costly strategies such as overtime, agency staff, and travel nurses. These strategies also had the potential to negatively affect quality, safety, the patient experience, physician satisfaction, and hospital employee job satisfaction. Data on Maryland agency nurse use shows a sharp upward trend, which suggests that nurse vacancy rates are on the rise again (see chart at the end of this section).

*Agency Nurse Use.* The NSP II appears to have had some positive impact on the costly use of agency nurses by Maryland hospitals. Agency nurse use declined sharply between 2008 and 2011 but is currently on the rise (Figure 1). Agency nurse use increases costs to hospitals struggling to permanently fill positions and meet patient service levels. Current agency nurse rates range from $55 to $78 per hour depending on area of practice, contract status and schedule. This is in sharp contrast to the average staff nurse's base salary of approximately $36 to $40 per hour. Maryland hospitals vary in full time nurses and nursing hours. In 2012, there were 22,365 RNs employed at 67 hospitals (MHA, 2014). Using an average of 334 RNs, the difference in the average cost of nurse hours between agency RNs and full time employee RNs at an average hospital could be $16,673,280. In the three years since the NSP I evaluation report, agency nurse use has risen substantially, due in part to hospital's efforts to adjust to the new Medicare waiver requirement. As nurses left positions, hospitals were more selective in hiring replacement nurses. Furthermore, hospital nurse leaders report hiring is increasing this year, after the contractions of services and changes within the industry in the last two years (HSCRC & MHEC meeting, 10/27/14).

**Figure 1: Statewide Agency Nurse Use - Cost and FTEs**




*Source: HSCRC Wage and Salary Survey*

## FUTURE DIRECTIONS FOR THE NSP II

### *Evolving Issues Impacting Maryland's Hospital Nursing Workforce*

In considering Maryland's hospital nursing workforce needs and implications for the possible renewal and revision of the NSP II program, several changes in the healthcare landscape are noted. These include changes in the federal healthcare programs, best practice recommendations from the Institutes of Medicine, the changing roles of nurses, and the increased emphasis on quality and patient satisfaction. A discussion of the impact of these changes, the projected job openings through 2022, potential nursing shortages, and changing demographics follow.

*Federal Programs.* In 2010, the federal *Affordable Care Act (ACA)* was signed into law. It represents the most significant change to national health care laws since the 1965 enactment of Medicare and Medicaid programs. The ACA currently provides private insurance coverage to 67,000 Marylanders who previously lacked health insurance; however, this number is expected to grow. This estimate also does not include newly eligible Medicaid recipients from the expanded income requirements or the estimated 90,000 primary adult care eligible citizens who were not covered for non-emergent hospital services before the ACA was enacted. The ACA will

increase demand for nurses as it strives to build a health care system that meets the national "Triple Aim" for healthcare – better health, better care, and lower cost.

The HSCRC collaborated with the Centers for Medicare and Medicaid Services to modernize the State's Medicare waiver in January 2014. Hospitals now operate on a value of services model rather than on a volume model. Rates are tied to improvements in the health care quality, population health, and per-capita cost growth. As a result, unnecessary and potentially avoidable services and procedures that formerly brought revenue now increase cost; the preventative services and primary care now become a key reducing avoidable utilization. This means developing strategies that help individuals stay healthy, reduce hospital readmissions, and prevent avoidable adverse outcomes, all essential to the ultimate success of the new All-payer model. Hospital-based nurses providing interventions to improve coordinated recovery and transition to home can make dramatic differences in care and at the same time reduce cost. As the largest group of health professionals, nurses have many opportunities to influence patient outcomes. This shift also requires new training in the form of continuing education, nurse preparation program curriculum, and nurse educator knowledge.

*IOM Recommendations for Nursing.* In 2010, *The Future of Nursing: Leading Change, Advancing Health* report was released by the Institutes of Medicine (IOM) in partnership with the Robert Wood Johnson Foundation. The report articulated the importance of nurses in providing safe, quality, accessible, affordable, and patient-centered care, and offered eight recommendations for action by states. Nursing leaders in Maryland formed the Maryland Action Coalition to promote the implementation of the recommendations as a blueprint for the nursing profession. Since the IOM (2010) report recommended increasing the number of BSN prepared nurses to 80% of all RNs by 2020, it has taken three years to improve from 50% to 55%. Beginning in 2014, hospitals seeking magnet hospital recognition must have an action plan and demonstrate progress toward achieving the 80% of nursing staff with BSN goal. The push behind more highly educated nurses is based on recent studies that suggest higher levels of nurse education are linked to better patient outcomes. For example, one study showed a 10% increase in the BSN workforce proportion reduced the odds of patient mortality by 10.9% (Yakusheva, et al., 2014).

*Changing Role of Nurses and Hospital Nurses in Particular.* Hospital nurses are at the forefront of moving from practices based purely on acute care admission frameworks towards

models based on health promotion and population health. Hospitals have or are restructuring to provide for "whole person" health care delivery. Continuity of care across acute and chronic conditions can be managed through a partnership among providers, payers and patients/families. The care coordination models demonstrate improved outcomes in the acute care inpatient settings when RN care coordinators, primary care physicians, other members of the health team and patient/family interact openly and participate in decision-making. Collaboration between patient and provider partners leads to better self-care management, improved functional health, and reduced readmissions. Nurses are central to care coordination for their clinical expertise, critical thinking, and organizational skills (Hajewski & Shirey, 2014). Nurses are positioned to coordinate transitions to home because they are the largest group of care providers; they spend the most time interacting with patients; and they are integral to safe discharge planning and to identifying specific factors that may require attention within the patient's home environment.

*Emphasis on Quality and Data.* The Department of Health and Human Services (DHHS, 2014) reported on 2011-2012 data from the National Database of Nursing Quality Indicators (NDNQI) on the nurse's impact on patients. Through quality focused initiatives, nurses saved $4 billion in health care spending, decreased the hospital acquired conditions by 9%, reduced readmissions for Medicare patients by 8%, prevented 560,000 patient injuries and saved 15,000 lives. Maryland is one of 14 states that increased the number of data points collected to be reported nationally. The nurse sensitive quality measures link nursing services with quality of care, patient outcomes and cost of care.

The Magnet designation through the American Nurses Credentialing Center (ANCC) recognizes hospitals for nursing excellence. Hospitals' commitment to staffing with highly trained nurses and putting them in leadership positions, thereby allowing them to have substantial input into patient safety issues is a benchmark for consumers seeking care. Patient experience as measured by Maryland HCAHPS scores for CY 2012 was compared among Magnet designated and non-Magnet designated acute care hospitals. As seen below, Magnet designated hospitals' HCAHPS scores were consistently higher than non-Magnet designated hospitals. For 2012, Magnet designated hospitals' scores ranged from 1.64% to 7.92% higher (Table 1). Statistically significant differences were found for overall hospital rating, willingness to recommend the hospital and discharge instruction, indicating patients had a better experience at a hospital with Magnet designation.

**Table 1: CY 2012 HCAHPS Scores - Magnet vs Non-Magnet Hospitals**

| Patient Experience of Care Measures CY 2012 | Magnet Hospitals | Non-Magnet Hospitals | Difference |
|---|---|---|---|
| Cleanliness of Hospital Environment | 68.14% | 67.27% | 0.87% |
| Communication About Medicines | 63.57% | 60.46% | 3.11% |
| Communication With Doctors* | 83.14% | 79.19% | 3.95% |
| Communication With Nurses | 80.14% | 76.54% | 3.60% |
| Discharge Information* | 88.00% | 83.70% | 4.30% |
| Overall Rating of this Hospital* | 75.14% | 68.35% | 6.79% |
| Pain Management | 72.29% | 70.65% | 1.64% |
| Quietness of Hospital Environment | 58.86% | 57.97% | 0.89% |
| Responsiveness of Hospital Staff | 64.29% | 60.54% | 3.75% |
| Willingness to Recommend this Hospital* | 76.57% | 68.65% | 7.92% |
| | | | |
| Notes: | | | |
| 1. * Statistically significant at p<.05. | | | |
| 2. Magnet Hospitals - University of Maryland Medical Center, Mercy Medical Center, The Johns Hopkins Hospital, Dorcehster General, Sinai Hospital of MedStar Franklin Square Medical Center, Easton Memorial | | | |

*Funds Supporting Nursing Programs.* The Nurse Support Program I, implemented in 2001, was designed to support hospital based nursing workforce initiatives for acute care nurses and serves as a companion and complementary program to the NSP II. Due to program success in creating hospital savings, the HSCRC renewed the NSP I in June of 2012 for five years.

*Economy and Demographics.* The recession of 2008 prompted nurses to delay retirements, increase hours of work, and/or return to work. As a result, hospitals and other employers experienced reduced turnover in nursing staff (Auerbach, et al., 2013). Nursing vacancy rates trended downwards and have held steady around 5% (MHA, 2012). Retiring baby boomers, rising chronicity, accelerating acuity, and the implementation of the ACA are cited among the reasons that have combined to make nursing the top occupation for job growth through 2022 (BLS, 2013). The following figures illuminate the specific need for additional nurses and nursing faculty in Maryland.

1. RN employment is projected to grow 22.3% in Maryland between 2008 and 2018 (DLLR, 2010). An estimated 19,450 RN job openings are expected in Maryland between 2012-2022 (DLLR, 2014)
2. In *Health Care 2020,* the Governor's Workforce Investment Board (GWIB) called for an increase of up to 25% in the State's health care workforce before 2020 to accommodate expanded access to coverage for an estimated 290,000 Marylanders under the ACA (GWIB, 2011).

3. The Health Resources and Services Administration (HRSA) reported in April 2013 that one third of the current national nursing workforce is older than 50 and will reach retirement age over the next 10-15 years. Maryland ranks 25th among states in its per capita RN workforce with 975.7 RNs per 100,000 population (HRSA, 2013).
4. The Bureau of Labor Statistics Employment Projections 2012-2022 indicates the RN workforce will grow from 2.71 million in 2012 to 3.24 million in 2022, an increase of 526,800 or 19%. The job openings for nurses due to growth and replacements will require an additional 525,000 RNs to meet the need for 1.05 million RNs by 2022 (BLS, 2013).

**STAFF RECOMMENDATIONS FOR THE NSP II GOING FORWARD**

The NSP II has been a successful strategy for increasing and sustaining the State's academic capacity to produce nursing graduates while simultaneously maintaining the quality of those graduates as indicated by NCLEX pass rates. These goals have been achieved by increasing nursing faculty ranks through a "grow your own" program, adding new graduate level nursing programs, creating an educator certificate to help practitioners become effective nursing teachers, and by providing the necessary academic support and financial aid to attract nurses to graduate level education. At the same time, undergraduate programs including ADN to BSN programs have been implemented to ensure a strong supply of entry level nurses into the workforce.

**Recommendation 1: Renew NSP II funding for five years, FY 2016 through FY 2020.**

Even so, with today's dynamic health care landscape it is unclear that nursing workforce demands have been met. In fact, based on the considerations outlined in the evolving issues section above, data suggest that the need for more highly trained nurses will continue to escalate which, in turn, will challenge nurse preparation programs to update curriculum, offer innovative instructional delivery, and increase enrollments. According to a sample of 50% (n=13) of Maryland Nursing Programs' 2012 reports, 1,120 qualified nursing applicants are still turned away due to enrollment limits (Maryland Deans and Directors, 2014). The NSP I, which was recently renewed, supports ongoing education for staff nurses with the goal of increasing nursing

quality placing further pressure on nursing programs. Therefore, MHEC and HSCRC jointly propose the following recommendations.

**Recommendation 2: Establish a work group to develop specific goals for a competitive institutional grant program and statewide initiatives based on the Institute of Medicine (IOM) recommendations.**

Assuming a renewal for NSP II, the program content of a new NSP II Phase 2 should be changed to address the evolving needs of hospitals and healthcare providers in Maryland. In developing revised and possibly new NSP II programs, it is imperative to take the changes in healthcare into account. The ACA, in particular, will have significant impact on the role of nurses in hospitals (and other settings), as hospitals move toward care coordination and improving health management models. Furthermore, selected recommendations from the IOM can serve as guidelines to enhance the quality of care. The key messages in the IOM report suggest that states should strive to 1) Improve education systems so that they promote seamless academic progression across broadly independent community college systems and university systems for nurses to achieve higher levels of education and training; and 2) Engage in effective workforce planning and policy making that requires better data collection and an improved information infrastructure. We recommend that although the program should still contain competitive institutional grants and statewide initiatives, the goals and initiatives should be updated to address these issues. These new goals should be set through a collaborative workgroup established by the HSCRC and MHEC.

**Recommendation 3: Adopt goals and metrics that address the following IOM recommendations: #4, #5, #6, & #7**

The following IOM Recommendations should serve as drivers for a new NSP II Phase 2.

**IOM Recommendation #4: Increase the proportion of nurses with a baccalaureate degree to 80 % of all RNs in the workforce.** As reported above, Maryland nursing programs are expanding enrollments and graduates, but the number of seats available in RN-BSN programs is unclear. A concerted effort in the Competitive Institutional Grants needs to be

directed through a specific initiative to address the 58% of Maryland's new nurse graduates with Associate Degrees. Meeting the goal of having 80% of all RNs becoming BSNs by 2020 will take seamless academic progression. NSP II has funded several models for dual enrollment to assist students in connecting with a university BSN program while enrolled in the community college. Metrics need to be developed to track the number of RN-BSN completions and the number of RN-BSN openings across Maryland. At present, graduations are not always identified as either new undergraduate BSN or RN to BSN completions. Efforts to increase BSN prepared nurses should take into consideration strategies to increase the diversity of the nursing workforce in race/ethnicity, gender and geographic distribution. The NSP II statute clearly supports increasing underrepresented groups in nursing to more closely mirror the population for whom they provide health services.

**IOM Recommendation #5: Double the number of nurses with a doctorate by 2020.** Adding to the cadre of nurse faculty, nurse researchers, and advanced practice nurses is important to the future of the nursing workforce. Ensuring at least 10% of all BSN graduates matriculate into a master's or doctoral level program within five years of graduation is a goal worth pursuing. Continued funding for scholarships for tuition and all fees, faculty fellowships and grants for educational loan repayments, and completion of doctoral dissertations are key to maintaining the growth in graduate programs reflected in this report. Identifying promising undergraduates at earlier career points and guiding them into faculty roles is a specific goal for faculty as they mentor the younger generation of nurses.

**IOM Recommendation #6: Ensure that nurses engage in lifelong learning.** Academic administration should provide support for all faculty to participate in continuing professional development. Demonstrations of educational excellence include obtaining and maintaining credentials and evidence of competence in practice, teaching and research. Foster a culture of lifelong learning and provide resources for inter-professional education.

**IOM Recommendation #7: Prepare and enable nurses to lead change to advance health.** Nursing education programs and nursing associations should prepare the nursing workforce to assume leadership roles across all levels. Health care decision makers should make room for nurses on boards and commissions to help make health decisions.

**Recommendation 4: Purchase software to manage and report on outcomes data.**

There are several administrative and operational issues to be considered as part of the administration of a new NSP II Phase 2. These recommendations stem from "lessons learned" in the administration of both the NSP I and NSP II, as well as emerging needs for evidence based practice in nursing education and workforce outcomes. One way to address some of these issues may be through a small competitive research grant program. Outcomes measures and data management are critical to making informed policy and programmatic decisions. In addition, software tools are needed to manage and analyze a high volume of outcomes data from the NSP II (and NSP I) projects. An investment in such software could also improve staff productivity by increasing ease of analysis and reporting.

Effort must be made for identifying metrics that link the "Triple Aim" with nurse sensitive measures and nursing workforce programs to demonstrate the connection of nursing professionals with population health delivery. Over the last 3 years, several multi-hospital studies added substantial support for a hospital-level association of nurse educational levels with patient outcomes. It was found that hospitals with a 10% higher BSN proportion had a 4%–7% lower 30- day mortality, reduced complication rates, and better outcomes on length-of-stay (LOS), measures of failure to rescue, congestive heart failure mortality, pressure ulcers, postoperative deep vein thrombosis or pulmonary embolism (Yakusheva, et al., 2014). MHEC and the HSCRC should investigate and possibly acquire *the Efforts to Outcomes* software or some similar software for the evaluation of NSP II over the next five year period.

**Recommendation 5: Review current NSP II statute, particularly the term "bedside nurses" to ensure that it meets the move toward a coordinated care model.**

Determine whether amended statutory language needs to be submitted to the Governor and legislature particularly the definition of "bedside nurses," given the shift towards coordinated care approaches. The relevant statute is found at General Assembly Education Article, Section §11-405.

## CONCLUSION

The NSPII program has been successful in improving the pipeline for nurses and reducing the need for hospitals to depend on expensive nurse staff agencies. However, as a result of a combination of the recovery in the economy, the implementation of the Affordable Care Act, and the recent approval of the new All-payer model in Maryland, nursing functions and demands are changing. The NSP II program can be one tool to help Maryland enhance its nurse workforce to meet these new demands. During the course of this evaluation, it became evident that there is a continued need for coordinated nursing related data.

Recommendations in two key reports in 2011, *Health Care 2020* and the *Sunset Review: Evaluation of the State Board of Nursing*, focused on improved nursing data infrastructure in Maryland. The current Maryland Longitudinal Data System for education may serve as a model for this type of coordinated data collection. Although there was much discussion on IOM Recommendation 8 (build an infrastructure for the collection and analysis of inter-professional health care workforce data), this is not an issue that the NSP II can tackle alone. While outside the scope of the NSP II, but nonetheless related to its work, the State should charge agencies within the state such as DHMH, MBON, MHEC, Department of Labor, Licensing and Regulation, and GWIB to determine the best method of addressing data infrastructure. It represents a larger need within health workforce management and should be reviewed by a task force composed of representatives from multiple agencies and organizations.

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HAGERSTOWN COMMUNITY COLLEGE

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December 1, 2014

Mr. John Colmers
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215,

Dear Mr. Colmers:

It is my pleasure to write a letter in support of the Nurse Support Grants (NSP). Hagerstown Community College has been very fortunate to have been awarded a number of these grants in the last several years. These grants have been very beneficial in helping our nursing program grow. Through the NSP II grant, we were able to almost triple the size of our nursing program.

In addition, we have been able to develop a remediation program whereby we have been successful in keeping many students from failing, thus increasing our retention rates. The grant also enabled us to purchase Assessment Technologies Institute (ATI) for each of our students. ATI not only helps students with remediation but has also helped to increase our NCLEX scores which remain some of the highest in the state.

Also, through the NSP 4 Simulation grant, we were able to establish a Simulation network throughout the state through which we helped the other community colleges in Maryland increase simulation in their nursing programs. Through this same grant, we were able to purchase simulators and other simulation equipment which helped to enhance our own simulation program at HCC.

In conclusion, I fully support your efforts to obtain additional money for grants to help our nursing programs.

Sincerely,

Karen Hammond RN, MSN

Karen Hammond
Director of Nursing
Hagerstown Community College

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December 1, 2014

Mr. John Colmers
Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Colmers:

On behalf of Harford Community College, please accept my highest recommendation for the continuation of the Nurse Support Program II (NSP II).

NSP II grant funding has played an integral role in the continued expansion and success of nursing offerings at Harford Community College. The following is only a brief list of the positive outcomes made possible by our NSP II grant award:

- The number of nursing graduates increased by more than 50 percent.
- An accelerated program that better utilizes resources during the summer semester was instituted.
- A weekend/evening program to take advantage of weekend clinical space availability was established.
- A Retention and Remediation Specialist was hired to assist our efforts of increasing student retention and completion.
- A Clinical Coordinator was hired to help with new clinical faculty orientation and ongoing training.

I firmly believe this program offers outstanding opportunities for increased capacity in nursing education and improved job readiness results. As such, I strongly endorse the NSP II program and its continuation.

Sincerely,

Laura Cianelli Preston

Laura Cianelli Preston, MS, RN
Dean, Nursing and Allied Health Professions

Montgomery College

Mr. John Comers
Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Regarding: Support for NSPII

Dear Mr. Comers:

I am writing in support of continuation for the Nurse Support Program. NSPII has been vital for the nursing program at Montgomery College. Montgomery College is a public, open admissions community college in Montgomery County, Maryland with campuses in Germantown, Rockville, and Takoma Park/Silver Spring. The college serves nearly 60,000 diverse students a year through credit and noncredit programs in more than 100 areas of study. The nursing program is located on the Takoma Park/Silver Spring campus. More than 170 countries are represented on campus. The number of foreign-born residents accounts for a remarkable 51% of the county's population. Many of the county's neediest residents live along the corridors adjacent to Washington, DC, where the Takoma Park/Silver Spring campus is located.

Montgomery College is committed to increasing the availability of competent, culturally diverse nursing graduates. Montgomery College has been expanding its Nursing Program over the past decade, so that the nursing program is now positioned to continue to increase enrollment. The target is to admit a maximum of 128 students per semester.

The Nursing Program at Montgomery College has received multiple NSPII grants.

- Staffing grant created a new clinical instructor role, which has had significant positive outcomes:
    - The clinical instructors have improved consistency of clinical instruction for the students where previously the program had some part-time instructors that were new each semester.
    - The clinical instructors have become a pool for future faculty. All of the clinical instructors have completed or are currently enrolled in master's degree programs. Three of the clinical instructors have become full-time faculty and one is the simulation coordinator.
    - I have shared the job description for the clinical instructor position with the other Maryland nursing programs.
- Nursing Enrichment Program
    - Created a position – Pre-Nursing Retention Coordinator. The role of this person is to provide support for pre-nursing students so that the students are able to meet the benchmarks for the nursing admission exam. Because of the high percentage of minority students at the college, additional resources and support are essential to maintaining the diversity of the nursing program.

  - Established a retention plan within the nursing program. The retention plan is integrated throughout the nursing program, which has improved the program graduation rate to the current 76%-80%. This is an amazing success, particularly considering the diversity of the student population.
- Success Through Simulation
  - Through coordination with *Who Will Care,* the nursing program was able to develop a seven room simulation suite.
  - The NSPII grant created two new positions, a simulation technician and a simulation coordinator. Both of these positions are essential in supporting the complex technology in the simulation suite and providing support to the faculty in developing and running simulations.
  - Simulations are now integrated throughout the nursing program and used for both theory and clinical instruction.
  - An open-access online website has been created with simulation scripts and videos posted for use by any nursing program. This has been an amazingly successful site with site visits in the thousands.
- Model for Dual Enrollment
  - Although this was a planning grant with the University of Maryland School of Nursing (UMSON), the project has advanced to implementation with the memorandum of agreement (MOU) being signed between the UMSON and Montgomery College planned for this month.
  - The Dual Enrollment will allow MC nursing students to take courses concurrently if desired and seamlessly progress for completion of a bachelor's degree in nursing.
  - The MOU will be a model that the UMSON can use with other community colleges throughout the state.
- Military to ADN project
  - Because Montgomery College is located in an area with multiple military hospitals and bases, the nursing program has the ability to reach military medics and corpsmen who are interested in obtaining an associate degree in nursing.
  - A full-time faculty member who is a military veteran is coordinating the military project and has been able to develop progression plans for the military medics and corpsmen.

As a result of the utilization of these multiple diverse grants, MC's nursing program has been able to expand enrollment, as well as improving the access and quality of the program. The Montgomery County government and Montgomery College have made a commitment to the nursing program by funding the eight full-time positions that were established through the NSPII grants. This funding ensures that all the projects initiated through the grants will continue.

Additionally, a total of 29 faculty and full-time clinical instructors have received NSPII grant funds through the new faculty fellowships and doctoral support program. Because of this support, the number of doctoral prepared faculty has increased from one in 2006 to seven in 2014. Additionally, there are another seven currently enrolled in PhD and DNP programs. The

most successful part of this effort has been the increase in the number of diverse doctoral prepared faculty. A total of 69% of the awards were to diverse clinical staff and faculty.

As I have highlighted, the NSPII program has enabled MC's nursing program to grow and to improve. Without this ongoing support, I am concerned that continued innovation and improvement will be extremely difficult.

Thank you for your support for the NSPII program.

Sincerely,

Barbara Nubile

Barbara Nubile, MSN, RN
Associate Dean/Director of Nursing
Montgomery College
7600 Takoma Avenue
Takoma Park, MD 20912-4197
Phone: 240-567-5529 or 240-567-5530
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Email: Barbara.Nubile@montgomerycollege.edu

Salisbury UNIVERSITY

November 26, 2014

Mr. John Colmers, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Colmers,

I am writing on behalf of the Department of Nursing at Salisbury University in support of the continuation of the NSP-II programs. The NSP-II programs have been instrumental in recruitment and retention of new nurse faculty to support expanded enrollments in our accelerated 2nd BS degree program and the development and launch of our DNP program, the only one located on the Eastern Shore of Maryland and the first post-BS to DNP entry option in the State of Maryland. Eight new nursing faculty have been supported by the New Nurse Faculty Fellowship (38% of our faculty), and three have received Nurse Educator Doctoral Grants expediting completion of their doctoral education.

The NSP-II program has also funded several institutional grants including a collaborative with two area hospitals (Peninsula Regional Medical Center and Atlantic General Hospital) to create shared hospital clinical faculty positions moving clinical experts into positions as educators with responsibilities for teaching students and staff. We were also the recipients of a second institutional grant collaborative with Chesapeake and Sojourner-Douglass Colleges to develop the Eastern Shore Faculty Academy and Mentoring Initiative. This project trains expert bachelor's prepared registered nurses to become part-time clinical faculty using online instruction, simulations and mentoring activities. To date, thirty nine new part-time clinical faculty have graduated from the Academy and are prepared for teaching assignments with one of the partner schools. Finally, we received a generous NSP-II grant to expand the availability of doctoral education in nursing to those on the Eastern Shore and throughout Maryland. As a result of this grant, we were able to launch our post-MS to DNP in Fall 2012 and our post-BS to DNP in Fall 2014, all in a distance accessible format with very limited trips to campus. We will graduate nine new DNPs in May 2015, two of whom are also completing requirements for certification as family nurse practitioners.

All of these initiatives have been aimed at addressing the nursing shortage in Maryland, through creating new roles in education, increasing the supply of part-time clinical faculty, and increasing availability and access to doctoral education. Each of these projects has connected directly to increased student enrollments and graduations, at both the undergraduate and graduate levels. None of the projects would have been

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**Department of Nursing**
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possible without the NSP-II program. It is a forward-thinking program that has benefitted the citizens of the State immeasurably. As you know, the "gray tsunami" has not yet arrived so our needs for highly qualified registered nurses in Maryland will only continue to grow. I heartily endorse continuation of the NSP-II program and hope you will too-it is vital to our ability to respond to the workforce needs of the State.

Sincerely,

Lisa A. Seldomridge, PhD, RN
Chair and Professor of Nursing
Salisbury University
Salisbury, Maryland
laseldomridge@salisbury.edu

CC: Oscar.Ibarra@maryland.gov.

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November 14, 2014

John Colmers
Chairman, Health Services Cost Review Commission
3910 Keswick Road
Suite N-2200
Baltimore, MD 21211

Dear Chairman Colmers,

As Dean of the University of Maryland School of Nursing (UMSON), I would like to take this opportunity to thank the Health Services Cost Review Commission and the Maryland Higher Education for the funding support provided to our faculty and students through the Nurse Support Program II (NSPII). To date, our School of Nursing has been awarded over $10.6 million in funding to support new educational programming, clinical site expansion, and faculty development initiatives. We are especially proud of the impact that the current funding has had on nursing education at our School and our ability to increase the pipeline of nurses who hold a baccalaureate degree or higher. But more remains to be done.

The Affordable Care Act, described as the biggest overhaul of the U.S. health care system since the passage of Medicare and Medicaid in 1965, is aimed at increasing health care coverage to all Americans while also cutting costs and improving efficiency of the country's health care system.

Its success may well depend on nurses. We need to know how we can be part of the solution to achieve better patient outcomes at a more reasonable cost. We need to do more to prevent disease; provide chronic care management to an aging, sicker, and more diverse population; and offer end-of-life care that emphasizes comfort and compassion. Across all settings, we must do more to prepare ourselves for the future.

Nursing has a central role to play in realizing the promise of health reform—a transformed health system that provides wide access to essential health services while improving quality and controlling costs. Simply put, these national goals cannot be achieved without maximizing the contributions of nurses.

There are ongoing and future needs for a well-educated nursing workforce, including faculty. We need to continue to emphasize the need for doctorally-prepared nursing faculty. The evolving nursing shortage, the greying of the nursing faculty, and a large "brain drain" of experienced faculty expected in the next 5-10 years as retirements dramatically increase (those who stayed during the recent economic downturn are now seriously ready to retire!) are all reasons we need to have well-educated nursing faculty to prepare the next generation of nurses who will care for populations, communities, individuals and families within the new models of care delivery. This education should span initial academic preparation for teaching as well as ongoing professional development of current faculty to assure currency with contemporary educational practices and to optimize maximizing of technologic resources to support learning.

It appears that although the NSP II grants were originally conceptualizing bedside nursing to hospital based nursing, there is now an opportunity to potentially broaden future funding to go across the care continuum, from population/community to ambulatory to hospital to nursing homes and beyond.

As you evaluate the current NSPII Program, I would like to respectfully offer some suggestions for future areas of focus for NSPII funding:

- Advancing nurse led care coordination across the continuum. Care coordination is central to training BS, CNL and advanced practice students.
- Support for education at the DNP advanced practice level with a focus on primary care (including mental health). For example, 1) funds to secure optimal primary care clinical rotations which are critical to capacity building in the FNP, PNP and AGPCNP programs and 2) funds to recruit and retain faculty in those programs.
- Support for academic/clinical practice partnerships (in particular practice focused faculty positions at the RN and NP level) to increase clinical learning sites.
- Support to start a nurse managed health center for the purposes of clinical education at all levels (focusing on issues needed to support the Maryland Medicare Waiver… transitions, chronic disease, care management, population health).
- Development of an educational focus on care management and care coordination either within the CPH curriculum or the HSLM curriculum; as a certificate program; or as a focus area in the post-master's DNP program.
- Focusing part of the NSP call on clinical simulation as an avenue to increase capacity. The recent outcomes from the National Council of State Boards of Nursing's s longitudinal multi-site study on the efficacy of simulation as a replacement for traditional clinical hours.
- Promoting care collaboratives between academic and clinical partnerships to focus on improving nurse sensitive outcomes, transitions of care and nursing processes.
- Initiatives that include preparation for teaching as part of doctoral programs in nursing.
- Health promotion and disease prevention by (a) supporting doctoral level nursing education for population health care (community and public health) and primary care for underserved, and (b) supporting systems which hire doctorally-prepared community/public health and primary care nurses through faculty practice arrangements in which faculty will precept doctoral students in these roles.
- Opportunities for interprofessional learning and practice.

Thank you for this opportunity to comment.

Sincerely,

Jane Kirschling, PhD, RN, FAAN
Dean and Professor, School of Nursing
University Director Interprofessional Education
University of Maryland, Baltimore

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THE FOUNDING CAMPUS

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November 14, 2014

John Colmers
Chairman, Health Services Cost Review Commission
3910 Keswick Road
Suite N-2200
Baltimore, MD 21211

Dear Chairman Colmers:

On behalf of the University of Maryland, Baltimore (UMB), I am writing to express our gratitude for the Nurse Support II (NSPII) Program administered by the Maryland Higher Education Commission (MHEC). As the Health Services Cost Review Commission (HSCRC) meets to evaluate the program, I would like to share with you the enormous impact this statewide initiative has had on our University, our faculty and students, and the health care community throughout the state of Maryland and beyond.

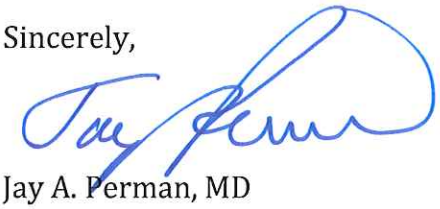
Since the launch of the NSPII Program in 2006, the University of Maryland School of Nursing has been awarded more than $10.6 million in funding. This included $9.5 million for educational programming and $1.1 million to aid our nursing faculty with continuing education and professional development. Maryland is the only state in the nation to provide this level of financial support for nursing education, and HSCRC's generosity has been vital to maintaining our role as a national leader in health sciences research, public service, and patient care. Given UMB's budgetary constraints during the recent economic downturn, this funding proved to be crucial in allowing us to continue our stated mission of improving the health and well-being of the residents of our state and better serve the region by producing the next generation of nurses for the Maryland workforce.

As the largest nursing school in the state and one of the largest in the nation, the NSPII funding allowed us to leverage our strengths by recruiting and retaining new faculty members, advancing the education and training of our current faculty, and creating innovative educational programs that were responsive to the needs of health care employers. This includes developing the region's first Doctor of Nursing Practice (DNP) Program, from which we have produced 99 graduates. This program proved to be such a success that four other institutions in the state have since added this degree offering. Another NSPII initiative from the University of Maryland was a partnership between our School of Nursing, the University of Maryland Medical

Center, and Franklin Square Hospital Center to develop an online master's program that would encourage staff nurses to serve as clinically based nurse educators. We were able to prepare 100 hospital-based nursing faculty, which expanded the number of clinical instructors and increased clinical access and enrollments for nursing students in Maryland. This is just a small sample of our outcomes, but it demonstrates the broad reach of the NSPII funding.

We are committed to continuing this important work and look forward to our sustained partnership with MHEC. We appreciate the opportunity to share our support for this vital statewide initiative.

Sincerely,



Jay A. Perman, MD

# Draft Report on Medicaid Savings resulting from the All-Payer Model

The Report will be distributed during the Commission Meeting

Staff Recommendation

Request by the Medical Assistance Program to Modify the Calculation of Current Financing Deposits for CY 2015

December 10, 2014

## Introduction

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

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

As a result of continuing budget shortfalls, on February 24, 2014, MAP requested an exception to the approved current financing calculation for FY 2014. MAP requested that it be permitted to increase the current financing amounts on deposit with each hospital by the HSCRC's update factor for FY 2014. MAP's request was granted by the Commission at its May 14, 2014 public meeting.

## MAP's Current Request

MAP requests that it be permitted to increase the current financing amounts on deposit with each hospital by the HSCRC's update factor for FY 2015 (2.41%). MAP also reported that it would report a revised implementation timeline for deploying its new claims system.

## Staff Recommendation

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

STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

# MEMORANDUM

To: Dennis Phelps, Associate Director, Audit and Compliance
Health Services Cost Review Commission (HSCRC)

From: Charles Lehman, Acting Deputy Secretary
Health Care Financing

Date: November 13, 2014

NOV 17 '14 AM11:56

Subject: CY 2015 Current Financing Deposits

The Department of Health and Mental Hygiene (DHMH) is proposing the continuation of the modified current financing formula for the Calendar Year (CY) 2015 inpatient and outpatient financing deposits. The current modified financing formula allows the existing Medicaid financing amounts for each hospital to be increased by the final update factor, as calculated by the HSCRC for the current rate setting year. Consequently, the DHMH would like to request that our proposal to continue the current modified financing formula be submitted at the next Commission meeting for approval.

DHMH continues its work to replace the existing MMIS claims system. A revised implementation timeline will be provided when available. Additionally, a new federal requirement was implemented during October 2014 which requires state Medicaid programs to reimburse hospitals for services provided to individuals who qualify for Hospital Presumptive Eligibility (HPE). Hospitals may make temporary, on-site Medicaid eligibility determinations based on basic, self-attested income and demographic information. The Medicaid program will reimburse for covered services during HPE coverage even if the individual is ultimately determined ineligible for Medicaid. Thirty seven hospitals have enrolled in the program and its employees completed training and passed knowledge training.

Should you have questions or require additional information, please contact Ardena M. Walker at 410-767-5196 or via email at ardenam.walker@maryland.gov.

cc: Audrey Parham-Stewart
Michael Robbins, MHA
Ardena Walker
Keith Sewell

State of Maryland
Department of Health and Mental Hygiene

John M. Colmers
Chairman

Herbert S. Wong, Ph.D.
Vice-Chairman

George H. Bone, M.D.

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Hospital Rate Setting

Sule Calikoglu, Ph.D.
Deputy Director
Research and Methodology

**TO:** **Commissioners**

**FROM:** **HSCRC Staff**

**DATE:** **December 10, 2014**

**RE:** **Hearing and Meeting Schedule**

| | |
|---|---|
| January 14, 2015 | Time to be determined, 4160 Patterson Avenue<br>HSCRC Conference m Room |
| February 11, 2015 | Time to be determined, 4160 Patterson Avenue<br>HSCRC Conference m Room |

Please note that Commissioner's binders will be available in the Commission's office at 11:45 a.m.

The Agenda for the Executive and Public Sessions will be available for your review on the Thursday before the Commission meeting on the Commission's website at http://www.hscrc.maryland.gov/commission-meetings-2014.cfm

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