

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.

Stephen F. Jencks,  
M.D., M.P.H.

Jack C. Keane

Bernadette C. Loftus,  
M.D.

Thomas R. Mullen

**Health Services Cost Review Commission**

4160 Patterson Avenue, Baltimore, Maryland 21215  
Phone: 410-764-2605 · Fax: 410-358-6217  
Toll Free: 1-888-287-3229  
hsrcr.maryland.gov

Donna Kinzer  
Executive Director

Stephen Ports  
Principal Deputy Director  
Policy and Operations

David Romans  
Director  
Payment Reform  
and Innovation

Gerard J. Schmith  
Deputy Director  
Hospital Rate Setting

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

**515th MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION**  
**Jan 14, 2015**

**EXECUTIVE SESSION**

**12:30 p.m.**

(The Commission will begin in public session at 12:30 p.m. for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1PM.)

1. Status of Medicare Data Submission and Reconciliation – Authority General Provisions Article, § 3-104

**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 December 10, 2014
2. Executive Director's Report
3. New Model Monitoring
4. Docket Status – Cases Closed  
2278A – Johns Hopkins Health System                      2279A – MedStar Health  
2280A – Johns Hopkins Health System                      2281A – Riverside Health
5. Docket Status – Cases Open  
2265A – Holy Cross Hospital                                      2282A – University of Maryland Medical Center  
2283A - Johns Hopkins Health System                      2284R – Garrett County Memorial Hospital  
2285R – Johns Hopkins Bayview Medical Center                      2286A - Johns Hopkins Health System
6. Final Recommendation for Modifications to the MHAC program for FY 2017
7. Final Recommendation on the NSPII Program
8. MHA Letter and Staff Comments regarding Mid-Year Update and Staff
9. Work Group Updates
10. Hearing and Meeting Schedule

## Executive and Public Session Minutes

The minutes will be posted after they are approved at the January 14<sup>th</sup> meeting.

## 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 JANUARY 6, 2015

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
2282A	University of Maryland Medical Center	12/4/2014	N/A	N/A	N/A	DNP	OPEN
2283A	Johns Hopkins Health System	12/8/2014	N/A	N/A	N/A	DNP	OPEN
2284R	Garrett County Memorial Hospital	12/23/2014	1/22/2015	5/22/2015	IRC	CK	OPEN
2285R	Johns Hopkins Bayview Medical Center	12/23/2014	1/22/2015	5/22/2015	RAT	CK	OPEN
2286A	Johns Hopkins Health System	12/23/2014	N/A	N/A	N/A	DNP	OPEN

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

**IN RE: THE APPLICATION FOR  
ALTERNATIVE METHOD OF RATE  
DETERMINATION  
UNIVERSITY OF MARYLAND  
MEDICAL CENTER  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
\* COMMISSION  
\* DOCKET: 2014  
\* FOLIO: 2092  
\* PROCEEDING: 2282A**

---

---

**Staff Recommendation**

**January 14, 2015**

## **I. INTRODUCTION**

The University of Maryland Medical Center (“Hospital”) filed an application with the HSCRC on December 4, 2014 requesting approval to continue its participation in a global rate arrangement with BlueCross and BlueShield Association Blue Distinction Centers for selected solid organ transplant services for a period of one year beginning January 3, 2015.

## **II. OVERVIEW OF APPLICATION**

The contract will be held and administered by University Physicians, Inc. (UPI), which is a subsidiary of the University of Maryland Medical System. UPI will manage all financial transactions related to the global price contract including payments to the Hospital and bear all risk relating to services associated with the contract.

## **III. FEE DEVELOPMENT**

The hospital portion of the global rates was developed by calculating historical charges for patients receiving the procedures for which global rates are to be paid. 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 Hospital will submit bills to UPI for all contracted and covered services. UPI is responsible for billing the payer, collecting payments, disbursing payments to the Hospital at its full HSCRC approved rates, and reimbursing the physicians. The Hospital contends that the arrangement between UPI and the Hospital holds the Hospital harmless from any shortfalls in payment from the global price contract.

## **V. STAFF EVALUATION**

Staff believes that the Hospital can achieve favorable performance under this arrangement.

## **VI. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospital’s application for an



alternative method of rate determination for blood and bone marrow transplant services, for a one year period commencing January 3, 2015. The Hospital 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 Hospital for the approved contract. This document would formalize the understanding between the Commission and the Hospital, 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  
ALTERNATIVE METHOD OF RATE  
DETERMINATION \*  
JOHNS HOPKINS HEALTH  
SYSTEM  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
COMMISSION  
\* DOCKET: 2014  
\* FOLIO: 2093  
\* PROCEEDING: 2283A**

---

---

**Staff Recommendation**

**January 14, 2015**

## **I. INTRODUCTION**

On December 8, 2014, Johns Hopkins Health System (“System”) filed a renewal application on behalf of its member hospitals (the “Hospitals”) requesting approval from the HSCRC to continue participation in a revised global rate arrangement for cardiovascular procedures with Global Excel Management, Inc. The Hospitals request that the Commission approve the arrangement for an additional year beginning February 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 Hospitals and bear all risk relating to regulated services associated with the contract.

## **III. FEE DEVELOPMENT**

The hospital portion of the global rates was developed by calculating mean historical charges for patients receiving the procedures for which global rates are to be paid. 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 there was no experience under the arrangement for the last year. However, staff believes that the Hospitals can achieve favorable performance under this arrangement.

## **VI. STAFF RECOMMENDATION**

The staff recommends that the Commission approve the Hospitals' application for an alternative method of rate determination for cardiovascular services for a one year period commencing February 1, 2015. 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 APPLICATION FOR  
ALTERNATIVE METHOD OF RATE  
DETERMINATION \*  
JOHNS HOPKINS HEALTH  
SYSTEM  
BALTIMORE, MARYLAND**

**\* BEFORE THE MARYLAND HEALTH  
\* SERVICES COST REVIEW  
COMMISSION  
\* DOCKET: 2014  
\* FOLIO: 2096  
\* PROCEEDING: 2286A**

---

---

**Staff Recommendation**

**January 14, 2015**

## **I. INTRODUCTION**

Johns Hopkins Health System (“System”) filed an application with the HSCRC on December 23, 2014, on behalf of its member hospitals, Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, and Howard County General Hospital (the “Hospitals”) for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC to continue to participate in a revised global rate arrangement for solid organ and bone marrow transplants with Optum Health, a division of United HealthCare Services, for a period of one year beginning February 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 System hospitals and bear all risk relating to regulated services associated with the contract.

## **III. FEE DEVELOPMENT**

The hospital portion of the global rates was developed by calculating mean historical charges for patients receiving the procedures for which global rates are to be paid. 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 risk of potential losses.

## **V. STAFF EVALUATION**

The staff reviewed the experience under this arrangement for the last year and found it to be slightly unfavorable. However, after review of the revised arrangement, staff believes that the Hospitals will be able to achieve a favorable outcome moving forward.

## **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 a one year period commencing February 1, 2015. 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.

# Final 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**

**January 14, 2015**

This document contains the final staff recommendations for updating the Maryland Hospital Acquired Conditions (MHAC) Program for FY 2017.



## **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:

## Final Staff Recommendation for Modifying the Maryland Hospital Acquired Conditions Program

- 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 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 to December meetings, the Workgroup discussed issues related to:

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

Final Staff Recommendation for Modifying the Maryland Hospital Acquired Conditions Program

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

In addition to the meeting discussions, HSCRC received four comment letters from the Maryland Hospital Association (MHA), CareFirst BlueCross BlueShield, the Johns Hopkins Health System (JHHS), and Medstar Health on the draft MHAC recommendation. The four MHAC comment letters as well as four additional letters commenting on the draft recommendation updates to the Readmissions Reduction Program and Aggregate Revenue Amounts at Risk for Quality Programs are in the attachments to this recommendation

In general, all the comment letters support continuing the current MHAC methodology with the changes implemented for FY 2016 where prospective benchmarks are provided and hospitals can monitor their performance “real time.” However, other specific comments, as outlined in the sections below, suggest changes to the recommendations.

**1. Updated PPC Measurement Trends**

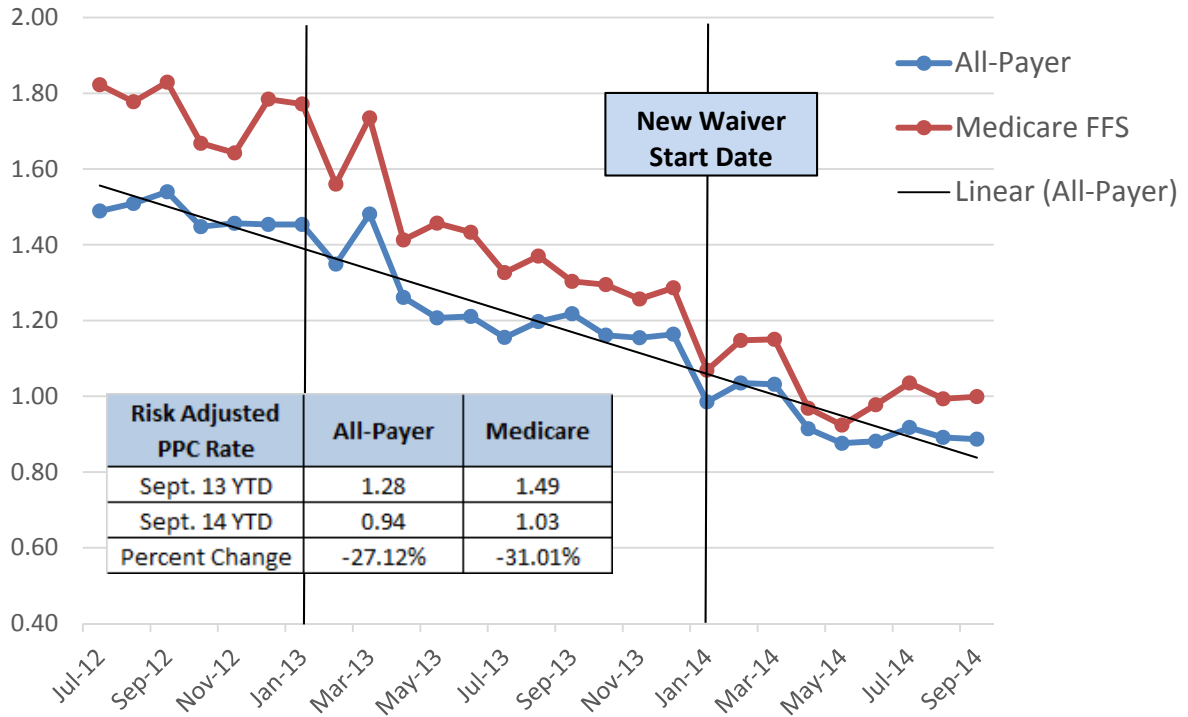
As illustrated in Figure 1 below, Maryland has seen a significant drop from year to year from 2010 to 2014 in the statewide PPC rates with a total rate per 1,000 decrease of 60.8% unadjusted, and an average annual risk adjusted decrease of 13.9%.

**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
<b>TOTAL NUMBER OF COMPLICATIONS</b>	53,494	48,416	42,118	34,200	34,143	26,900		-9.5%	-13.0%	-18.8%	-21.2%		-15.6%	50.4%
<b>UNADJUSTED COMPLICATION RATE PER 1,000 AT RISK CASES</b>	1.92	1.82	1.65	1.41	1.40	1.16		-5.2%	-9.3%	-14.5%	-17.1%		-11.6%	60.8%
<b>RISK ADJUSTED COMPLICATION RATE PER 1,000 AT RISK CASES</b>	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**



Note: Based on final data for January 2013 - September 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.

Related to both the PPC reduction trends and POA coding driving MHAC performance, in their comment letters, MHA, JHHS and CareFirst all acknowledge and concur with staff that the PPC reductions are likely due to a combination of clinical documentation, coding and actual reduced complications. CareFirst also raised concerns that the implementation of Global Budget Rate arrangements may provide a disincentive to fully code complications.

Staff notes that under-coding complications will still require hospitals to provide the additional care needed by patients with complications from their global budgets, and that monitoring

shifts in case mix index (CMI) will continue to be important under GBR. Staff will present findings of the ongoing POA audits as well as the routine APR-DRG coding audits in public Workgroup meetings in 2015 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**

	<b>Correlation Coefficient</b>	<b>p-value</b>
Attainment Scores FY13 and FY14	0.6248	<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 initially 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. Alternatively, the Johns Hopkins Health System comment letter advocates keeping constant CY 2013 benchmarks for calculating hospital scores. To balance the Workgroup’s desire to lower the benchmarks and concern about sustainability of the current improvement results, and staff concerns about continuing the momentum with improving on MHACs and establishing reasonable benchmarks, the staff

supports a revised “middle” approach which is to use the full 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 9 months of CY 2014 (FY2014 Qtrs 3 and 4, and FY2015 Qtr 1). 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 ~5% of what would have been earned if they were not capped at the penalties collected.

Staff supports removing the cap on rewards based on discussions at the payment and performance workgroup meetings.

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

	<b>Count of Hospitals receiving Reduction or Reward</b>	<b>Total Revenue</b>	<b>Revenue Neutral Adjustment</b>
Total Reduction	2	\$ (449,188)	\$ (449,188)
Total Reward	18	\$9,468,894	\$449,188

**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 ~27% 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 and base period rates does not account for the additional 6 months from July to December 2014 where the MHAC rates would continue to improve.

Several comments were received on targets and scaling. In their comment letters, MHA and Medstar advocate for little or no increase in the improvement target for FY2017, arguing that it does not impact the state negatively in achieving the 30% MHAC reduction over five years. In their comment letter, CareFirst also expressed concern regarding the use of a tiered approach with more revenue at risk if a statewide target is not met versus met, as well as non-continuous scaling where there is a hold harmless neutral zone. CareFirst supports using one scale for payment adjustments where each hospital’s performance is directly proportionate to the rewards and penalties they receive. Alternatively, MHA and JHHS indicate in their comment letters that they believe the statewide target with tiered scaling provides an incentive for hospitals to work collaboratively on reducing complications.

Staff continues to advocate 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 and reduced from last year's annual improvement target of 8%. 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). Using a tiered approach provides strong incentives for collaboration between hospitals to share best practices and continue to improve to ensure the statewide target is achieved. While MHAC scaling is based on rewards and penalties for hospitals at the tail end of the scores and holds hospitals with scores in the middle harmless, revenue reduction programs (Potentially Avoidable Utilization, and Readmission Shared Savings) are based on a continuous scale where all hospitals receive reductions in proportion to their performance.

#### **D. Recommendations**

Based on the work completed to date on updating the MHAC program for FY 2017, staff makes the following 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 Bypass Graft (CABG)  
HAC 09: Manifestations of Poor Glycemic Control  
HAC 10: Deep Vein Thrombosis/Pulmonary Embolism with Total Knee Replacement or Hip Replacement  
HAC 11: Surgical Site Infection – Bariatric Surgery  
HAC 12: Surgical Site Infection – Certain Orthopedic Procedure of Spine, Shoulder, and Elbow  
HAC 13: Surgical Site Infection Following Cardiac Device Procedures  
HAC 14: Iatrogenic Pneumothorax w/Venous Catheterization

### CMS HAC Measures Implemented FY 2015

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



## **Appendix II: 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 serious reportable events, the benchmark will be set at 0.

### ***Performance Points***

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

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

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

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

Final Staff Recommendation for Modifying the Maryland Hospital Acquired Conditions Program

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

Tier A	Tier C
Selected as high cost, high volume statewide plus those that match CMS HAC policy of AHRQ Patient Safety Indicators	Remaining PPCs
3 Acute Pulmonary Edema and Respiratory Failure without Ventilation	1 Stroke & Intracranial Hemorrhage
4 Acute Pulmonary Edema and Respiratory Failure with Ventilation	2 Extreme CNS Complications
5 Pneumonia & Other Lung Infections	12 Cardiac Arrhythmias & Conduction Disturbances
6 Aspiration Pneumonia	13 Other Cardiac Complications
7 Pulmonary Embolism	15 Peripheral Vascular Complications Except Venous Thrombosis
9 Shock	20 Other Gastrointestinal Complications without Transfusion or Significant Bleed
14 Ventricular Fibrillation/Cardiac Arrest	21 Clostridium Difficile Colitis
16 Venous Thrombosis	23 GU Complications Except UTI
24 Renal Failure without Dialysis	25 Renal Failure with Dialysis
28 In-Hospital Trauma and Fractures	26 Diabetic Ketoacidosis & Coma
31 Decubitus Ulcer	29 Poisonings Except from Anesthesia
35 Septicemia & Severe Infections	30 Poisonings due to Anesthesia
37 Post-Operative Infection & Deep Wound Disruption Without Procedure	32 Transfusion Incompatibility Reaction
38 Post-Operative Wound Infection & Deep Wound Disruption with Procedure	33 Cellulitis
40 Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Proc	34 Moderate Infectious
42 Accidental Puncture/Laceration During Invasive Procedure	36 Acute Mental Health Changes
49 Iatrogenic Pneumothrax	39 Reopening Surgical Site
54 Infections due to Central Venous Catheters	43 Accidental Cut or Hemorrhage During Other Medical Care
65 Urinary Tract Infection without Catheter	44 Other Surgical Complication - Mod
66 Catheter-Related Urinary Tract Infection	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 with 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
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	

**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 Arrhythmias & 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

Final Staff Recommendation for Modifying the Maryland Hospital Acquired Conditions Program

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 with 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

Final Staff Recommendation for Modifying the Maryland Hospital Acquired Conditions Program

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.**

**2b. CY2014 Jan-September Final Data- MHAC Scaling Modeling**

HOSPITAL ID	HOSPITAL NAME	Estimated Inpatient Revenue (FY15*2.6%)	Base Year Score	Final Score Jan-Sept	% Improvement in Base Scores	% Scaling Adjustment	\$ Scaling Adjustment	\$ Revenue Neutral Scaling Adjustment	% Revenue Neutral Adjustment
210062	SOUTHERN MARYLAND	\$ 163,208,213	0.29	0.40	38%	-0.21%	\$ (337,672)	\$ (337,672)	-0.21%
210016	WASHINGTON ADVENTIST	\$ 161,698,669	0.42	0.44	4%	-0.07%	\$ (111,516)	\$ (111,516)	-0.07%
210051	DOCTORS COMMUNITY	\$ 136,225,391	0.33	0.46	39%	0.00%	\$ -	\$ -	0.00%
210023	ANNE ARUNDEL	\$ 310,117,075	0.37	0.46	24%	0.00%	\$ -	\$ -	0.00%
210022	SUBURBAN	\$ 181,410,188	0.17	0.46	170%	0.00%	\$ -	\$ -	0.00%
210033	CARROLL COUNTY	\$ 138,209,278	0.40	0.48	19%	0.00%	\$ -	\$ -	0.00%
210048	HOWARD COUNTY	\$ 167,386,497	0.22	0.48	118%	0.00%	\$ -	\$ -	0.00%
210034	HARBOR	\$ 124,002,220	0.45	0.48	7%	0.00%	\$ -	\$ -	0.00%
210044	G.B.M.C.	\$ 201,533,345	0.26	0.49	87%	0.00%	\$ -	\$ -	0.00%
210055	LAUREL REGIONAL	\$ 77,501,975	0.47	0.51	9%	0.00%	\$ -	\$ -	0.00%
210043	BALTIMORE WASHINGTON MEDICAL CENTER	\$ 223,155,126	0.29	0.52	79%	0.00%	\$ -	\$ -	0.00%
210005	FREDERICK MEMORIAL	\$ 189,480,763	0.40	0.52	30%	0.00%	\$ -	\$ -	0.00%
210004	HOLY CROSS	\$ 319,596,342	0.29	0.52	81%	0.00%	\$ -	\$ -	0.00%
210049	UPPER CHESAPEAKE HEALTH	\$ 148,917,096	0.36	0.53	48%	0.00%	\$ -	\$ -	0.00%
210057	SHADY GROVE	\$ 228,731,775	0.51	0.54	5%	0.00%	\$ -	\$ -	0.00%
210017	GARRETT COUNTY	\$ 18,724,074	0.69	0.54	-22%	0.00%	\$ -	\$ -	0.00%
210018	MONTGOMERY GENERAL	\$ 87,652,208	0.39	0.54	38%	0.00%	\$ -	\$ -	0.00%
210024	UNION MEMORIAL	\$ 242,505,500	0.26	0.54	110%	0.00%	\$ -	\$ -	0.00%
210015	FRANKLIN SQUARE	\$ 285,691,170	0.39	0.55	40%	0.00%	\$ -	\$ -	0.00%
210010	DORCHESTER	\$ 25,127,935	0.45	0.55	21%	0.00%	\$ -	\$ -	0.00%
210006	HARFORD	\$ 47,089,618	0.37	0.56	51%	0.00%	\$ -	\$ -	0.00%
210002	UNIVERSITY OF MARYLAND	\$ 863,843,449	0.30	0.56	88%	0.00%	\$ -	\$ -	0.00%
210027	SYSTEM	\$ 184,484,266	0.35	0.58	66%	0.00%	\$ -	\$ -	0.00%
210056	GOOD SAMARITAN	\$ 180,861,011	0.57	0.58	3%	0.00%	\$ -	\$ -	0.00%
210008	MERCY	\$ 233,163,594	0.34	0.59	75%	0.00%	\$ -	\$ -	0.00%
210038	UMMC MIDTOWN	\$ 133,787,811	0.44	0.60	37%	0.00%	\$ -	\$ -	0.00%
210003	PRINCE GEORGE	\$ 177,243,165	0.45	0.61	35%	0.00%	\$ -	\$ -	0.00%
210011	ST. AGNES	\$ 239,121,556	0.38	0.61	62%	0.00%	\$ -	\$ -	0.00%
210009	JOHNS HOPKINS	\$ 1,292,515,919	0.18	0.62	244%	0.05%	\$ 680,272	\$ 32,271	0.00%
210019	PENINSULA REGIONAL	\$ 233,728,496	0.26	0.63	142%	0.11%	\$ 246,030	\$ 11,671	0.00%
210032	UNION HOSPITAL OF CECIL COUNT	\$ 67,852,189	0.34	0.65	91%	0.21%	\$ 142,847	\$ 6,776	0.01%
210012	SINAI	\$ 429,154,679	0.26	0.67	158%	0.32%	\$ 1,355,225	\$ 64,290	0.01%
210001	MERITUS	\$ 187,434,497	0.26	0.67	158%	0.32%	\$ 591,898	\$ 28,079	0.01%
210037	EASTON	\$ 94,828,132	0.43	0.67	57%	0.32%	\$ 299,457	\$ 14,206	0.01%
210035	CHARLES REGIONAL	\$ 76,338,049	0.54	0.68	26%	0.37%	\$ 281,245	\$ 13,342	0.02%
210058	REHAB & ORTHO	\$ 69,104,846	0.33	0.68	107%	0.37%	\$ 254,597	\$ 12,078	0.02%
210063	UM ST. JOSEPH	\$ 216,335,128	0.29	0.69	137%	0.42%	\$ 910,885	\$ 43,211	0.02%
210029	HOPKINS BAYVIEW MED CTR	\$ 356,396,901	0.33	0.69	110%	0.42%	\$ 1,500,619	\$ 71,187	0.02%
210061	ATLANTIC GENERAL	\$ 38,640,762	0.56	0.69	24%	0.42%	\$ 162,698	\$ 7,718	0.02%
210040	NORTHWEST	\$ 142,186,717	0.24	0.73	206%	0.63%	\$ 898,021	\$ 42,601	0.03%
210028	ST. MARY	\$ 69,520,305	0.56	0.74	33%	0.68%	\$ 475,665	\$ 22,565	0.03%
210013	BON SECOURS	\$ 78,212,787	0.58	0.75	29%	0.74%	\$ 576,305	\$ 27,339	0.03%
210030	CHESTERTOWN	\$ 29,416,674	0.80	0.76	-6%	0.79%	\$ 232,237	\$ 11,017	0.04%
210060	FT. WASHINGTON	\$ 17,776,133	0.45	0.77	72%	0.84%	\$ 149,694	\$ 7,101	0.04%
210039	CALVERT	\$ 67,385,287	0.48	0.80	66%	1.00%	\$ 673,853	\$ 31,966	0.05%
210045	MCCREADY	\$ 3,734,618	0.78	1.00	28%	1.00%	\$ 37,346	\$ 1,772	0.05%
						Total Reduct	\$ (449,188)	\$ (449,188)	
						Total Award	\$ 9,468,894	\$ 449,188	
							0.047438328		

## 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 <b>0.17</b>	<b>-4.00%</b>	<b>-1.00%</b>
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%

Final Staff Recommendation for Modifying the Maryland Hospital Acquired Conditions Program

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%
<b>Scores greater than or equal to</b>		
<b>0.80</b>	<b>0.00%</b>	<b>1.00%</b>

<b>Penalty threshold:</b>	<b>0.51</b>	<b>0.46</b>
<b>Reward Threshold</b>	<b>No rewards</b>	<b>0.61</b>

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



See MHAC Final Policy Figures Excel File posted or sent separately.



Maryland  
Hospital Association

January 5, 2015

Dianne Feeney  
Associate Director, Quality Initiatives  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland

Dear Ms. Feeney:

On behalf of the 64 hospital and health system members of the Maryland Hospital Association (MHA), we appreciate the opportunity to comment on the proposed changes to the *Draft Recommendation for Modifying the Maryland Hospital Acquired Conditions Program for FY 2017*. We are pleased with the progress the hospital field has made over calendar year 2014 and want to continue working to make the improvements that have been gained in 2014 more deeply embedded in routine practice. The reductions in complications over the past year demonstrate that the policy is well structured to support hospitals' efforts to reduce patient harm, and as such we support your recommendation that the structure of the program remain essentially unchanged. Setting the scoring targets and associated payment impacts at the start of the year allows hospitals to track progress throughout the year and clearly understand the payment impacts.

Considering the substantial improvement hospitals have made in complications over the first three quarters of this calendar year, we believe that the improvement target should be lower, and the revenue at risk should shift toward readmissions, where it's not clear we are achieving our goal. At most hospitals, quality and care management leaders are responsible for both Maryland Hospital Acquired Conditions (MHACs) and readmissions, so holding steady on the complication reductions achieved this year without pushing for more would allow hospitals to direct more of their shared resources to readmissions reduction.

Over the coming months we will convene physicians, nurses, coders, and documentation specialists to share care practices that have been successful in reducing complications, and to review the internal hospital guidelines physicians use to identify conditions or diagnoses that could result in assignment of a complication to a case. For example, when determining whether a patient is experiencing kidney injury, some hospitals may use the Acute Kidney Injury Network's modified RIFLE (risk, injury, failure, loss, and end-stage kidney disease) staging system, while others may base the diagnosis on blood levels of important markers of kidney function such as creatinine or cystatin C.

This work differs from the "present on admission" coding reviews in that it is a more fundamental look at the criteria hospitals use to determine when a complication is diagnosed. Our goal with these clinical groups is twofold: to attempt to come to agreement on the criteria that are used to identify conditions, and to spread the implementation of practices that have reduced patient harm. To the extent that hospitals adopt or implement the successful practices, we will see further reductions in complications. The work to agree upon standard definitions for conditions that trigger assignment of a complication could lower or increase complication rates. Both the adoption of uniform guidelines

and the spread of successful practices are important steps toward our longer term goal of reducing complications, particularly those that cause the most harm to patients.

Several potentially preventable complications (PPC) have very low expected values either because the number of cases at risk is small, or the nature of the occurrence is rare. If the expected value is very low the occurrence of a single complication disproportionately affects the hospital's score. At a recent Performance Measurement Work Group meeting, the possibility of grouping those PPCs into a single combined measurement was mentioned. We believe that idea has merit and would support pursuing such an approach.

Thank you for the opportunity to participate in this process and to comment on this recommendation. If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Traci La Valle".

Traci La Valle  
Vice President

Department of Finance  
Johns Hopkins at Keswick  
3910 Keswick Road  
Suite S4200 D  
Baltimore, MD 21211



January 5, 2015

Dianne Feeney  
Associate Director, Quality Initiative  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215  
[dianne.feeney@maryland.gov](mailto:dianne.feeney@maryland.gov)

Dear Ms. Feeney:

The purpose of this letter is to comment on the HSCRC staff draft recommendation for modifying the Maryland Hospital Acquired Conditions Program for FY2017 (December 10, 2014). As a policy that continues the implementation of the CMMS hospital all-payer demonstration model, we appreciate many positive features of the methodology that were implemented in the current fiscal year and improvements that this proposal continues. In the early implementation of the MHAC policy, we consistently advocated for transparency in this complex methodology and the ability to track real-time performance to effectively manage hospital performance to achieve the goals of the policy. As the MHAC policy has evolved over time, the HSCRC staff has worked to improve access to data (monthly versus quarterly reports from the State, for example) and to establish prospective performance standards. These improvements allow hospitals to monitor ongoing performance and encourage collaboration through the sharing of best practices.

While the staff's current proposal incorporates many positive features from the workgroup discussions leading up to this recommendation, there are a number of concerns that remain. We encourage the Commission to maintain PPC benchmarks at CY2013 base year levels instead of the annual updates to targets that reset the base for comparison annually. We understood the MHAC performance target under the demonstration model to be a five-year improvement target with a stable benchmark and methodology. This understanding facilitated clinical support and the provision of substantial resources to meet the challenge. One partial data point (three quarters of CY14 with final data) with the new methodology is not sufficient to evaluate performance improvement. The MHAC program needs predictability and transparency against the five-year goal rather than unpredictable yearly variations in benchmark targets and methodology. Changing program parameters negatively impact institutional buy-in and motivation for the program, clouding the clinicians' ability to drill down to the root cause of identified problems and to sustain improvements in the process. Maintaining a stable baseline for the program will

facilitate predictability and performance measurement, and the Commission can still use the methodological framework to provide strong incentives to achieve the demonstration model goals by adjusting the incentives through thresholds, rewards, and penalties.

In the next year, performance improvement will continue to be a three-step approach: documentation, coding, and clinical practice. Standardization of documentation and data accuracy is a critical component of performance improvement. While some workgroup participants discounted the significance of MHAC reductions in this year's discussions as a result of improved coding and documentation, this critique mischaracterizes the nature of the improvement effort. To reduce documentation and coding improvements, hospital staff must minimize variation in practice within hospitals across the state, and processes will need to be hardwired through technology (computer assisted coding, EMR enhancements, automated physician query processes, etc.). In addition, not recognizing the entire process (documentation, coding, and clinical practice) minimizes the level of resources already expended to achieve the level of improvement targeted under the demonstration model.

Because the ultimate goal of this policy is to eliminate harm to patients, additional enhancements will need to be made with respect to the PPC methodology. Ongoing work with 3M needs to occur on a more frequent basis. We need to review clinical findings in relation to the PPC methodology in order to refine and update clinical definitions in future versions of the PPC methodology. We request a commitment from the HSCRC and 3M to meet periodically to review potential PPC changes based on experience evolving from the State's MHAC program and from PPC users outside of Maryland when appropriate.

The MHAC program is important to the State's efforts to improving the experience of care in the State and in controlling the cost of providing care. The program has yielded benefits to the system, and as the methodology is improved over time, it will contribute to the success of the hospital demonstration model. We appreciate the opportunity of offer comments on this staff recommendation.

Sincerely,



Ed Beranek  
Senior Director of Regulatory Compliance

Cc: Donna Kinzer, Executive Director, HSCRC



# MedStar Health

8010 Suite O Corporate Dr.  
Nottingham, MD 21236  
410-933-2300 **PHONE**  
**medstarhealth.org**

January 5, 2015

Ms. Dianne Feeney  
Associate Director, Quality Initiatives  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215

Dear Dianne,

On behalf of MedStar Health, Inc., we would like to take this opportunity to comment on the proposed changes to the "Draft Recommendation for Modifying the Maryland Hospital Acquired Conditions Program for FY 2017".

We are supportive of the recommendation that the structure of the program remain consistent and relatively unchanged.

We believe that the current MHAC program promotes collaboration and sharing of best practices. Statewide targets and predetermined scaling allows hospitals to monitor progress timely. Although the State has made significant improvements in reducing complications in Calendar Year 2014 we believe that sustaining this rate of improvement each year is not feasible. It is widely recognized that early efforts in any improvement effort yield highest returns as "low hanging fruit" is quickly addressed. We support a lower reduction target for Fiscal Year 2015 as it is more realistic and consistent with waiver commitments.

Thank you for allowing us to comment on this recommendation. Please feel free to contact us should you have any questions.

Sincerely,

Chris Goeschel  
AVP, Quality

Kathy Talbot  
VP of Rates and Reimbursement

December 29, 2014

Health Services Cost Review Commission  
4201 Patterson Avenue  
Baltimore, Maryland 21215



Dear Commissioners:

The purpose of this letter is to provide general comments and suggestions regarding the Health Services Cost Review Commission (HSCRC) staff draft recommendations on modifications to the Commission's Maryland Hospital Acquired Condition (MHAC) and Readmission Reduction Incentive Program (RRIP) policies.

CareFirst is strongly supportive of the HSCRC's efforts to incentivize hospitals to reduce their rates of Hospital Acquired Conditions (HACs) and unnecessary readmissions. Success in these two areas will both improve the overall quality of care provided by Maryland hospitals and help the State meet certain performance standards as required by the Demonstration agreement with the Centers for Medicare/Medicaid Innovation (CMMI).

We appreciate the considerable time and effort that the HSCRC staff and the Performance Work Group members have devoted to the process of policy development thus far. While we believe that the HSCRC's MHAC and RRIP policies represent unique and alternative strategies to address these issues (relative to similar efforts of the Medicare program nationally), we believe that the overall effectiveness of both Maryland policies can be enhanced by the following suggested modifications to both the Guiding Principles and underlying methodologies.

**Suggested Additions to the HSCRC's Guiding Principles for both the MHAC and RRIP Policies**

CareFirst generally supports the staff's "Guiding Principles" for Methodology Development as articulated in the draft MHAC and RRIP recommendations. However, to enhance the effectiveness of the financial incentives applied in each program, we would strongly suggest that the list of principles (governing both programs) also include the following additional provisions:

- The primary way the MHAC and RRIP standards will be met is through the efforts of individual hospitals. Both programs should be structured to provide very clear, consistent and strong incentives at the individual hospital level;
  - The methodologies should be simplified and streamlined wherever possible so that the incentives for individual hospitals are clear and easily understood;
  - Individual hospital incentives should not be contingent on statewide performance (i.e., the HSCRC should avoid the use of "contingent incentives");
  - Hospitals should be rewarded (or penalized) in proportion to their individual contribution to meeting the goals of each program;
  - In general, the best policy is one where individual hospital performance always matters;

- The use of a mechanism to ensure revenue neutrality is important, however, it need not be applied in the context of each specific policy. Revenue neutrality should instead be enforced on a system-wide level;
- Hospitals should be rewarded for their positive performance however, that performance should be verified to make sure it is representative of actual quality improvement (i.e., reductions in Hospital Acquired Conditions) and not a function of changes in hospital documentation and coding.

#### **General Observations and Suggestions regarding the MHAC policy and Draft Recommendations**

- The MHAC program is still a very complex policy and is not currently structured to provide proportionate incentives at the individual hospital level. Hospitals should be rewarded proportionately to their own individual performance.
- In addition, the methodology employs a “two-tiered” scaling approach that applies a system of more punitive incentives at the individual hospital level, if the state fails to meet its overall annual performance target. This use of a “contingent incentive” dilutes the incentives of individual hospitals to work hard and invest in the care management activities necessary to improve performance. The key point here is that when a hospital faces the potential of a greatly reduced individual reward, based on factors beyond that hospital’s control (i.e. the collective performance of all hospitals), that hospital will have a reduced incentive to make substantial investments in their own MHAC improvement efforts, since failure at the state level would render their investments worthless.
- A more effective approach would be to create one reward/penalty scale that provides positive and negative incentives in proportion to each hospital’s individual performance. This reward/penalty scale should also be applied to all hospitals so that each facility’s performance counts toward the realization of program goals (i.e., we recommend elimination of the use of a “neutral zone” that holds hospitals harmless for their own performance).
- To enhance the incentive of hospitals to “pull” collectively and cooperatively toward the overall statewide goal, the HSCRC can apply an ex-post-facto penalty to all hospitals at the time of the annual update factor, should the state not meet its overall improvement goal.
- This proposed structure will provide incentives for the collective sharing of information and best practices among the hospitals while at the same time create maximum incentives for individual performance.
- We also believe that while it is not necessary to impose budget neutrality in the context of the MHAC methodology itself (i.e., rewards do not need to be limited to the magnitude of penalties generated), the HSCRC should offset any net addition to system revenue stemming from the MHAC policy, across all hospitals in the annual update to hospital rates.



Finally, while CareFirst is encouraged by general downward trend in the rates of MHACs experienced by hospitals since the initial implementation of the MHAC program, the recent and unexpectedly large improvement experienced by a majority of the hospitals may, in part, reflect changes in documentation and coding activities rather than an actual reductions in the rate of HACs. The new incentives under the hospital Global Budget Rate (GBR) arrangements provide strong incentive to reduce HACs. However, unlike the old Charge per Case payment system, the GBR does not provide incentives for hospitals to thoroughly document and code HACs. This change in incentives could possibly explain the larger than expected drops in MHAC rates across most hospitals.

- Until the current year MHAC results can be substantiated by the planned audit activity, the HSCRC should update the base year for measuring MHAC performance to 2014. This will remove, any influence of a possible coding-driven result, from the FY 2015 results. If the HSCRC finds that there is no coding issue later next year, then it can effective immediately implement the use of the 2013 base to provide the proper rewards.

#### **General Observations and Suggestions regarding the RRIP policy and Draft Recommendations**

Many of the general comments regarding the MHAC policy also apply to the Draft RRIP policy as well. We summarize these key points below:

- Wherever possible, the RRIP policy should be simplified in order to keep the incentives clear and well understood by hospital management.
- The proposed use of a two-tiered scaling approach creates a contingent incentive that dilutes incentives at the individual hospital level.
- Maximizing individual incentives involves the use of one scale where the rewards and penalties are proportionate to each hospital's individual performance.
- All hospital performance matters and should be counted. Thus, the hold-harmless/ neutral zone component of the scaling methodology should be eliminated.
- The use of an ex-post-facto penalty applied across the industry in the event the statewide goal is not met, can enhance incentives for a collective and cooperative effort.
- The policy does not need to be revenue neutral with in the context of the RRIP methodology but any net rewards in excess of penalties should be offset across all hospitals in the annual update factor.

Finally, CareFirst is very concerned that through the first eight months of CY 2014 system the statewide Medicare readmission rate has only declined 1.16% relative to the targeted 6.76%

established under the original RRIP policy. As the Commissioners well know, failure to outperform the national Readmission Rate change on average could result in the termination of Maryland's exemption from the national Medicare Readmission program. CareFirst believes that its proposed modifications to the structure of the RRIP policy (as discussed above) will help bolster the individual hospital incentives and potentially help improve overall statewide performance.

In addition to these general comments, we have included specific observations and suggestions related to each of the staff's key discussion points and draft recommendations in an Appendix of this letter.

Thank you for the opportunity to submit these comments on the staff's draft recommendations for both the HSCRC's MHAC and RRIP policies. We remain ready to assist the staff and the Commission in the final development of these two important initiatives.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Bruce Edwards". The signature is written in a cursive, flowing style.

M. Bruce Edwards  
Senior Vice President  
Networks Management

## **Appendix I - Specific Comments and Suggestions regarding the Draft MHAC and RRIP Recommendations**

### **Comments and Suggestions regarding the Draft RRIP Recommendations**

In a paper dated December 10, 2014, the HSCRC staff issued a set of draft recommendations for modifications to the Commission's MHAC policy. Specifically staff recommended that the HSCRC should:

- 1) Change the statewide MHAC rate of reduction target from 8% to 7%;
- 2) Use performance measures that are based on the greater of attainment and improvement;
- 3) Continue to use a "tiered" approach where the amount of revenue at-risk and the magnitude of rewards and penalties applied at the individual hospital level differs, depending on whether or not the statewide reduction target is met;
- 4) Use a non-proportional scaling approach and one for which some hospitals are held harmless (i.e., receive no positive or negative adjustment);
- 5) Distribute rewards only if statewide penalties are met; not limiting the magnitude of these rewards to the penalties collected (i.e., remove the revenue neutrality requirement);
- 6) Audit the MHAC results to ensure the results represent actual improvements in each hospital's rate of HACs; and
- 7) Continue to monitor the stability of the Potentially Preventable Condition measures.

Based on our suggested list of additional guiding principles, CareFirst has the following observations and suggestions associated with each of these specific MHAC discussion points and recommendations:

#### **1 - Change the statewide MHAC rate of reduction target from 8% to 7%.**

- Given that the State has experienced a general downward trend in the rates of HACs, CareFirst supports the Staff's recommendation of a modest reduction in the statewide target to 7%.

#### **2 - Continue to use performance measures that are based on the greater of attainment and improvement.**

- CareFirst supports measuring performance based on the greater of hospital attainment and improvement. This approach provides an opportunity for all hospitals (both those with low attainment and high attainment) to generate rewards, promotes the improvement of all hospital performance (which assists the State to meet its statewide reduction target) and is consistent with the policy structure of the HSCRC's Quality-Based-Reimbursement (QBR) program.

**3 - Continue to use a “tiered” approach where the amount of revenue at-risk and the magnitude of rewards and penalties applied at the individual hospital level differs, depending on whether or not the reduction target is met.**

- CareFirst’s position is there should be no dependency on statewide performance when structuring the incentives that apply to individual hospitals. Making incentive payments dependent on any external test (i.e., a “contingent incentive”) dilutes individual hospital incentives. This is because hospitals will be reluctant to make substantial investments in their own MHAC-related efforts since the failure at the state level would render these investments worthless.
- To augment an overall collective incentive to meet the target, the HSCRC could instead apply an overall penalty to all hospitals uniformly for failure to meet the statewide MHAC standard.

**4 – Continue to use of a non-proportional scaling approach, including the ability for which some hospitals have no reward or penalty applied (i.e., the use of a “neutral-zone” in the scaling methodology).**

- CareFirst believes this provision of the policy should be changed to create clearer and stronger incentives at the individual hospital level to achieve the desired target reductions in MHACs.
- This then implies the use of rewards and penalties that are proportionate with individual hospital performance relative to the pre-established target. It also means that the HSCRC should abandon the so-called “neutral zone” where hospitals are held harmless (i.e., receive a 0% adjustment). In general, CareFirst believes that the best policy is one where individual hospital performance always matters.

**5 - Distribute rewards only if statewide penalties are met and should not be limited to the penalties collected (i.e., remove the revenue neutrality requirement).**

- CareFirst supports the elimination of the revenue neutrality requirement in the context of the MHAC policy itself. This would mean that in the case of the current CY 2014 results where the hospitals had \$1 million in penalties, that the generated rewards (calculated to be \$9 million) would be fully realized by the hospitals.
- While CareFirst supports the removal of the revenue neutrality requirement for individual hospital results (in the context of the MHAC policy result), it recommends that any additional revenue provided to hospitals for MHAC performance (net of penalties), be offset across all hospitals in the following year’s annual update to ensure revenue neutrality at an overall system level.
- CareFirst also recommends this approach for the Readmission Reduction Incentive Program as well. The policy would not be “revenue neutral” at the individual hospital level (i.e., the total magnitude of rewards earned by all should not be limited to the total magnitude of the penalties generated). However, just as with the MHACs, if the total rewards for the RRIP were

greater than total penalties, then there should be an offset in the following year's update factor (across all hospitals) to ensure revenue neutrality at the system level.

**6 - The HSCRC should audit the MHAC results to ensure the results represent actual improvements in each hospital's rate of HACs.**

- CareFirst would note however, that the use of provisions that reward hospitals on the "greater of attainment and improvement" coincided with much greater performance improvements than expected (on average staff projected hospital scores would improve about 21% when the preliminary year-to-date results show that hospital scores have improved over 73%).<sup>1</sup> This unexpectedly large improvement results casts a pall over the validity of the recent MHAC performance and provides some justification for adoption of a conservative approach regarding certain provisions of the overall MHAC policy.
- CareFirst supports the auditing of selected hospitals to determine whether changes in documentation and/or coding were responsible for a portion of this performance improvement. However, the results of the audits won't be available for some time.
- While we generally support the use of a cumulative target (where there is no rebasing of the initial base year standard used in calculating performance), given the uncertainty regarding the validity of the MHAC year-one results, we would suggest that until these results can be substantiated by the planned audits, the HSCRC should update the base to 2014. This will remove, any influence of a possible coding-driven result, from the FY 2015 results. If the HSCRC finds that there is no coding issue later next year, then it can effectively immediately implement the use of the 2013 base to provide the proper rewards.

**Comments and Suggestions regarding the Draft RRIP Recommendations**

In the recommendation dated December 10, 2014, the HSCRC staff issued a draft recommendation for the Commission's RRIP policy. Specifically staff recommended that the HSCRC should:

- 1) Adopt a payment incentive program with both rewards for hospital exceeding a pre-established benchmark level of performance and penalties for hospitals that have readmission rate increases or fail to make adequate improvements;
- 2) Continue to set a benchmark for a minimum required readmission rate reduction where rewards may be earned based on all payer readmission reductions;
- 3) Use a tiered approach where a statewide Medicare readmission target must be met to avoid maximum penalties at risk for the program; and
- 4) Develop readmission reduction targets for CY 2015 compared to CY 2013 readmission rates once the final Medicare readmission rates are obtained from the CMMI (these results are expected in March 2015).

---

<sup>1</sup> See appendix II for a comparison of actual hospital performance over Q1 and Q2 of CY 2014 vs. the expected or predicted performance by hospital (from the April 2014 final MHAC staff recommendation).

Based on our suggested list of additional guiding principles and our comments and observations articulated in our comment letter, CareFirst has the following observations and suggestions associated with each of these specific recommendations:

**1 - Adopt a payment incentive program with both rewards for hospital exceeding a pre-established benchmark level of performance and penalties for hospitals that have readmission rate increases or fail to make adequate improvements.**

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

- CareFirst supports the use of one scale of rewards and penalties that are proportionate to individual hospital performance, where individual hospital performance is always counted (i.e., no use of a neutral zone or hold-harmless provision).

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

- Again, CareFirst's position is there should be no dependency on statewide performance when structuring the incentives that apply to individual hospitals. Making incentive payments dependent on any external test (i.e., a "contingent incentive") dilutes individual hospital incentives. This is because hospitals will be reluctant to make substantial investments in their own RRIP-related efforts since the failure at the state level would render these investments worthless.
- To augment an overall collective incentive to meet the target, the HSCRC could instead apply an overall penalty to all hospitals uniformly for failure to meet the statewide RRIP standard.

**4 - Develop readmission reduction targets for CY 2015 compared to CY 2013 readmission rates once the final Medicare readmission rates are obtained from the CMMI (these results are expected in March 2015).**

- CareFirst supports the use of a cumulative approach to measuring the performance of individual hospitals for the purpose of the RRIP policy.
- CareFirst also supports the staff recommendation to wait until Medicare Readmission rate data is available from the CMMI before establishing the targeted rate of improvement for CY 2015.



Maryland  
Hospital Association

January 5, 2015

Dianne Feeney  
Associate Director, Quality Initiatives  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland

Dear Ms. Feeney:

On behalf of the 64 hospital and health system members of the Maryland Hospital Association (MHA), we appreciate the opportunity to comment on the proposed changes to the *Draft Recommendation for Updating the Hospital Readmission Reduction Incentive Program for FY 2017*.

Crafting a payment policy recommendation is difficult at a time when significant questions remain about the difference between Maryland's readmissions rate and the national rate in both the calendar year 2013 base period and in the calendar year 2014 performance period. We support the Health Services Cost Review Commission (HSCRC) staff's intention to postpone setting the readmissions target until calendar year 2013 base year data is validated, likely by March, and we appreciate the recent decision to postpone until February a final readmission payment policy recommendation to allow time for additional analysis. However, we believe that a decision on a final readmission payment policy should be postponed beyond February to allow time to complete the necessary analyses.

Our primary concern is that a revised readmissions payment policy must not slow the good work underway at Maryland's hospitals to address the root causes of hospital readmissions. In this comment letter, we will outline what we know about readmission rates, and Maryland's rates in particular; what we don't yet know about the drivers of readmissions and the opportunities to improve; and, we will propose a way to develop a payment policy with incentives that reward hospitals for providing the best care for patients and supports hospitals' focus on areas where there is the most opportunity and need to improve. Our recommendation is that we postpone final approval of a fiscal year 2017 readmissions payment policy until we've been able to answer these important questions.

*What We Know about Readmission Rates*

**Maryland's historic readmissions rate is higher than the nation.** From June 2009 through June 2012, the most recent period available on Medicare readmission rates at the Medicare website Hospital Compare, readmission rates for heart failure, pneumonia, and heart attack across Maryland's hospitals in the aggregate were among the highest in the nation. In that same period, Maryland's mortality rates for the same conditions were the second lowest in the nation. This finding is consistent with what has been reported in the literature.<sup>1</sup>

---

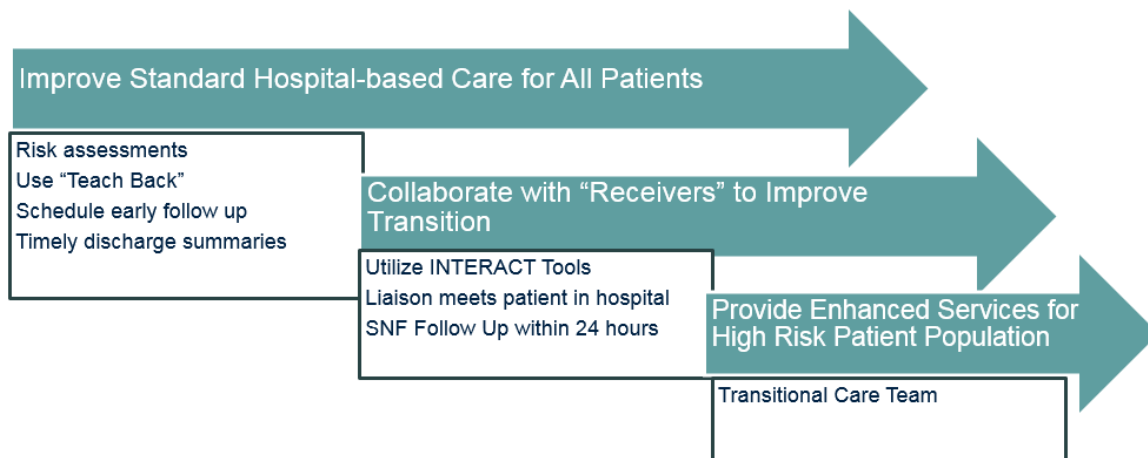
<sup>1</sup> Divergent trends in survival and readmission following a hospitalization for heart failure in the Veterans Affairs health care system 2002 to 2006. *Journal of the American College of Cardiology* (7/2010); In a study of hospitals within the Veteran Affairs health care system, reported that at the patient level, mortality after an admission for HF declined from 2002 to 2006 while readmission increased.

Are All Readmissions Bad Readmissions? *New England Journal of Medicine* (7/2010); A higher occurrence of readmissions after index admissions for heart failure was associated with lower risk-adjusted 30-day mortality. Our

**Maryland’s readmission rate has been improving faster than the nation.** We also know from Medicare data published by Delmarva, the Quality Improvement Organization at the time, that Maryland’s all-cause readmission rate improved by 10 percent from October 2010 through September 2013. From January 2011 to December 2013, Maryland’s 30-day Medicare readmission rate for people admitted with heart attack, heart failure, diabetes, chronic kidney disease, chronic obstructive pulmonary disease, and pneumonia improved faster than the nation.

**Maryland’s hospitals have significantly increased the focus and amount of resources dedicated to reducing readmissions this year, in response to the new waiver’s requirements and incentives.** While some of the nation’s hospitals have significantly reduced readmissions for targeted, high risk populations, very few have reduced their hospital-wide readmissions rate in the way Maryland’s hospitals have. There is substantial difference between designing an intervention to reduce readmissions in a relatively small, well-defined target population, such as a pilot for congestive heart failure patients and designing a strategy to reduce overall hospital readmissions. Maryland’s hospitals are using a robust portfolio of strategies to address this challenge.

**Sample Portfolio Strategy:**



While every hospital is investing in evidence-based interventions that are tailored to their local communities, still more work can be done. The investments are significant, involve numerous partners and require time and actionable data to realize their full potential. Examples of hospital strategies are included as links in Appendix 1.

---

findings suggest that readmissions could be “adversely” affected by a competing risk of death — a patient who dies during the index episode of care can never be readmitted. Hence, if a hospital has a lower mortality rate, then a greater proportion of its discharged patients are eligible for readmission. As such, to some extent, a higher readmission rate may be a consequence of successful care. Furthermore, planned readmissions for procedures or surgery may represent appropriate care that decreases the risk of death, but this is not accounted for in Hospital Compare.

Looking forward, looking back: assessing variations in hospital resource use and outcomes for elderly patients with heart failure. Circulation: Cardiovascular Quality and Outcomes (10/2009); This study examines the association between mortality and resource use at the hospital level, when all Medicare beneficiaries hospitalized for heart failure are examined. Findings: California teaching hospitals that used more resources caring for patients hospitalized for heart failure had lower mortality rates.



*What We Don't Know about Readmission Rates*

**We do not yet know the magnitude of the difference in Maryland's readmissions rate compared to the nation, for the calendar year 2013 base period or for any part of the calendar year 2014 measurement period.** Data sources put the gap between 1.55 to 2.56 percentage points. The Delmarva Foundation for Medical Care as the Medicare Quality Improvement Organization produced quarterly utilization reports using Medicare data as required under the Centers for Medicare & Medicaid Services (CMS) contract Scope of Work. Based on data released in their June 6, 2014 report, Maryland's 30-day all cause annual readmission rate for calendar year 2013 was 18.96 percent compared to the nation's rate of 17.41 percent; a difference of less than 9 percent or 1.55 percentage points. However, recent comparisons HSCRC staff shared at a Performance Measurement Work Group meeting based on calendar year 2013 data received from the Center for Medicare and Medicaid Innovation (CMMI) indicate Maryland readmission rates were at 20.65 percent in Maryland compared to 18.09 percent nationally--a base year gap just over 14 percent or 2.56 percentage points. Between the two data sources, the discrepancy in the Maryland to national base year gap is more than 5 percent. More recent data from CMMI indicates that the base year gap is closer to the Delmarva data than the data shared with the Performance Measurement Work Group. The recent CMMI data indicates the base year gap is 11.53 percent or 1.94 percentage points. Looking at the recent CMMI data on the performance year, Maryland is continuing to reduce readmission rates faster than the nation and is close to or may have outpaced the national rate of improvement by one-fifth of the base year gap, thereby possibly meeting the calendar year 2014 readmissions waiver target.

**We do not yet know how much of the gap between Maryland and national rates is due to errors or differences in measurement method.** The difference between Maryland and national readmissions rates may be due, at least in part, to the inclusion of a larger proportion of high-risk individuals in the data set. Most concerning is that the state does not yet have sufficient data to verify base year readmission rates, nor 2014 performance year results. Further, it is not clear whether the data provided by the CMMI has appropriately handled Maryland's psychiatric units within acute care hospitals that are paid under the Maryland hospital payment system, but would not be paid under the Inpatient Prospective Payment System (IPPS) were they located outside of Maryland. Because the national data includes only hospitals paid under IPPS but not those cases receiving psychiatric care and associated with the claims paid under the Medicare Inpatient Psychiatric Prospective Payment System, we believe there is a higher proportion of people with behavioral health conditions in Maryland's readmission data, and the presence of a behavioral health condition significantly increases the risk of readmission.

**It's also not clear to what extent Maryland's reduced admissions should be accounted for in a readmissions payment policy.** There are many moving parts to the incentives in the new waiver. Maryland's hospitals have significantly reduced admissions and lowered costs for all payers. With this change, hospitals also recognize that the patients who remain in the hospital are sicker and often have more comorbidities. While reducing readmissions for this population is an imperative, data analysis needs to inform payment policies that are consistent with the goals of the waiver and enable an accurate assessment of performance. While patients are more complex, our hospitals have not wavered from their commitment to innovate beyond their four walls to address patient needs, as shown in the examples we highlight in the Appendix. As a field, we also recognize that focusing on all-payer readmissions, not just Medicare readmissions, is simply the right thing to do. As HSCRC analysis shows, all-payer readmissions is consistent with the trends in Medicare readmissions and solidly linked to waiver success – not only for the Medicare readmissions metric, but the limits on all-payer spending growth. Recognition that Maryland's hospitals could be lowering costs and improving quality, and just not meeting an arbitrary readmissions reduction goal (not informed by data), is concerning in light of the agreement hospitals

signed on to and the field's unwavering passion to get it right.

**We do not know how to best structure readmissions performance incentives beyond those that exist in the global budget.** The existing HSCRC readmissions payment policy adjusts expected readmissions rates for severity of illness and accounts for planned readmissions. However, because readmissions are also strongly associated with factors that we cannot yet measure well at the hospital level, such as health literacy, support at home, and the income and resources of the neighborhood in which a person lives, we don't know which Maryland hospitals have the most opportunity to reduce readmission rates and which are performing well relative to other hospitals with similar patient characteristics.<sup>2</sup>

Well-developed community partnerships, particularly those with primary care physicians, are critical to reducing readmissions. Brian Jack, MD, Professor and Vice Chair, Department of Family Medicine, Boston University School of Medicine, Boston Medical Center, and founder of Project RED said, "Safe readmission reduction can only happen if hospitals have well developed community-based partners, particularly primary care partners, willing and able to care for patients in the community. More effort to ensuring that this primary care safety net is available for patients is needed."<sup>3</sup> The concern with the proposed policy is that applying penalties--potentially large penalties--to hospitals because they did not improve at the uniform targeted rate is that the Commission could inadvertently harm a hospital's ability to provide services and interventions to the high-risk individuals who most need support. In federal Value-Based Purchasing, Hospital Acquired Conditions and in Maryland's comparable programs, it is broadly accepted that outcome measures should be adjusted for clinical severity and comorbidities, including conditions that are "present on admission," as these affect outcomes independent of the quality of care provided. Sociodemographic factors, like poverty, limited English proficiency, and homelessness, are also "present on admission." Unlike pre-existing medical conditions, these social factors are not directly affected by health care interventions, but will directly affect certain outcomes, such as 30-day

---

<sup>2</sup> Neighborhood Socioeconomic Disadvantage and 30-Day Rehospitalization (Annals of Internal Medicine, 12/2014); *Living in a severely disadvantaged neighborhood predicts rehospitalization as powerfully as the presence of illnesses, such as peripheral vascular disease or chronic pulmonary disease, and more powerfully than being on Medicaid or having diabetes.*"

Hospital Readmissions: Necessary Evil or Preventable Target for Quality Improvement (Annals of Surgery, 10/2014); *"High volume cancer centers have higher readmission rates....and may not be an appropriate marker for quality improvement."*

The Medicare Hospital Readmissions Reduction Program: Potential Unintended Consequences for Hospitals Serving Vulnerable Populations. (Health Services Research, 6/2014); *"Both dual eligible status and share of MC discharges have a positive effect on risk adjusted readmission rates."*

Socioeconomic status and readmissions: Evidence from an urban teaching hospital. (Health Affairs, 5/2014); *Patients living in high-poverty neighborhoods were 24 percent more likely than others to be readmitted, after demographic characteristics and clinical conditions were adjusted for."*

Variation in the Risk of Readmission Among Hospitals: The Relative Contribution of Patient, Hospital and Inpatient Provider Characteristics. (Journal of General Internal Medicine, 12/2013); *"Patient characteristics are the dominant contributor to the variation in risk of readmissions among hospitals...findings add to the accumulating evidence that hospitals may not be the appropriate sole target for placing accountability for excess readmissions."*

<sup>3</sup> *Readmission News* (August 2014 )

readmissions. This concern is clearly reflected in the National Quality Forum's Expert Panel report on the need for sociodemographic adjustments for payment programs:

*Just as quality measures for readmission aim to account for differences between patients in disease severity that affect repeat hospitalization, the Panel thought that factors related to social disadvantage ... that affect risk for readmission should also be accounted for. ... A measure of true performance accounts for the level of challenge posed by the patient to achieve an outcome, whether clinical or sociodemographic.*

### *Moving Forward*

Maryland's hospitals are committed to improving care for all patients while they are inside the hospital walls and as they transition to home and to lower levels of care. Performing well on readmissions demonstrates our commitment to this important outcome, and helps us achieve the financial savings required under the waiver demonstration. We recommend that HSCRC staff and hospitals work together to answer the data and measurement questions, and to better understand the patient and hospital characteristics that may help to identify for targeted improvement efforts subpopulations with relatively high readmission rates. The results of the data validation and analysis should then inform the structure of incentives within a readmissions payment policy so that hospital payment adjustments are commensurate with successful levels of effort.

In addition to closely following the work on socio-demographic factors that the National Quality Forum and CMS are pursuing, we recommend an analysis that begins with the data that we can access. MHA recommends no change to the current readmissions payment policy until MHA and HSCRC have the opportunity to:

1. Analyze a combination of variables for their potential use to classify and assign Maryland's hospitals to peer groups. We believe an analysis that includes socio-economic and demographic indicators (by linking resident zip codes with data sets in the public domain such as census data on urbanicity, and poverty levels) will inform payment policies that have the right incentives and that recognizes the variations in hospitals' opportunity to improve.

While we appreciate HSCRC's efforts to consider Medicaid status, we think the analysis was incomplete. Specifically, the analysis does not address whether having a higher percentage of Medicaid patients impacts a hospital's readmission rate. The analysis is simply focused on whether readmission rates at Maryland hospitals with a larger Medicaid population changed more (or less) over one year. That is a different question from whether those that care for more Medicaid patients tend to have higher readmissions rates. The HSCRC analysis is not sufficient for constructing a payment policy in a state where readmission rates have been steadily declining over the last several years.

2. Given Maryland's strong performance with mortality and the financial savings already realized, an analysis using the Charlson Comorbidity Index (CCI) could be informative. CCI is considered a gold standard as a risk adjustment variable and is commonly used to account for severity of illness and multiple chronic conditions (similar to APR-DRGs), and can also be used to estimate comorbidity-adjusted life expectancy.

3. While we understand and appreciate the need for safeguarding protected health information, transparency of CMMI readmission data is needed to appropriately compare Maryland with the nation. It would be helpful if MHA could review the SAS code used to pull the national readmissions data so that, when we have questions of what types of hospitals and cases are included, the detailed methodology contained in the SAS code can inform our validation process.

Considering the investments hospitals have made in their communities to reduce readmissions, the potential harm that would be done by imposing more financial risks, the uncertainties around the base year readmissions gap, uncertainties about Maryland's rate of improvement relative to the nation thus far in calendar year 2014, and the significant incentives under global budgets, we recommend the reward-only policy continue for a second year while we address the socio-demographic questions, the data validation issues, and the best path forward. Implementing a more aggressive penalty structure before validating our performance creates a ham-fisted corrective action plan that does not identify or target areas that need focus, and does it before knowing whether corrective action is even required. While we recognize the critical importance of payment policies supporting success under the waiver, changing this policy without adequate data, analysis, and a reasonable amount of time for hospitals to analyze and respond to the changes is not helpful to the state's overall success, nor to the collaborative nature that has allowed us to accomplish so much in such a short time.

We appreciate the Commission's consideration of our comments and look forward to continuing to work with HSCRC staff toward our shared goals.

Sincerely,



Traci La Valle  
Vice President

Appendix 1

Examples of Hospital Strategies to Reduce Hospital Wide All Payer Readmissions

Frederick Memorial Hospital

<http://www.hscrc.state.md.us/documents/md-maphs/wg-meet/cc/2014-12-12/3-Frederick-Memorial-Hospital.pdf>

Johns Hopkins Health System

<http://www.hscrc.state.md.us/documents/md-maphs/wg-meet/jt-mtg-2014-03-27/8-A-Deutschendorf-HSCRC-Presentation.pdf>

Sinai Hospital

<http://dhmh.maryland.gov/mchrc/Documents/Hospital%20Community%20Partnership%20Forums/HCA%20Presentation.pdf>

Additional resources and examples

<http://www.modernhealthcare.com/article/20141206/MAGAZINE/312069983/global-budgets-pushing-maryland-hospitals-to-target-population-health>

<http://www.mhaonline.org/resources/video-resources/video-resources>

<http://www.mhaonline.org/quality/transitions-handle-with-care>

Department of Finance  
Johns Hopkins at Keswick  
3910 Keswick Road  
Suite S4200 D  
Baltimore, MD 21211



January 5, 2015

Dianne Feeney  
Associate Director, Quality Initiative  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215  
[dianne.feeney@maryland.gov](mailto:dianne.feeney@maryland.gov)

Dear Ms. Feeney:

The purpose of this letter is to comment on the HSCRC staff draft recommendation for the Hospital Readmission Reduction Incentive Program for FY2017 (December 10, 2014). Quality programs that measure hospital performance and link financial incentives to performance are an important part of achieving the hospital demonstration model's quality goals. Consequently, HSCRC policies to achieve those targets are an important part of the implementation process.

In this draft recommendation, the staff proposes to revise the current readmission reduction incentive policy to include penalties as well as incentives for achieving pre-established readmission benchmarks. The program would establish a tiered incentive structure that is based on statewide performance, with hospitals avoiding maximum penalties if the statewide system meets minimum performance standards.

For Maryland hospitals, financial incentives under this program apply to the entire hospital revenue base under the State's all-payer model. For hospitals in other states, commercial payers may pursue similar quality policies, but most hospitals do not face these risks on their entire revenue base. Because the policy has the potential for substantial revenue reductions as a penalty for unsatisfactory performance, hospitals that lack the resources to improve care coordination may face reductions in revenue needed to improve performance. Programs to reduce readmissions and improve care coordination require hospitals to invest in building relationships with skilled nursing facilities and other community partners and to strengthen relationships with physicians to improve transitions and follow-up immediately after discharge. Furthermore, these penalties are not under the individual hospital's control because the thresholds are determined by

the aggregate readmission performance in the State. That is, an individual hospital's financial penalty depends on the performance of other hospitals in the system. While this programmatic structure provides incentives for the State's hospital to cooperate in reducing readmissions, it also puts part of a facility's revenue beyond its own direct managerial influence. Additionally, this potential penalty is to be layered onto a global budget methodology that treats readmissions as potentially preventable utilization.

The hospital demonstration model requires the HSCRC to achieve the national average readmission rate in the Medicare program, and well-structured incentives are an important component to achieving that goal. Positive incentives that leave hospitals with the ability to invest in initiatives to improve care delivery are a better approach to attaining that goal. JHHS is committed to working with the HSCRC in achieving that goal. We appreciate the opportunity to provide comments on the draft recommendation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ed Beranek', with a stylized, cursive script.

Ed Beranek  
Senior Director of Regulatory Compliance

Cc: Donna Kinzer, Executive Director, HSCRC



Maryland  
Hospital Association

January 5, 2015

Dianne Feeney  
Associate Director, Quality Initiatives  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland

Dear Ms. Feeney:

On behalf of the 64 hospital and health system members of the Maryland Hospital Association (MHA), we appreciate the opportunity to comment on the proposed changes to the *Draft Recommendation for Aggregate Revenue Amount at Risk under Maryland Hospital Quality Programs for FY 2017*.

**The 8.86 percent of all-payer revenue that the Health Services Cost Review Commission (HSCRC) is proposing to place at risk for quality-related programs is far above the amount at risk in the rest of the nation. This change would subject Maryland’s hospitals to an extraordinarily large risk at a time when they are already assuming exceptional risk under global budgets.**

For performance year 2015, which impacts fiscal year 2017 rates, the HSCRC staff’s proposal to place 8.86 percent of inpatient revenue at risk, without counting any of the utilization at risk under global budgets, compares to less than 6 percent of Medicare inpatient revenue, or about 2 percent of all-payer inpatient revenue, at risk nationally, assuming 40 percent of the nation’s payer mix is Medicare. Figure 1 shows the significantly greater financial risk to a \$200 million Maryland hospital under the December HSCRC proposal to the same hospital in another state.

Figure 1

The % at Risk Between MD and the Nation is Dissimilar When the Dollar Value is Considered

- For Maryland, penalties affect all inpatient revenue under global budgets
- For hospitals in the rest of the nation, penalties only affect Medicare inpatient revenue

Example Maryland Hospital with \$200M in Revenue*			Example National Hospital With \$200M in Annual Revenue*		
\$120M in Inpatient Revenue			\$120M in Inpatient Revenue \$48M (40% of Inpatient Revenue) from Medicare \$29M (~60% of Medicare inpatient Revenue) from base DRG *Readmission penalties apply to full Medicare payment		
	2017			2017	
Program	% at Risk	Dollar Value	Program	% at Risk	Dollar Value
MHAC	4.00%	\$4.8M	HAC	1.00%	\$0.29M
Readmissions	2.86%	\$3.4M	Readmissions*	3.00%	\$1.44M
QBR	2.00%	\$2.4M	VBP	2.00%	\$0.58M
<b>Total Without PAU</b>	<b>8.86%</b>	<b>\$10.6M</b>	<b>Total</b>	<b>6.00%</b>	<b>\$2.31M</b>

When the dollar value of potential penalties is considered against total annual revenue, the Maryland hospital in this example would have \$10.6 million or 8.8 percent of revenue at risk versus \$2.31 million or 1.9 percent of revenue at risk for the hospital located elsewhere in the nation

\*Revenues are hypothetical and roughly based on known proportions of inpatient revenue, Medicare inpatient revenue and base MS-DRG revenue relative to total hospital revenue



The HSCRC staff recommendation seeks to justify this greater financial risk in two ways:

- The Center for Medicare and Medicaid Innovation (CMMI) requires Maryland to reallocate revenue based on quality performance on a similar scale with the nation; and
- By contract, Maryland's aggregate amounts at risk for quality-related programs must be on par with the nation over a cumulative period that extends beyond the years in which the new waiver demonstration would be in place. The cumulative period would begin with a performance period in 2012, which corresponds to fiscal year 2014, and presumably extend through the calendar year 2018 performance period which would apply to fiscal year 2020 payment adjustments.

We strongly disagree. Neither assertion is supported by the language or the spirit of the agreement between the state of Maryland and CMMI and, as mentioned earlier, this interpretation places an unduly large amount of revenue at risk for Maryland's hospitals. Attempting to shoehorn Maryland's demonstration into the confines of the national payment system with this overly aggressive policy is out of step with the Advisory Council's recommendations that hospital budgets and related policies be set to include incentives for hospitals to manage patients, and allow hospitals flexibility to achieve targets without heavy regulatory intervention. Furthermore, failure to achieve quality programs' risk amounts commensurate with national risk amounts is not one of the events that trigger a consequence within the waiver agreement.

To uphold the good faith and cooperation required for a successful demonstration, we strongly believe that input from the hospital field is required when interpreting the language of the waiver demonstration contract. It is important to reconcile the revenue at risk assumptions for quality programs with CMMI and the hospital field before any decisions are made by Commissioners about the fiscal year 2017 quality program at risk amounts.

In addition, Maryland hospitals' utilization risk under global budgets needs to be accounted for in the same way that the national "efficiency measure" used in the Value-Based Purchasing Program counts towards the sum of the aggregate amount at risk. A fair accounting of the avoidable utilization risk in global budgets is not only appropriate, it helps lower the risk on the other measures in Quality-Based Reimbursement, which are not directly tied to the readmissions and complications metrics under the waiver agreement. It also mitigates concerns with the metric itself, as mentioned in our September 22 comment letter on Quality-Based Reimbursement program recommendations. We also recommend shifting a portion of the revenue at risk from Maryland Hospital Acquired Conditions to readmissions, to reflect Maryland's performance on hospital acquired conditions over the past year and the less clear performance on readmissions relative to our target.

Thank you for the opportunity to participate in this process and to comment on this recommendation. If you have any questions, please contact me.

Sincerely,



Michael B. Robbins  
Senior Vice President

Department of Finance  
Johns Hopkins at Keswick  
3910 Keswick Road  
Suite S4200 D  
Baltimore, MD 21211



January 5, 2015

Dianne Feeney  
Associate Director, Quality Initiative  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215  
[dianne.feeney@maryland.gov](mailto:dianne.feeney@maryland.gov)

Dear Ms. Feeney:

Thank you for the opportunity to comment on the HSCRC staff draft recommendation for the amount of revenue at risk under Maryland Hospital Quality Programs for FY2017 (December 10, 2014). The recently implemented hospital demonstration model is designed to achieve a number of important goals in the State – better patient experience of care, improved population health, and lower cost of care. Quality programs that measure hospital performance and link financial incentives to performance are an important part of achieving the model's quality goals. Consequently, HSCRC policies to achieve those targets are important to the demonstration model's implementation.

Properly structured incentives have an important role in providing system incentives to achieve success under the demonstration model. Policies must balance a variety of considerations – clear incentives that are commensurate with the potential benefits of the policy must be balanced against their implementation costs and financial impact on the State's hospitals. By that criterion, the staff's proposal raises some concerns.

The staff recommendation proposes levels of at-risk revenue under the quality programs that substantially exceed those of the Medicare program. In Table 2 of the recommendation, the staff presents a comparison of Maryland revenue at risk under quality programs compared to the Medicare program through FY2017. In every year, the Maryland at-risk share of revenue exceeds Medicare levels, with the difference increasing from 0.5 percentage points in 2014 to over 5 percentage points in 2017. The staff presents differences both without and with potentially avoidable utilization (PAU), holding out the question as to whether PAU should be part of the at-

risk revenue. Under the global budget revenue model, however, hospitals face penalties associated with these categories of utilization. They are appropriately included as part of the at-risk revenue.

For Maryland hospitals, the revenue at risk applies to the entire revenue base under the State's all-payer model. While Medicare rules apply to a single (if substantial) payer in other States, the risks are more broadly based in Maryland. Commercial payers outside of Maryland may pursue similar quality policies, but most hospitals do not face these risks on their entire revenue base. While this creates powerful incentives in Maryland, it also suggests that levels exceeding Medicare risk may be out of proportion to the benefit of implementing those incentives. The staff recommendation provides a clear comparison of the revenues at risk to achieve the demonstration model mandate, but it does not provide any discussion as to whether the benefits of such a policy are proportional to the cost of their implementation.

Furthermore, the description of the revenues at risk contains surprising redundancy. Three programs are targeted toward readmissions: the Readmission Reduction Incentive Program, the Readmission Shared Savings Program, and potentially avoidable utilization (which includes readmissions). While the demonstration model requires the State to reach the national readmission average by the end of the five-year period, the policy process has given little consideration to whether incentives to reduce readmissions are the best method for arriving at better care coordination and improved population health. Before committing to arbitrary levels of at-risk revenue to meet the demonstration model requirements, we need to give careful consideration to the potential costs of these policies and to the balance required for achieving the model's goals and preserving the financial health of hospitals.

We recognize the need to meet the demonstration model goals to achieve desirable outcomes for the healthcare delivery system in the State. There is no dispute that the hospital demonstration model requires the HSCRC to meet or exceed at-risk revenue in the Medicare program, and JHHS is committed to working with the HSCRC in achieving rational policies toward that end.

Sincerely,



Ed Beranek  
Senior Director of Regulatory Compliance

Cc: Donna Kinzer, Executive Director, HSCRC

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.

Stephen F. Jencks,  
M.D., M.P.H.

Jack C. Keane

Bernadette C. Loftus,  
M.D.

Thomas R. Mullen

**Health Services Cost Review Commission**

4160 Patterson Avenue, Baltimore, Maryland 21215  
Phone: 410-764-2605 · Fax: 410-358-6217  
Toll Free: 1-888-287-3229  
[hsrc.maryland.gov](http://hsrc.maryland.gov)

Donna Kinzer  
Executive Director

Stephen Ports  
Principal Deputy Director  
Policy and Operations

David Romans  
Director  
Payment Reform  
and Innovation

Gerard J. Schmith  
Deputy Director  
Hospital Rate Setting

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

**To:** HSCRC Commissioners

**From:** Claudine Williams, Associate Director, Policy Analysis

**Re:** Modifications to the Draft Recommendation for NSPII Outcome Evaluation FY 2006-  
FY2015 and Recommendations for Future Funding

**Date:** January 7, 2015

---

This is to advise the Commissioners of the most recent changes to the NSP II Outcomes Evaluation and Recommendations for Future Funding based on inquiries made by the Commissioners. Please note the following changes:

- Data from the MBON was replaced with data from HRSA regarding nurse workforce supply and demand. HRSA is considered a more reliable source of healthcare workforce data (Pages 3 and 23).
- Language was added to highlight the importance of subsidizing nurse faculty (Page 5, first paragraph). In addition, salary data comparing nurse faculty to clinical nurses was added to illustrate the discrepancy (Page 9).
- Chart 3 and 4 were added to illustrate trends in graduate degree production between 2006-2013 (Pages 10-11). These tables were missing in the draft report.
- Data comparing National and Maryland growth in RN supply between 2000-2012 (Pages 15-16) and data comparing National and Maryland growth in nurse graduates between 2008-2013, was added to address questions from Commissioners regarding how Maryland compares to the nation (Pages 13-14).
- Data regarding the change in nursing roles at Maryland hospitals was added to address questions from Commissioners (Pages 19-20).

# 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

January 14, 2015

These recommendations are for Commission action at the January 2015 Public Commission Meeting.

## 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) is 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 or 27% of 20,967 total Maryland 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 indicating

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

- According to the U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA) report released mid December 2014 (after the December 10, 2014 Commission meeting), the Maryland nurse workforce increased 38% between 2008-2012. Nationally, the increase was 28%. Even with these gains, Maryland is one of 16 states projected to have a significant shortfall of RNs by 2025 (HRSA, 2014). HRSA data is generally considered the most reliable available healthcare workforce data for national comparisons.

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 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. We recommend that the Health Services Cost Review Commission consider five actions, regarding the future direction of the NSP II.

1. Renew NSP II funding at 0.1% of hospital regulated gross patient revenue 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, particularly the term "bedside nurses" to ensure that the statute meets the current needs of health care and 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 Health Services Cost Review Commission (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 designed to increase the State's academic capacity to graduate more nursing students, and 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 were 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 supports 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. The shortage of faculty was due, in part, to the significant salary discrepancy between nurses in practice and nurse faculty/educators, and incentives would be necessary to attract clinical nurses to academic positions. 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 numbers of nursing faculty and nursing students.

In 2006, 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 concluded its work 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 Understanding (MOU) 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 purpose of the NSP II to: 1) increase the number of bedside nurses in Maryland hospitals; and 2) expand 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 are also 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 pursue faculty positions in both classroom and/or clinical settings.

### ***Program Sunset and Evaluation Methodology***

New 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 was collected and compiled for all NSP II funded projects for all years of activity where data was 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, or advanced their careers (tenure-track) as faculty by earning a doctorate, 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 members is presently 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 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; i.e. simulation, medication errors, student retention, faculty shortage and teaching modalities which inform best practices in nursing education and clinical practice.

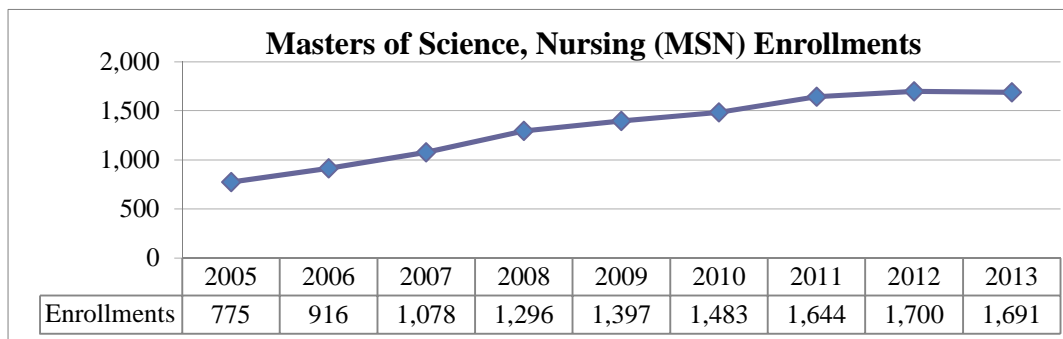
*Hal and Jo Cohen Graduate Nursing Faculty Scholarship and Living Expenses Grant (GNF/LEG).* The GNF and LEG supported registered nurses to enter graduate nursing programs in Maryland and to complete the coursework to be qualified as nurse faculty. The scholarship is contingent upon a service obligation to teach nursing in nursing program 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).

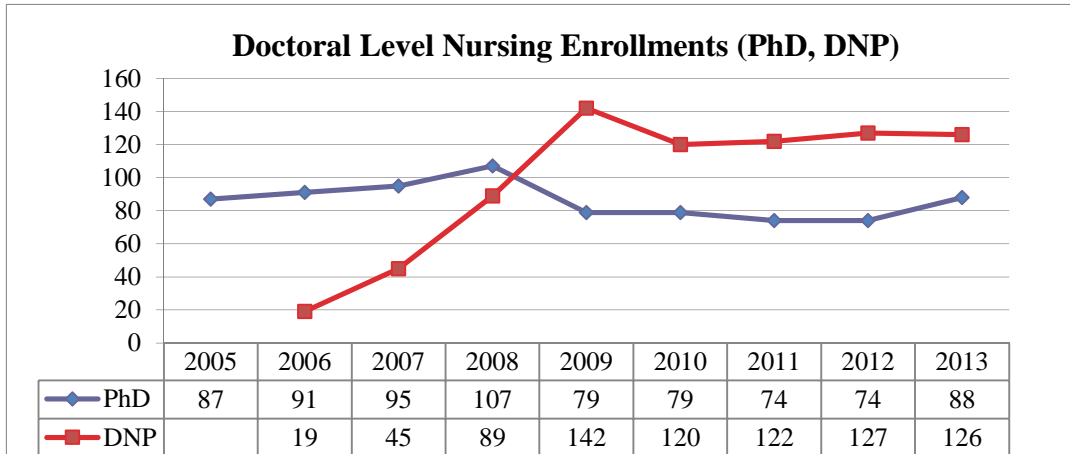
***Post-Nursing Licensure Masters and Doctoral Degree Enrollments***

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 that 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. In Maryland, the median salary for a registered staff nurse is \$71,017, compared to the median salary of \$61,725 for newly hired Assistant Professor in Nursing (Salary.com, 2015). “These glaring discrepancies between clinical salaries and administrative salaries as compared to academic salaries are disincentives for nurses contemplating a move to educator roles,” (HRSA, 2010).

Four new Master’s 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 tables below.



**Chart 1**

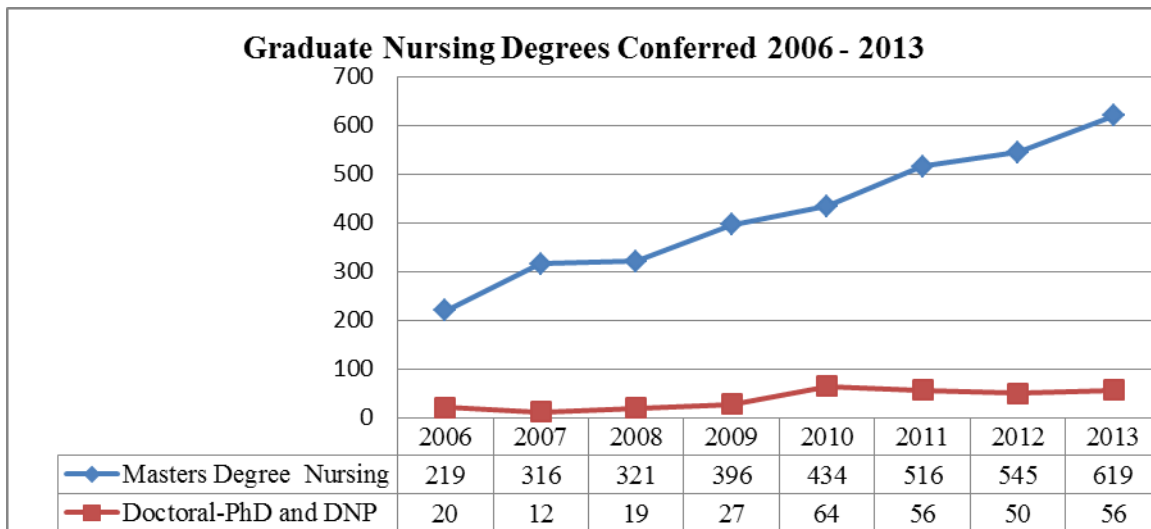


**Chart 2**

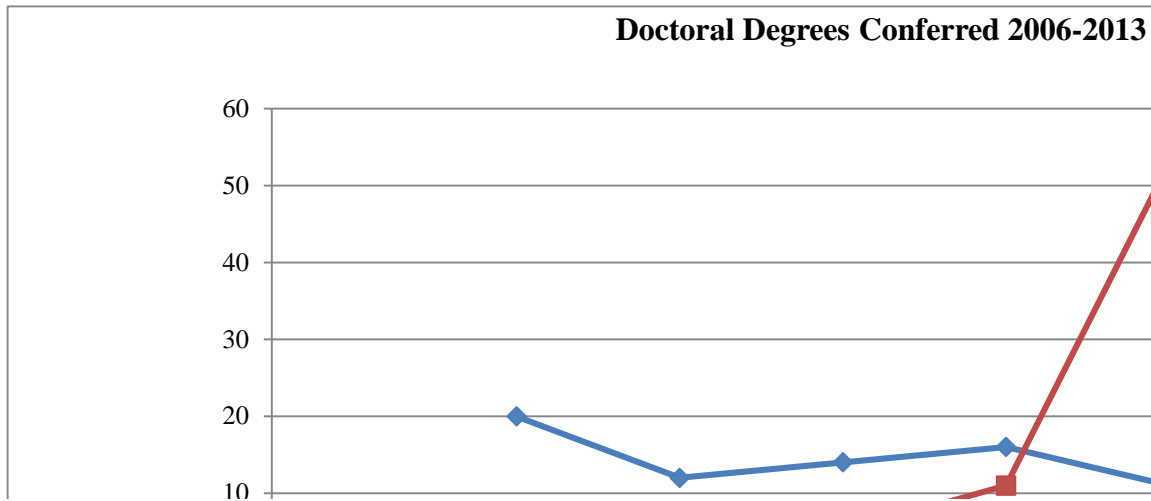
*Source: Maryland Higher Education Commission Enrollment Data System (Charts 1 and 2)*

***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 (Chart 3). Doctoral degree conferment has increased as well (Chart 4). 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.



**Chart 3**

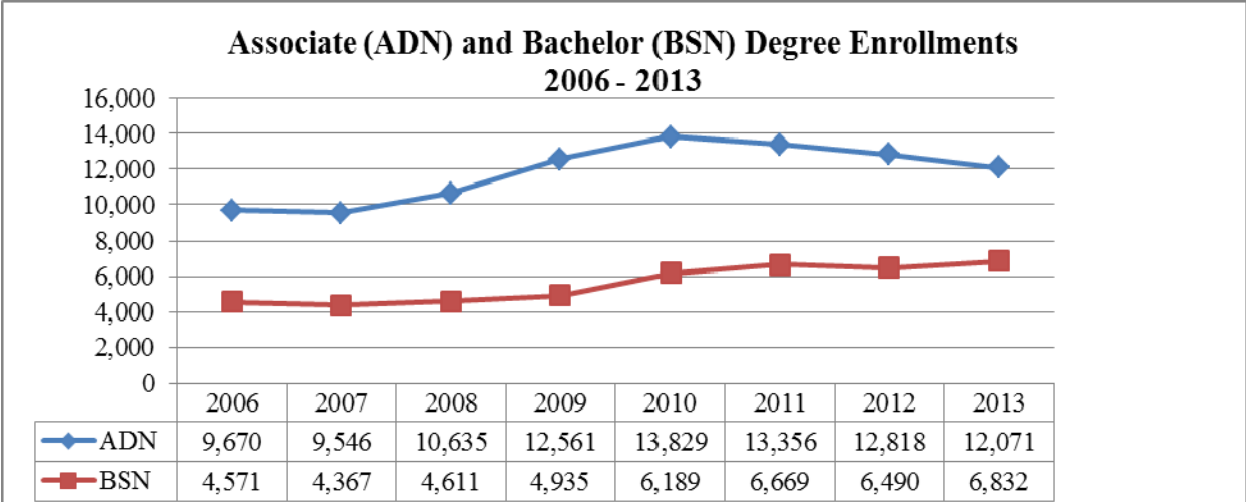


**Chart 4**

Source: Maryland Higher Education Commission Degree Information System (Charts 3 and 4)

***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 (BSNs) 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 gaining 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 two-year degrees. During the same time period, enrollments in BSN programs increased from 4,571 in 2006 to 6,832 in 2013 (67%). After a brief leveling between 2011 and 2012, BSN student enrollments appear to be increasing again.



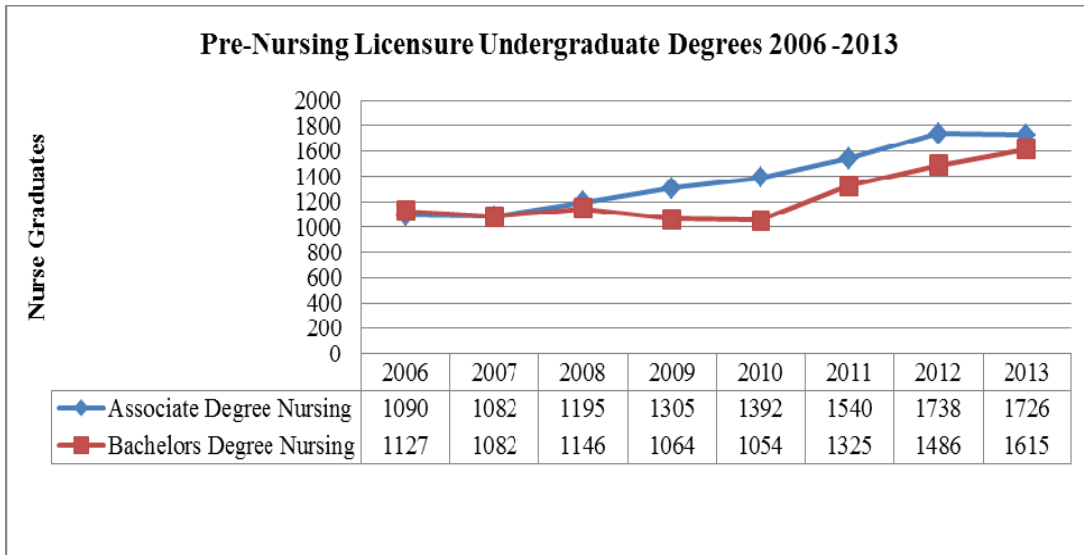
**Chart 5**

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. 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.

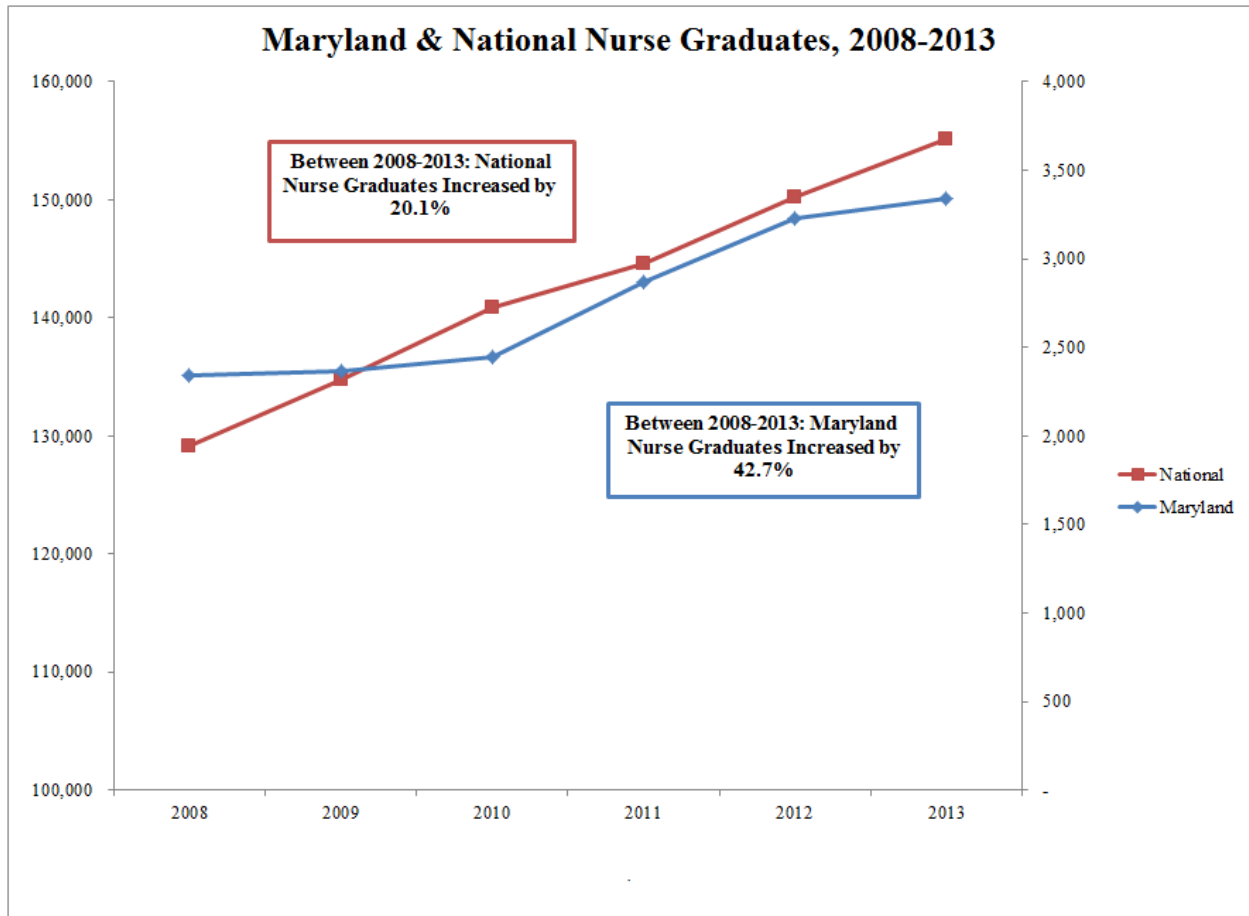




**Chart 6**

*Source: Maryland Higher Education Commission, Degree Information System*

The overall number of nursing graduates in Maryland has increased by 43%, compared to a national increase of 21% between 2008 and 2013 (Chart 7). 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 initiatives, redesigned curriculum options, and new programs.*** This number does not include the number of new students admitted and graduated due to an 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.

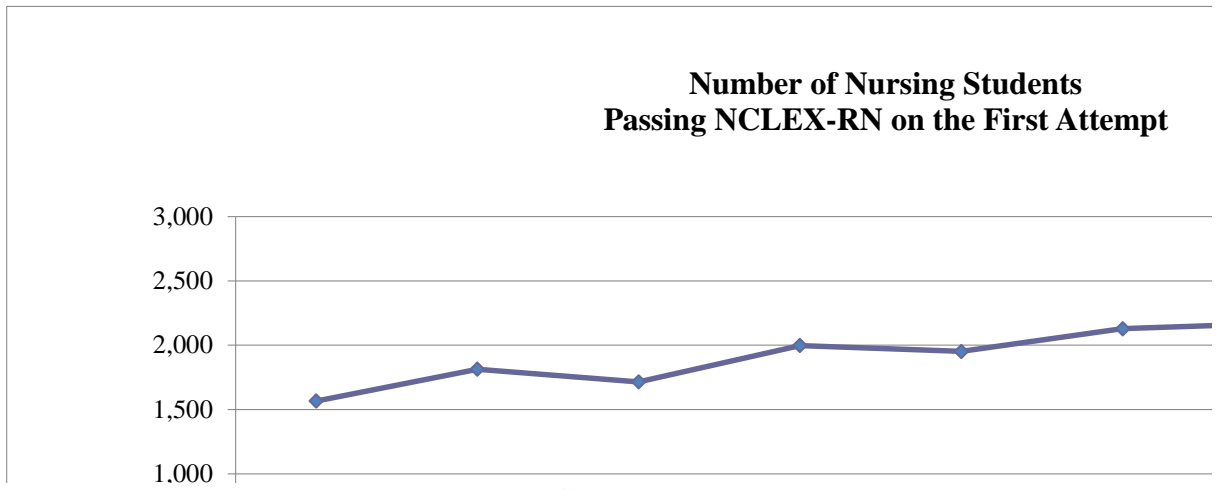


**Chart 7**

Source: Maryland Higher Education Commission Degree Information System. HRSA. (2014). *The Future of the Nursing Workforce: National-and State-Level Projections, 2012-2025*.

***NCLEX Pass Rates***

The number of Maryland nursing graduates passing 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. 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 8**

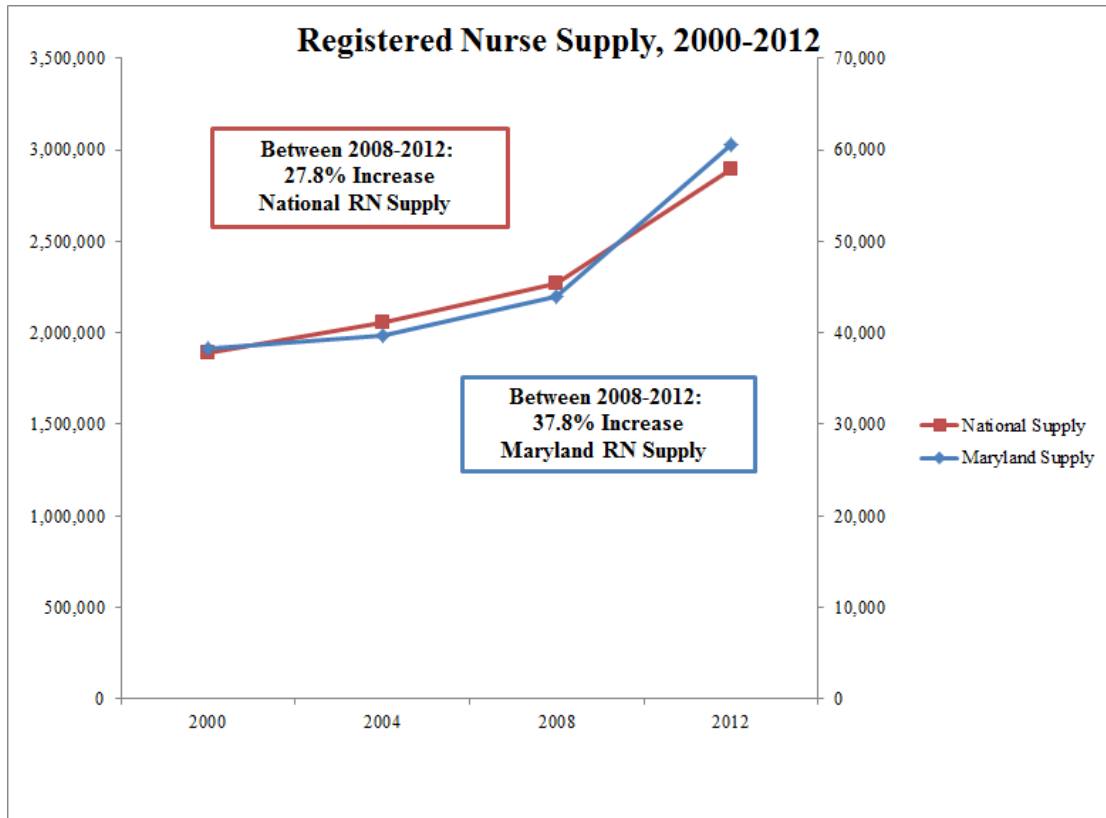
*Source: Maryland Board of Nursing*

***NSP II Impact on 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. 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.

Based on recent HRSA nursing workforce supply data from 2000 through 2012, Maryland's rate of increase between 2008 and 2012 outpaced the national rate of increase in the supply of registered nurses (Chart 9). Nonetheless, Maryland is projected to experience a nursing workforce shortage into 2025 (HRSA, 2014). This suggests that Maryland may have started at a greater workforce deficit than the national average. This data also suggests that

the NSP II investments in expanded academic capacity have contributed to the remarkable growth in not only graduates but the workforce.

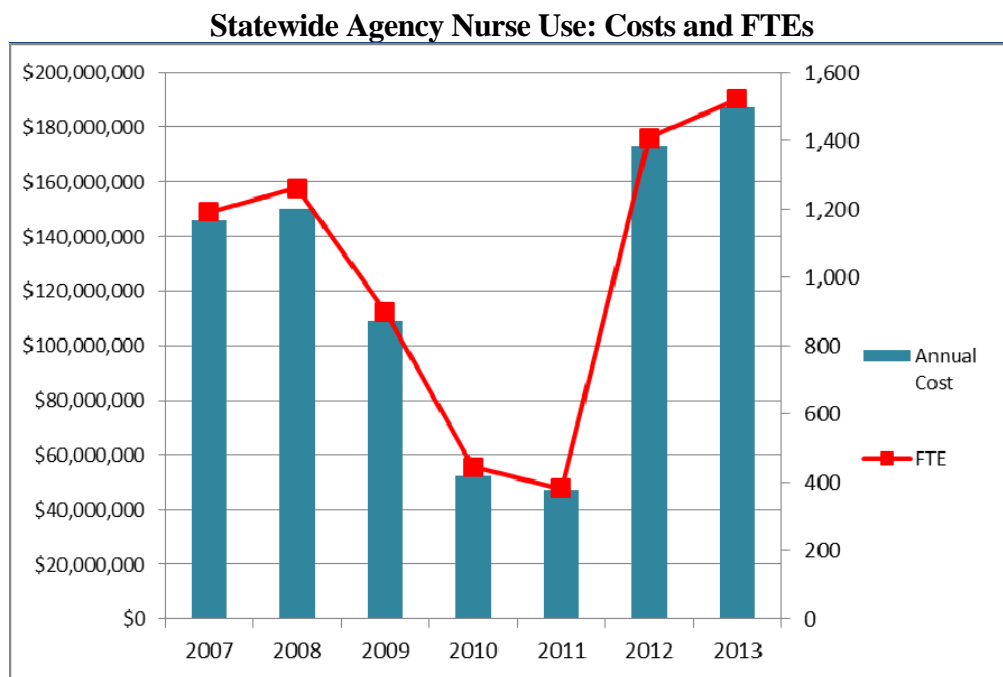


**Chart 9**

Source: HRSA. (2000). *The Registered Nurse Population*, HRSA. (2006-2014). *The Future of the Nursing Workforce: National-and State-Level Projections, 2012-2025*.

*Nurse Vacancy Rates.* In 2002, prior to the NSP II, the Maryland hospital nurse vacancy rate was 15.6%, according to the Maryland Hospital Association Annual Hospital Personnel Survey. By 2007, after the 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 (MHA, 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 (Chart 10).

*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 (HSCRC, 2014). 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 a sharp contrast with 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 (AHA 2012). 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).



**Chart 10**

*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 will 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 insurance coverage to 67,000 Marylanders who previously lacked health insurance; however, this number is expected to grow. This estimate does not include newly eligible Medicaid recipients from the expanded income requirements, or the estimated 90,000 primary adult care eligible citizens that 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 value of services model rather than 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; preventative services and primary care now become key to reducing avoidable utilization. This means that developing strategies that help individuals stay healthy, reduce hospital readmissions, and prevent avoidable adverse outcomes are essential in 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 revisions, 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 2010 release of the IOM report recommending an increase in 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, spend the most time interacting with patients, and are integral to safe discharge planning through identifying specific factors that may require attention within the patient’s home environment. According to a recent survey of hospital nursing executives, over half (N=17/32; 53%) of the respondents plan to create new nursing job classifications in the coming year. The anticipated new roles included hiring of Care Navigator (N=9/14; 64%), Clinical Documentation Specialist

(N=9/14; 64%), Care Coordinator (N=7/14; 50%), and Quality and Patient Safety Specialist (N=7/14; 50%) (MONE Survey, 2015).

*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 nurses' 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 which allow 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. Statistically significant differences were found for overall hospital rating, willingness to recommend the hospital and discharge teaching indicating patients had a better experience at a hospital with Magnet designation.



**Table 1**

<b>Patient Experience of Care Measures CY 2012</b>	<b>Magnet Hospitals</b>	<b>Non-Magnet Hospitals</b>	<b>Difference</b>
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%
<b>Notes:</b>			
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 to continue this successful program.

*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 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 25<sup>th</sup> 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).
5. Maryland is one of the sixteen states projected to experience a smaller growth in RN supply relative to state-specific demand, resulting in a shortage of RNs by 2025 (Table 2). Maryland is the only state within the neighboring geographic states of Delaware, Virginia, West Virginia, and Pennsylvania expected to see large declines in the adequacy of the RN workforce.” (HRSA, December, 2014).

**Table 2: Statewide Current and Projected Nursing Supply and Demand**

<i>State</i>	<b>2012</b>	<b>2025 Projected</b>		
	<i>Supply &amp; Demand</i>	<i>Demand</i>	<i>Supply</i>	<i>Difference</i>
<b>Maryland</b>	60,600	72,000	59,900	<b>-12,100</b>
Virginia	69,900	87,300	106,700	+19,400
Pennsylvania	145,000	152,600	178,400	+25,800
Delaware	10,600	12,500	16,200	+3,700
West Virginia	20,600	21,100	29,000	+7,900
<b>US</b>	2,897,000	3,509,000	3,849,000	+ 340,000

*Source: HRSA (2014). The Future of the Nursing Workforce: National and State Level Projections, 2012-2025*  
*Notes: Projections assume demand and supply are equal in 2012 and nurses remain in their state of training.*

## STAFF RECOMMENDATIONS FOR THE NSP II GOING FORWARD

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

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. This goal has 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.

Even so, with today's healthcare 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 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 education programs. Therefore, MHEC and HSCRC jointly propose to renew the NSP II funding at 0.1% of hospital regulated gross patient revenue for five years, FY 2016 through FY 2020, with the following recommendations.

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

Assuming a renewal for the 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, as noted in the previous sections, 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 Institutes of Medicine (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 80% BSN 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. 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. A broad goal is ensuring at least 10% of all BSN graduates matriculate into a master’s or doctoral level program within five years of graduation. 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 nursing faculty members 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. Healthcare 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 to identify 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 purchase 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, 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 alter its nurse workforce to meet these new demands. During the course of this evaluation, it became clearly 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 was 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, DLLR 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.

## REFERENCES

- American Hospital Association (2012). AHA Annual Survey. Received September, 2014.
- Allan, J., Crowley, C., Ports, S., & Aldebron, J. (2010). Developing a statewide solution to the faculty shortage in Maryland. *Journal of Nursing Regulation, 1*(3), 15-19.
- Auerbach, D.I., Staiger, D.O., Muench, U. & Buerhaus, P.I. (2013). The nursing workforce in an era of health reform. *New England Journal of Medicine, 368*(16), 1470-1472. Doi: 10.1056/NEJMMp1301694.
- Governor's Workforce Investment Board (November, 2011). *Preparing Maryland's Workforce for Health Reform: Health Care 2020*. Accessed at <http://www.gwib.maryland.gov/pub/healthreformcare2020.pdf>
- Hajewski, C. & Shirey, M. (2014). Care coordination: a model for the acute care hospital setting. *Journal of Nursing Administration, 44*(11), 577-85.
- Health Services Cost Review Commission, *Maryland's All Payer Hospital Payment System, Executive Summary*, Dr. Hal Cohen. Accessed at [http://www.hsrc.state.md.us/documents/HSCRC\\_PolicyDocumentsReports/GeneralInformation/MarylandAll-PayorHospitalSystem.pdf](http://www.hsrc.state.md.us/documents/HSCRC_PolicyDocumentsReports/GeneralInformation/MarylandAll-PayorHospitalSystem.pdf)
- Health Services Cost Review Commission, Wage and Salary Report 2014.
- Heller, B & Sweeney, D. (2003). *Maryland's Nursing Shortage: A Workforce Crisis*. Center for Health Workforce Development, University of Maryland, Baltimore, M.D. Accessed at <http://www.scribd.com/doc/99152/Nursing-Shortage>
- Institute for Health Care Improvement, *IHI Triple Aim*, Accessed at <http://www.ihc.org/Engage/Initiatives/TripleAim/Pages/default.aspx>
- Institute of Medicine. (2010). *The Future of Nursing: leading change advancing health*. Washington, DC: The National Academies Press.
- Maryland Board of Nursing (2013). NCLEX Pass/Fail Rates by Education Program in the State of Maryland. Accessed at [http://www.mbon.org/education/nclex\\_rn\\_stats\\_fy13.pdf](http://www.mbon.org/education/nclex_rn_stats_fy13.pdf)
- Maryland Department of Labor, Licensing and Regulation, *Healthcare Practitioners and Technical Occupations- Maryland Occupational Projections-2012-2022*. Accessed at <http://www.dllr.state.md.us/lmi/iandoproj/occgroup29.shtml>
- Maryland Higher Education Commission (2014). Nurse Support Program II. Accessed at <http://www.mhec.state.md.us/Grants/NSPII/NSPII.asp>
- Maryland Hospital Association, Annual Hospital Personnel Survey Report, CY 2012.

Maryland Organization of Nurse Executives, Workforce Survey, completed January 5, 2015

Nurse Support Program II Advisory Group, meeting at HSCRC on October 27, 2014, personal communication of members with HSCRC and MHEC staff on nursing data and implications.

Median Salaries for Nursing Positions in Maryland. Salary.com Accessed at

*Sunset Review: Evaluation of the State Board of Nursing* (October, 2011). Maryland Department of Legislative Services, Office of Policy Analysis, Annapolis, Maryland. Accessed at [http://dls.state.md.us/data/polanasubare/polanasubare\\_sunrev/Full-Nursing-2011.pdf](http://dls.state.md.us/data/polanasubare/polanasubare_sunrev/Full-Nursing-2011.pdf)

Salary.com Salary Wizard - Do you know what you're worth? (2015, January 7). Retrieved from <http://swz.salary.com/SalaryWizard/Asst-Professor-Nursing-Salary-Details-Baltimore-MD.aspx?&yearsofexperience=0>

Salary.com Salary Wizard - Do you know what you're worth? (2015, January 7). Retrieved from <http://swz.salary.com/SalaryWizard/Staff-Nurse-RN-Salary-Details-Baltimore-MD.aspx?&yearsofexperience=0>

*The Maryland Nursing Program Capacity Study* (2006) Maryland Higher Education Commission and Maryland Board of Nursing, Report requested by Senate Bill 511. Accessed at <https://www.mhec.state.md.us/publications/nursecapstud1006.pdf>

U.S. Department of Health and Human Services, Health Resources and Services Administration, National Advisory Council on Nurse Education and Practice. *The Impact of the Nursing Faculty Shortage on Nursing Education and Practice*. Rockville, Maryland. 2010. <http://www.hrsa.gov/advisorycommittees/bhpradvisory/nacnep/Reports/ninthreport.pdf>

U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. *The Future of the Nursing Workforce: National- and State-Level Projections, 2012-2025*. Rockville, Maryland, 2014. <http://bhw.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingprojections.pdf>

U.S. Department of Health and Human Services. Health Resources and Services Administration, *The Registered Nurse Population, Findings from the 2008 National Sample Survey of Registered Nurses*, September, 2010, Rockville, Maryland. 2010 <http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyfinal.pdf>

U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis. (2013). *The US Nursing Workforce: Trends in Supply and Education*. Washington, D.C. Accessed at <http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf>



U.S. Department of Health and Human Services (May, 2014). New HHS Data Shows Major Strides Made in Patient Safety, Leading to Improved Care and Savings, Accessed at <http://innovation.cms.gov/Files/reports/patient-safety-results.pdf>

U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, Registered Nurses, 2012-2022. Accessed at <http://www.bls.gov/ooh/healthcare/registered-nurses.htm>

Yakusheva, O., Lindrooth, R. & Weiss, M. (2014). Economic evaluation of the 80% baccalaureate nurse workforce recommendation: a patient-level analysis. *Medical Care*, 52(10), 864-869.



Maryland  
Hospital Association

January 6, 2015

Steve Ports  
Deputy Directory, Policy and Operations  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Mr. Ports:

On behalf of the 64 members of the Maryland Hospital Association (MHA), we appreciate the opportunity to comment in support of the *Nurse Support Program II (NSP II) Outcomes Evaluation FY 2006 – FY 2015 and Recommendations for Future Funding*.

Since its inception, NSP II has positively impacted nursing programs by expanding capacity and supporting student success. MHA's *Who Will Care? Fund for Nurse Education*, established in 2006, shared these goals and worked to double the number of RN graduates in Maryland. Despite these investments and significant achievements, we know that the nursing workforce shortage in Maryland is not fully resolved. According to the Health Resources and Services Administration, Maryland currently ranks 25<sup>th</sup> among states in its per capita RN workforce.

Maryland's modernized waiver committed our hospitals to leading the nation and achieving the elusive Triple Aim of healthier communities, better care, and lower costs. If it is successful, Maryland's system will serve as a model for the nation; accordingly, our investment in the health care professionals who are integral to our success should match our commitment to these goals. We must develop and invest in programs that keep individuals healthy, reduce hospital readmissions, improve patient experience of care, and prevent avoidable complications. We were pleased to see staff's recognition of the need to prepare nurses for work involving population health, including patient centered medical home models, home care, care management, nursing homes, and other care settings.

In order to ensure that the transformation efforts continue to progress, we believe it is necessary to continue to support these vital health care professionals as they work to meet the needs of a dynamic and evolving health care delivery system.

Thank you for the opportunity to comment on this recommendation. If you have any questions, please contact me.

Sincerely,

Nicole Dempsey Stallings  
Vice President, Policy & Data Analytics



December 23, 2014

Mr. John Colmers, Chairman  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21250

Dear Mr. Colmers,

We are writing to offer the Maryland Nurses Association's (MNA) full support for the continuation of the Nurse Support Program II that focuses on increased capacity in nursing education programs across Maryland. Over the last several years, NSP II programs and initiatives in Maryland have led to increased numbers of nursing faculty receiving grants to continue their education, expansion of programs to prepare clinical instructors and preceptors for the Associate and Baccalaureate nursing programs, as well as to provide opportunities for many registered nurses to advance their educations. Additionally, these funds have provided new registered nurses to healthcare facilities to expand the nursing workforce in the state.

Consistent with the 2010 Institute of Medicine Report, *The Future of Nursing: Leading Change, Advancing Health*, NSP II funding has allowed Maryland nursing programs to focus on one of the key initiatives related to "Registered Nurses achieving higher levels of education and training through an improved education system that promotes seamless academic progression." There were several NSP II grants funded to expand Registered Nurse to Bachelors of Science in Nursing (RNBSN) programs across the state to help attain the goal of 80% BSN nurses in the United States by 2020. This is an excellent example of the seamless academic progression cited in the IOM report.

Because MNA advocates for all registered nurses in Maryland, and members represent many practice settings, including acute care and academic settings, continuation of this NSP II funding is very important to our practice and education. Through these funds, registered nurses in Maryland can continue to advance their education, and expand the pipeline for clinical instructors and nursing faculty needed to ensure that Maryland has sufficient registered nurses. With the many changes in the healthcare delivery system, well prepared, educated registered nurses are crucial to ensuring the health and wellness of the citizens of Maryland. For this reason, the Maryland Nurses Association strongly endorses the renewed funding for the Nurse Support Program II.

Sincerely,

A handwritten signature in black ink that reads "Janice J. Hoffman".

Janice J. Hoffman, RN, PhD, ANEF  
President

A handwritten signature in black ink that reads "Ed Suddath".

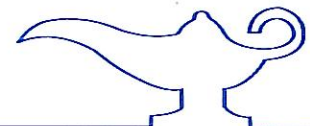
Ed Suddath  
Chief Staff Officer



## Maryland Nurses Association

21 Governor's Court, Suite 195, Baltimore, Maryland 21244-2721

Phone: 410-944-5800, Fax: 410-944-5802, Email: [info@marylandrn.org](mailto:info@marylandrn.org), Web Site: [www.marylandrn.org](http://www.marylandrn.org)





December 22, 2014

John Colmers  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215

Mr. Colmers:

Washington Adventist University (WAU) is a proud recipient of Nurse Support Program II (NSP II) funding. Funding from this program has enabled WAU to increase the number and diversity of didactic and clinical faculty, as well as the number and diversity of nursing graduates. Programmatic funding resulted in a partnership between the University and Dimensions Healthcare System and Doctor's Community Hospital.

WAU writes this letter in support of the continuation of the Nurse Support Program. Since 1904, the nursing program at Washington Adventist University (formerly Columbia Union College) has delivered undergraduate nursing instruction. NSP II Program funding has allowed the institution to:

1. increase the qualifications of beside RNs
2. provide mentoring support and financial assistance to RNs enrolled in both BSN and MSN programs, and
3. increase the number of didactic and/or clinical nursing faculty

As a grant recipient that has benefited significantly from NSP II funding, it is difficult to imagine the impact of a lack of funding to the NSP II program. Funding through this program has enabled programs, such as ours to help address the nursing shortage in the State of Maryland. It is our hope that funding support will continue for the Nurse Support Program II so that nursing programs throughout the State of Maryland will have the opportunity to shape the future of the nursing workforce.

*Karen Benn Marshall*

Karen Benn Marshall, Ed.D.  
Dean, School of Health Professions, Science and Wellness

*Gateway to Service*



January 5, 2015

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

Dear Mr. Colmers,

I am submitting a letter of support for NSP II funding for Maryland Nursing Programs. I am the Director of the Nursing Program at Allegany College of Maryland in rural Western Maryland. I would like to express appreciation for funding that our program has received in the past and support any future funding that may be possible.

I would like to relay some specific NSP II grant funds provided to our school and what was accomplished with these monies:

- NSP II-09-101, "Creating qualified Bedside Nurses in Western Md to Serve the Entire State" resulted in a new location of our nursing program being established in Garrett County, Md to admit and graduate 20 students every other year. The grant funded the start-up costs of the program, including faculty positions. The first class was admitted in Spring 2009 and graduated in 2010. This program continues with two subsequent graduating classes in 2012 and another class just completing December 2014.

Also with this grant the evening nursing program at the main campus location was expanded from an enrollment of 20 to 40 students from 2009 until 2013. Additional monies from this grant also purchased simulation manikins and equipment for the Cumberland main campus and the Garrett location of the nursing program. A computer lab of laptops was purchased for the Garrett location. Three Metro Mobile medication carts were purchased to train students in the use of barcode technology for safe medication administration and to do electronic documentation for medication administration.

This grant also helped establish a Retention and Success Coordinator to provide support and professional tutoring for nursing students in the program. This grant increased the number of nurses entering the workforce in Maryland. The educational resources provided by this grant have helped with the retention and graduation of nursing students and NCLEX pass rates that exceed the national norm.

- NSP II-10-102, "Creating a Smart Learning Environment to Retain Nursing Students"

Monies from this grant resulted in the addition of 4 Smart Classrooms at the main Campus of the Nursing Program in Cumberland. This provided increased availability of tools to utilize to teach in the classroom. Ready access to various multimedia devices, computer software and the internet enhanced the learning opportunities for students. Interactive equipment allowing audience response became available, as well as electronic learning in the classroom via case studies to do clinical simulation. Grant monies were also utilized to obtain a subscription for faculty development to over 70 archived webinars to aid in classroom and clinical instruction.
- NSP II-10-103, "Enhancing Nursing Retention through Tutoring: A Rural/Urban Project"

Grant monies were utilized to Provide students access to a an online service, "Smarthinking", to provide a broad level of tutoring support to all students at every site of the program. The services were available online to promote student retention and success.
- NSP II-12-101, "Creating a Smart Learning Environment to Rural Garrett County and Enhancing the Gatekeeper Courses Through Smart Learning to Strengthen the Pipeline of Nursing Students as well as Retain Students Already Enrolled in the Nursing Program"

This grant primarily provided Smart Classroom technology to enhance the success rate in science courses and to provide a Smart Classroom at the Garrett County Location of the nursing program. The Smart Classrooms allowed the instructor to conduct class sessions using multiple typed of multimedia from the podium in the classroom. It was equipped with a computer, internet access and audiovisual equipment (DVD's, Power point presentations, document camera, smart board, etc). It allowed for interactive displays and audience response tools. Faculty training was provided on the use of the Smart Classrooms. Electronic resources were purchases and added to classroom instruction and available for student use outside the classroom to develop clinical reasoning with students. Some monies were utilized to provide a consultant to help prepare faculty for our 2013 nursing accreditation site visit. This contributed to a successful national accreditation visit granting our program 8 years of reaccreditation by the Accreditation Commission for Education in Nursing (ACEN).
- NSP II- "Creating an Online LPN to RN Program"

This grant provides a quality online program for Licensed Practical Nurses that meet the needs of those who wish to further their education, despite work schedule, family responsibilities and rural and/or urban localities. The program provides a two to three semester program to help ensure more qualified Registered Nurses enter the workforce. This program has been fully developed and is slowly increasing in enrollment, as interested applicants progress towards meeting the prerequisite requirements for entry into the program. This grant is in its final year ending in 2015.

- NSP II- "New Nurse Faculty Fellowship Awards"

Our school has had the benefit of 4 of our new nursing faculty to receive the "New Nurse Faculty Fellowship Awards". This award has helped address the need for hiring and retaining qualified nursing faculty to teach in our program. This has been a tremendous benefit to help in providing adequate staffing for our program in a rural area with few Masters prepared nurses.

- NSP II-"Nurse Managed Wellness Center in Rural Western Maryland"

The newest grant received in July 2014 is an initiative to establish an innovative clinical experience for nursing students to focus on wellness, disease prevention and health promotion. As a result of project funding, Allegany College of Maryland will establish a Nurse Managed Wellness Center. The undergraduate nursing students will be better prepared for the expanding role of the nurse in a changing healthcare environment through innovative wellness based clinical opportunities. The student will see positive role modeling of the Advanced Practice Registered Nurse. These experiences will better prepare the students to meet the demands of the current health care environment and enter the Maryland workforce to serve hospitals and the community. Currently, the Wellness Center is in the stage of securing a physical space, hiring personnel and establishing policies and procedures. Clinical experiences and services are projected to start this spring 2015 semester.

Thus, it is with much gratitude that I send this letter. The grant monies provided over the past several years have greatly enhanced the educational experience and opportunities that our students have been able to receive. It has greatly improved the teaching/learning experience. Expanded programs, new programs, technology training and equipment, and new wellness focused learning experiences are but some of the enhancements we have had the good fortune to receive. This has helped us retain and graduate more nursing students and better prepare qualified nurses to serve our community in Western Maryland. I fully support any future funding opportunities that may be made available to nursing schools in order to provide quality nursing education and have qualified faculty to provide this education.

Sincerely,

*Debbie Costello, MSN, RN*

Debbie Costello  
Director of Nursing Education  
Allegany College of Maryland  
12401 Willowbrook Road  
Cumberland, Md 21502  
301-784-5574



One Seahawk Drive | North East, MD 21901 | 410-287-6060 | Fax: 410-287-1026 | [www.cecil.edu](http://www.cecil.edu)

---

December 8, 2014

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

Dear Mr. Colmers:

I would like to thank the Health Services Cost Review Commission and the Maryland Higher Education for the funding support provided to the nursing students at Cecil College through the Nurse Support Program II (NSPII). The NSP II funding provided to Cecil College has facilitated the development and implementation of several initiatives designed to support nursing students in their studies. Please accept this letter on behalf of the nursing program at Cecil College as endorsement for continuation of the NSP II program and funding.

The NSP II funding that Cecil College received has enabled Cecil to develop a comprehensive retention and remediation program for our nursing students, designed to increase retention and graduate more competent and well-prepared nurses. Below is a brief list of the initiatives made possible by NSP II funding:

- a remediation and retention coordinator was hired to support student learning
- the development of a supplemental instruction program to assist students in developing the studying and critical thinking tools necessary for success in nursing
- the initiation of a mentoring and tutoring program lead by recent Cecil College graduates
- the development and implementation of a Preparing for Academic Success Seminar for newly admitted nursing students
- the development of online supplemental instruction modules for all semesters of the nursing program

If this funding had not been available to Cecil College, many of these initiatives would not have been possible. Again, I fully support the continued funding of this unique program that helps to meet Maryland's workforce and health care needs. Thank you for this opportunity.

Sincerely,

A handwritten signature in blue ink that reads 'Christy Dryer'.

Christy Dryer, DNP, RN, CNE  
Dean of Nursing and Health Professions  
Cecil College





10901 Little Patuxent Pkwy.  
Columbia, MD 21044-3197  
443-518-1000  
MD Relay – 711

[www.howardcc.edu](http://www.howardcc.edu)

January 5, 2015

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

Dear Mr. Colmers,

I am writing today to express my support of continued funding for NSPII through FY2020. The NSP II grants have been instrumental in the development of pathways for academic progression and increasing the number of registered nurses in Maryland. The Nurse Education Program at Howard Community College is a recipient of a competitive institutional grant to develop a Military to Associate Degree Nursing Pathway Sequence. This project is designed to increase the number of registered nurses at the bedside by creating a Military to ADN Pathway Sequence that capitalizes on the healthcare training and vast experiences of the medics and corpsmen. This initiative is projected to increase enrollment into the associate degree nursing program by up to 16 students annually. Continued funding will help nurse educators to offer nursing programs that meet the needs of the community and provide for an educated workforce.

Thank you.

Sincerely,

Patricia A. Sipe, RN, M.Ed., CNE  
Director, Nurse Education Program  
Professor, Nursing  
Howard Community College  
443-518-4985  
[psipe@howardcc.edu](mailto:psipe@howardcc.edu)



NOTRE DAME  
OF MARYLAND  
UNIVERSITY

## SCHOOL OF NURSING

December 23, 2014

DEC 26 '14 11:41

Oscar Ibarra  
Information Management and Program Administration  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Oscar,

I am writing to support the continuation of the NSP grant program. This program has been key for Notre Dame of Maryland School of Nursing School of Nursing.

With the support of the Nurse Support Program II (NSP II), Notre Dame of Maryland University (NDMU) has transformed its nursing programs over the last seven years to meet Maryland's nursing workforce needs. Starting with its first NSP II grant in 2007, *Synergistic Pathways to Address the Nursing Shortage in Maryland*, and continuing through its most recent grant in 2011, NDMU has been awarded three NSP II grants from the Health Services Cost Review Commission (HSCRC) and Maryland Higher Education Commission (MHEC) to expand capacity to educate bedside nurses, and to create educational opportunities for adult nurses. During this time, Notre Dame began a Master of Science in Nursing (MSN) program with concentrations in education and administration in 2008, launched a new entry-level Bachelor of Science in Nursing (BSN) program (with pre-nursing students beginning in fall 2011), and expanded its RN-to-BSN-program to 15 hospital partners throughout Maryland. From the start of the first grant in July 2007 through December 2013, NDMU has achieved the following outcomes as reported in its 2013 Annual Survey to the American Association of Colleges of Nursing .

- An additional **831** RN-to-BSN students have graduated, addressing the Institute of Medicine's goal of 80% of nurses with a BSN degree by 2020. These students are now in the pipeline to apply for MSN programs.
- A total of **201** nurses have graduated with an MSN – 113 of them with a Leadership in Nursing Education concentration – thus partially alleviating the nursing faculty shortage. At least 42% of these graduates are teaching in Maryland Schools of Nursing, allowing them to add additional seats for entry-level programs.
- A total of **94** pre-nursing students and nursing majors were enrolled in a new entry-level BSN program as of December 2013, with the first class of 41 students scheduled to graduate in spring 2015. Most students are expected to graduate, pass the NCLEX, and be eligible for employment as bedside nurses in Maryland hospitals.
- The diversity of NDMU nursing students has increased during this period, as well. In the RN-to-BSN program, nurses from minority backgrounds comprised about 24% of the 291 students (70) enrolled in 2007, while they were more than **35%** of the 506 students (177) in fall 2013. Male students grew from 2% (6) enrolled in the program in 2007 to 7% (36) in 2014. In the entry-level BSN program, **49%** of the first class of 45 junior-level nursing majors in fall 2013 were students from minority backgrounds.

To accommodate the growth, in fall 2013, Notre Dame opened a new 36,500-square-foot building to house the School of Nursing (SON) featuring the Center for Caring with Technology, which includes three state-of-the-art clinical simulation labs. The building was funded in part by public and private grants that leveraged NSP II funding, and has increased NDMU's capacity to prepare nurses for Maryland well into the future.

Despite gains made in the capacity and diversity of Maryland's nursing workforce over the last seven years, there is a continuing need to expand the pipeline of bedside nurses based on projected future demand. At the same time, U.S. policy makers and nursing groups agree that a more diverse nursing workforce is needed nationwide to reduce the health disparities that exist among growing minority populations.

Data collected by the Nurse Support Program II show that new graduate registered nurses in Maryland have increased about 14% from FY 2006 to FY 2013. Over the seven-year period, nursing graduates completing entry-level programs grew from 2,615 new nursing graduates to 3,026 graduates last year (HSCRC, MHEC, 2014). The latest data from Maryland Hospital Association's *Who Will Care?* grant initiative indicate that in the last three years enrollment in Maryland Schools of Nursing entry-level programs jumped more than 17 percent (WWC, 2013).

However, nursing school enrollment at these state schools is not growing at a fast enough pace to meet the projected demand for registered nurses. More retiring "baby boomers," the accelerating acuity of the patient population with more than two chronic conditions, and the implementation of the Affordable Care Act leading to greater numbers of insured patients are cited as among the reasons that nationally have combined to make nursing the top occupation in terms of job growth through 2020 (BLS, 2012). The following figures illuminate the specific need for bedside nurses in Maryland.

- RN employment is projected to grow 22.3% in Maryland between 2008 and 2018 by the Department of Labor, Licensing and Regulation (DLLR, 2010).
- In "Health Care 2020," the Governor's Workforce Investment Board's calls for an increase of up to 25 percent across the board in the state's health care workforce before 2020 to accommodate expanded access to coverage for an estimated 290,000 Marylanders under the Affordable Care Act (GWIB, 2011).
- 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 25<sup>th</sup> among states in its per capita RN workforce with 975.7 RNs per 100,000 population (HRSA, 2013).

In addition, Maryland's nursing workforce does not reflect the state's minority population. Ethnic and racial minority groups comprise more than one third (36%) of the state's population in 2010, but less than 30% of the baccalaureate nursing graduates were from minority groups (MHCRC, 2010). The *Who Will Care?* data indicate that there have been modest increases in enrollment of minorities in state schools of nursing since then (WWC, 2013).

Finally, these grants have been essential to helping faculty transition from a high paying clinical career to a lower salary in academia. Twelve faculty have benefitted from this program with another three being approved for funding this year. It has made a big difference as we deal with the nursing faculty shortage. Our students are also able to obtain their MSN in Leadership in Nursing Education with numerous students accepted into the MHEC scholarship program. At Notre Dame we call them MHEC scholars and have a special program to mentor them into faculty roles.

I am grateful for the support NSP grants has given to the faculty, students, the School of Nursing, and to the nursing profession in the state of Maryland. Without these funds, we would not be able to do what we do every day.

Sincerely,



Katharine C. Cook, PhD, RN  
Dean  
School of Nursing



# Anne Arundel Community College

101 College Parkway Arnold, Maryland 21012-1895 410-777-AACC (2222)

January 7, 2015

John Colmers, Chairman, HSCRC  
4160 Patterson Avenue  
Baltimore, MD

Dear Mr. Colmers,

Anne Arundel Community College would like to express its ongoing support for the NSP II program. Thanks to the previous grants received, the nursing program has been able to expand its simulation capabilities and retention initiatives to assist students in their success. We have increased our enrollments over the last 8 years by 42% and the grants received have enabled us to continue our success as demonstrated by our high NCLEX pass rates and improving graduation rates.

Anne Arundel Community College is committed to educating nurses for the future of Maryland's health and we feel that continuation of the NSP II program provides institutions with funds to expand and improve our capabilities.

Sincerely,

Beth Batturs Martin, RN, MSN  
Director of Nursing and Healthcare Initiatives  
Anne Arundel Community College  
101 College Parkway  
Arnold, MD 21012  
[babatturs@aacc.edu](mailto:babatturs@aacc.edu)  
410-777-7352

December 6, 2014

To: Mr. John Colmers, Chairman Health Services Cost Review Commission (HSCRC)

From: Judith E. Stetson, Ph.D., RN. Director of Chesapeake College/MGW Nursing

Re: Support for Continuation of Nurse Support Program II (NSP II)

I am writing in full support of continuing the efforts made possible through the HSCRC Nurse Support II Program (NSP II). These funds have had a major positive impact on the entire nursing community at state and local levels. As Director of Nursing at a small community college serving five counties on the eastern mid-shore region of Maryland, I welcome the opportunity to share specifically how the generous funding has benefited our program.

Funding provided a full time retention specialist and many resources to support student success. For example, funds were utilized to purchase a software package developed by Unbound Medicine to place information related to pharmacology, illnesses, signs and symptoms, teaching plans and the latest research literally at the students' fingertips. The program also flagged essential information that students could expect to find on the NCLEX exam. The program provided students with an excellent resource to acquire, manage and share essential nursing knowledge. Retention rates in the program improved from 50% to 76% over the five year period of the grant. NCLEX first time pass rates over the period of the grant were stable between 90% and 97.6%.

Equally significant is the positive impact NSP II funds have had on our nursing faculty. We have a total of 9 full – time nursing faculty. Over the course of the grant period, six full-time nursing faculty received “New Nurse Faculty Fellowships.” The purpose of that funding was to recruit talented young nurses into the educator role and off-set the large number of nurse educators near retirement age. The average age of nursing faculty at Chesapeake College has decreased while ethnic diversity among our faculty has increased. In addition, NSP II funds have made it possible for four of our full time faculty to pursue their education at the doctoral level. Currently, two of the nine full-time nursing faculty have earned doctoral degrees. In the next two years, it is projected that six of our nine full time faculty (66%) will be prepared at the doctoral level. This academic progression significantly benefits the particular individual, the entire profession and most importantly, health care in the global community.

In summary, the efforts of NSP II are timely and visionary. I fully support continuing this initiative, and offer support on behalf of the entire Chesapeake College/MGW Nursing Program. Chesapeake College highly values the partnership we shared with NSP II, and deeply appreciates the many benefits these funds have provided our students and our program.



11400 Robinwood Drive • Hagerstown, Maryland 21742-6590 • 240-500-2233

*Office of the President*

January 6, 2015

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

Dear Mr. Colmers:

As our Nurse Support Grant (NSP) II project director, Karen Hammond, has already expressed, it is our pleasure to write a letter in support of the NSP II grant program, so much so that we have decided to submit not one, but two, letters. Through four NSP grants (a total of \$3.2 million) awarded to Hagerstown Community College (HCC), the first in 2007 and the latest in 2013, we have successfully bolstered our efforts to provide our Appalachian region with increased opportunity for nursing workforce training.

As Ms. Hammond noted, we have nearly tripled the number of students enrolled in our nursing programs since 2007, when we received our first NSP grant, and we have also instituted programs, with NSP support, designed to increase student retention and completion rates, all the while maintaining NCLEX scores that are consistently among the highest in the state. In addition, we have enhanced our nursing simulation lab and, most recently, established a new program to assist students in making an accelerated transition from the associate's degree in nursing (ADN) to bachelor of science in nursing (BSN) programs.

The impact of the NSP grants managed by HCC has not been limited to our region, however. NSP II funding also allowed HCC to start the first-ever Maryland Community College Simulation Users' Network (MCCSUN), a group that has remained sustainable after the end of the original start-up grant and includes not only community college, but also university members. As noted above, NSP II funding is also being used to accelerate students' attainment of BSN degrees, which is directly in line with statewide goals. We will share lessons learned from our new ADN to BSN program with other colleges, thereby further leveraging NSP II's investment in that effort.

We strongly support your request for additional years of NSP II funding as a sound investment that will continue to help our state achieve its goals for nursing workforce development.

Sincerely,

Guy Altieri, Ed.D.  
President



Harford Community College  
401 Thomas Run Road • Bel Air, Maryland 21015  
410-836-4000 • 410-879-8920 • www.harford.edu

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, MS, RN  
Dean, Nursing and Allied Health Professions





# MedStar Franklin Square Medical Center

9000 Franklin Square Dr.  
Baltimore, MD 21237  
443-777-6419 **PHONE**  
443-777-7904 **FAX**  
[www.MedStarFranklin.org](http://www.MedStarFranklin.org)

**Larry Strassner, PhD, RN, FACHE, NEA-BC**  
**Senior Vice President, Operations**  
**Chief Nursing Officer**

January 5, 2015

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

Dear Mr. Colmers:

The Nurse Support Program has been instrumental in preparing Maryland's registered nurses and positively impacting the needs of hospitals for nursing leaders. MedStar Franklin Square Medical Center (MFSMC) has directly benefited from this grant.

In partnership with the University of Maryland School of Nursing, we collaborated on a grant to advance the professional nursing workforce through degree advancement and the creation of clinical instructors. Through this program 29 nurses graduated with master's degrees and as clinical instructors which enabled us to increase student nurse clinical experiences at our hospital by 36%. Not only has the NSP II grant assisted our nurses to obtain advanced degrees, our nursing students and patients have also been the benefactors.

We strongly endorse the continuation of the NSP II programs. With the changing dynamics of Maryland health care, renewal of the funding for the Nurse Support Program II will provide critical support during a time of transition.

Sincerely,

Larry Strassner, PhD, FACHE, RN, NEA-BC  
Senior Vice President Operations and Chief Nursing Officer



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,

A handwritten signature in cursive script that reads "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  
Fax: 240-567-5527  
Email: [Barbara.Nubile@montgomerycollege.edu](mailto:Barbara.Nubile@montgomerycollege.edu)



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 2<sup>nd</sup> 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

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,

A handwritten signature in red ink that reads "Lisa A. Seldomridge".

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

CC: [Oscar.Ibarra@maryland.gov](mailto:Oscar.Ibarra@maryland.gov).

— SCHOOL of the SCIENCES —  
**STEVENSON**  
U N I V E R S I T Y  
Department of Nursing

December 5, 2014

Mr. John Colmers  
HSCRC, Chairman  
4160 Patterson Avenue  
Baltimore, MD 21215

Dear Mr. Colmers,

Stevenson University strongly supports the continuation of the Nurse Support II Program. These funds have greatly benefitted our nursing program in a number of ways. First, we have been able to increase the number of students enrolled in the nursing major ultimately contributing to one of the NSP II goals of increasing the number of bedside nurses in our Maryland hospitals. Second, the funds have allowed us to establish unique and valuable partnerships within the hospital community by setting mutual goals for increasing simulation learning opportunities for our students and hospital employees alike. In a time of very scarce clinically-based resources, simulation has proven to be an invaluable tool which supports and encourages enrollment and retention of students in nursing programs.

In addition to scarce clinical resources that nursing programs experience, there remains a huge need for nursing faculty and for practicing Registered Nurses at the bedside for years to come. The Bureau of Labor and Statistics' Employment Projections, 2012-2022 quotes the need for 525,000 replacement nurses in the workforce bringing the total number of job openings for nurses due to growth and replacement to 1.05 million by 2022. (<http://www.bis.gov/news.release/ecopro.t08.htm>) Continuation of NSP II would play a major role in helping us realize this goal.

We appreciate very much the opportunities NSP II have afforded Stevenson University thus far, and sincerely hope that our successes can be furthered by continuation of NSP II funding.

Warm Regards,



Ellen R. Clayton, RN, MS  
Interim Department Chair, Nursing  
Instructor and Course Chair, Community Health Nursing; Leadership Practicum  
Stevenson University (443-334-2558)

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.

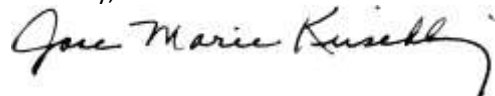
It appears that although the NSP II grants were originally conceptualizing bedside nursing to hospital based nursing, there is now an opportunity to potentially broaden future funding to go across the care continuum, from population/community to ambulatory to hospital to nursing homes and beyond.

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 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





## UNIVERSITY OF MARYLAND

December 3, 2014

Mr. John Colmers  
Chairman  
Health Services Cost Review Commission  
4160 Patterson Ave.  
Baltimore, MD 21215

Dear Mr. Colmers:

I am writing to support the continuation of the Nurse Support Program II which has encouraged new and innovative approaches to address the challenges and demands facing the nursing profession. The program has been important in meeting the needs of hospitals for nursing professionals and schools of nursing for educational capacity through faculty development to ensure qualified bedside nurses.

As Project Directors at the University of Maryland School of Nursing who have received several NSP II grants, we have been able to partner with 13 Maryland hospitals to identify, mentor and graduate more than 165 nurses as hospital based Master's prepared clinical instructors. Additional nurses are currently in the pipeline for this preparation as well. By increasing the availability of clinical instructors, schools of nursing in the State of Maryland have been able to increase their enrollments due to greater availability of clinical access. This would not have been possible without the support of the Nurse Support Program II grants.

Continuation of the the NSP II initiative through the Health Services Cost Review Commission will further generate innovations in the preparation of nurses to meet health care organization needs in the coming years. The continuation of significant changes in health care delivery will demand forward thinking in the preparation and utilization of nurses, a goal that can be advanced through renewed funding of the Nurse Support Program II.

Sincerely:

A handwritten signature in cursive script that reads "Mary Etta Mills".

Mary Etta Mills, RN, ScD, NEA-BC, FAAN  
Professor

A handwritten signature in cursive script that reads "Linda J. Hickman".

Linda J. Hickman, RN, PhD  
Assistant Professor

Cc: Peggy Daw, MHEC



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,

A handwritten signature in blue ink, appearing to read "Jay Perman". The signature is fluid and cursive, with a large loop at the end.

Jay A. Perman, MD

**WOR-WIC**  
COMMUNITY COLLEGE

32000 CAMPUS DR  
SALISBURY MD 21804  
PHONE: (410) 334-2800  
www.worwic.edu

BOARD OF TRUSTEES

Russell W. Blake

D. Gary Boggs

Andrew W. Booth

Morgan Hazel

Velda E. Henry

William H. Kerbin

Martin T. Neat

PRESIDENT

Dr. Murray K. Hoy

January 6, 2015

Mr. John Colmers  
Chairman, HSCRC  
4160 Paterson Ave.  
Baltimore, MD 21215

Dear Mr. Colmers,

My employer, Wor-Wic Community College, and I are recipients of a NSP II grant. I became the Retention and Success Coordinator for the Department of Nursing here in our associate of science degree in nursing (ADN) program in the fall of 2013. The Nursing Department is not the only benefactor of this grant. Our students are the real benefactors. We live in a rural area that is in great economic turmoil as many of our neighbors and others in our community have lost businesses and jobs. Our Mission and Value statements say that we will help those in our area to, not only gain entrance to our College, but be able to help them carry their goals to completion. This gives our tri-county area, which has three local Hospitals and numerous long term care facilities, a reliable pool of highly qualified Wor-Wic Community College (WWCC) ADN graduates from which to employ. The majority of our students remain in the local tri-county area of the Lower Eastern Shore of Maryland after graduation, acquiring employment in local healthcare facilities.

Many of our nursing students need the extra services that this grant has allowed the college to provide. The average age of a Wor-Wic Community College student is 26. Many students are already in the work force and bear responsibilities associated with paying for expenses and bills and caring for children and or family members. Students in these circumstances have multiple stressors upon them, as well as, the fast paced and difficult nursing curriculum. They need the extra guidance, interventions and study programs that have been afforded by the NSP II grant. Many of them have waited years to fulfill their dream of becoming a nurse. As one of my many roles as the Nursing Retention and Success Specialist, I provide one on one advisement that can be used to determine the learning and study habits of the student and assess the needs they have to succeed in our program. Peer Assisted Study Sessions (PASS) are held throughout the week in the nursing courses. These are study sessions similar to the Supplemental Instruction (SI) model in which a higher level student and I interact with the group to augment effective and successful studying strategies to help students review material and create new ways of applying the newly learned material. These sessions have a 75-95% course pass rate for those who attend, depending on the number of times they choose to participate. Currently the expenses of the implementation of the PASS program are being funded via another grant, which will mature in June 2016.

The atmosphere and structure of healthcare is changing rapidly, as you well know! We must prepare our students as future nurses who to be able to successfully thrive in

this rapidly evolving industry. Community care, such as home health, outpatient services and sub-acute facilities seem to be the future. Long term care will be rapidly expanding as our growing population ages and lives longer related to the medical advances we currently have. Our students will need exposure and mentoring in these areas as well; a new focus for most nursing schools, whose basis is acute care at the hospital bedside. This will cause our program to need curriculum changes and present challenges for faculty who will need extra training in these fields to remain up to date on changes outside of our hospitals.

Renewing and extending the NSP II grant will augment Wor-Wic Community College's continued provision of well-educated and qualified professional nurses who are ready to take on the challenges of an ever changing healthcare scene. It will help students who are struggling personally and academically to have a chance at a career that they have dreamt of for years. It is the chance to provide our area with the needed professional staff to offset the numbers of nurses reaching retirement age and leaving the active profession, both in the clinical setting and the academic one. I ask that you please consider the extension of the NSP II grant to allow for these outcomes to become reality. I know the date for the current grant is rapidly approaching, and I appreciate the time and attention you have given to this matter.

Sincerely,

Pamela G. Budd RN, CCRN, MSN  
Retention and Success Coordinator for Dept. of Nursing  
Wor-Wic Community College  
32000 Campus Drive  
Salisbury, MD 21804

# Staff Comments Regarding MHA Letter Requesting a Mid-Year Rate Increase

## Overview

Maryland Hospital Association has requested an across the board rate increase for Maryland Hospitals effective January 1, 2015. This amount is requested to support additional infrastructure investments of hospitals to advance the changes that will be required for the success of the All Payer Model that was initiated on January 1, 2014.

## HSCRC Rate Setting Since the Initiation of the All Payer Model

By July 1, 2014, all hospitals had entered into a global budget agreement with HSCRC. These agreements provide a stable revenue base for hospitals, assuring that the maximum revenue growth requirement can be assured and that hospitals will be able to reinvest savings accrued under the Model.

Effective July 1, 2014, the HSCRC approved a rate increase that provided a full inflation update to hospitals of 2.41%<sup>1</sup>, a population adjustment, an infrastructure adjustment for global budget hospitals<sup>2</sup> of .325% (for a total of .65% including the adjustment provided at the time of initiating the global budget) and a reduction for readmissions savings of .2%. The opening of Holy Cross Germantown Hospital is also expected to increase hospital revenues in the State by an estimated .4% for the year. In total, this provided approximately 3.67% in expected revenue increases, prior to considering any unforeseen adjustments. Offsetting these increases were two reductions-- a reduction of .45% related to reducing the MHIP assessment effective October 1, and a net reduction in uncompensated care of approximately .64%. (The uncompensated care adjustment reflected a 1.02% reduction in expected uncompensated care due to increased enrollment in Medicaid partially offset an increase of .38% based on hospitals' actual 2013 uncompensated care levels over 2012 levels.)

The approved increase was within the all payer revenue growth limit and also within a range that could result in savings to Medicare, based on national Medicare hospital growth projections per beneficiary obtained from the Office of the Actuary.

## Analysis

### Performance Monitoring

HSCRC staff has been monitoring performance under the All Payer Model, including:

- Hospital financial performance

---

<sup>1</sup> Unlike prior years, there was no offset for expected productivity improvement, because hospitals would be expected to reduce utilization, thereby creating savings for consumers and purchasers

<sup>2</sup> Total Patient Revenue hospitals did not receive an infrastructure adjustment, but were provided an incentive for adopting the model at the time of initiation of their agreements.

- All Payer revenue increases
- The impact of Medicaid and other enrollment expansion under ACA
- Performance relative to quality improvement targets
- Hospital utilization levels

Hospital financial performance has improved and operating margins for FY 2014 averaged 2.52% percent. For FY 2015, operating margins have averaged 2.67 percent through November 2014. These performance levels are an improvement relative to recent levels of profitability.

All Payer revenue is within model limits and quality is improving, although hospitals are falling short of the readmission reduction targets that were set for the calendar year 2014 by HSCRC.

HSCRC staff has been monitoring the impact of the expansion of ACA. Based on our evaluation of the reduction in self pay and charity revenues, hospitals are overfunded for uncompensated care since coverage is well beyond the amount included in the uncompensated care offset. However, there is a "pop up" in utilization that may be attributed to the expansion. HSCRC staff is currently analyzing the extent of the increase and will continue to monitor whether it is a temporary increase representing pent up demand or of a more permanent nature.

Staff is also focused on hospital utilization trends, including factors that may be epidemic in nature. While we were informed that there may be requirements to fund Ebola costs, we have not yet been presented with any such requests. Influenza has the potential to drive admissions and costs above expected levels. Staff is monitoring reports of the Center for Disease Control. Influenza for 2014-2015 is above 2013-2014 levels to date, on par with 2012-2013 levels. Hospitals benefitted from lower influenza levels in FY 2014 under their global budgets. HSCRC staff will continue to track influenza levels and monitor the impact on hospital utilization. It is too early to tell what, if any, relief hospitals will need for influenza burden.

### *Monitoring of Medicare Savings*

Staff has been working with Center for Medicare and Medicaid Innovation (CMMI) staff to obtain Medicare performance reports. CMMI reports hospital payments and beneficiaries on a monthly basis, but these reports have the expected lag of about three months due to claims processing timelines. HSCRC was recently granted a data use agreement (DUA), that will allow verification and analysis of these reports. On December 17, the State approved a contract with a third party vendor to help HSCRC staff conduct this analysis.

Based on approved rate levels for FY 2014, HSCRC staff expected favorable performance relative to Medicare for January through June of 2014. The July through December performance levels versus Medicare are uncertain, with the rate increase that occurred July 1 for Maryland hospitals and the inpatient rate decrease that occurred for Medicare effective October 1. By the end of March 2015,

HSCRC staff expects to see relatively complete claims data from Medicare. Staff will be initiating work with contractors in January to evaluate the data CMMI has provided.

### **Infrastructure Requirements**

Maryland Hospital Association has suggested a .75% across the board rate increase for infrastructure. No analytic support has been provided to justify additional infrastructure needs beyond the .65% provided to most hospitals, along with the funds that should be freed up for infrastructure from reduced avoidable utilization. In past Commission meetings and in the recent Advisory Council meetings, Commissioners expressed an interest in regional cooperation, including a focus on integrating efforts with physicians, long-term care facilities, and community based organizations.

Under the direction of the Commission, the staff has initiated three multi-stakeholder efforts to make recommendations on care coordination and infrastructure, provider alignment, and consumer education and outreach. Under the BRFA, there was \$15 million earmarked for potential efforts to support the new All Payer Model. HSCRC and DHMH expect to use approximately \$2 million for regional planning efforts. HSCRC staff will seek recommendations from the Care Coordination Work Group and Alignment Work Group regarding infrastructure requirements to support state-wide initiatives. Regional planning efforts may shed more light on infrastructure needs.

### **Maryland's Economy**

According to the Bureau of Economic Analysis<sup>3</sup>, Maryland's expected GDP growth for 2013 is estimated to be 1.8%, making it 47th in the nation. The growth in the local economy does not appear to be a driver for increased hospital rates. A mid-year rate increase would also further erode the Medicaid budget.

### **Staff Assessment of Request**

HSCRC staff appreciates the efforts that hospitals and others are making to ensure the success of the new All Payer Model. HSCRC staff appreciates the tremendous opportunity in front of us to improve care for Marylanders and moderate costs for purchasers. Changing delivery models and integrating provider and community resources will take both focus and investment. This will require all parties working together to be agile and to succeed while achieving the goals of the new All Payer Model.

HSCRC staff does not support granting a mid-year rate increase since there is no financial crisis, hospitals were provided full funding of inflation without productivity offset for FY 2015, the impact of ACA on uncompensated care and hospital utilization is under evaluation, the recent State economic performance is worse than expected, and there are other unanticipated factors that require evaluation.

---

<sup>3</sup> [http://www.bea.gov/newsreleases/regional/gdp\\_state/gsp\\_newsrelease.htm](http://www.bea.gov/newsreleases/regional/gdp_state/gsp_newsrelease.htm)



Furthermore, it is also too early to assess the Medicare results and the trend line that will develop from the rate increase approved July 1, 2014.

HSCRC should continue to work with stakeholders to understand infrastructure needs. Infrastructure resources from hospital savings as well as resources outside of hospitals should be considered, in addition to those that might be funded from rate increases. HSCRC may want to consider approaches to funding that support collaboration among hospitals in regional areas, as well as collaborations with other providers and community resources.



Maryland  
Hospital Association

December 5, 2014

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

Dear Chairman Colmers:

At its June 11, 2014 public meeting, the Health Services Cost Review Commission (HSCRC) voted to establish “the update factor for a 6 month period to allow for consideration of calendar year performance...(to) monitor and review results on an ongoing basis and make changes as needed on January 1<sup>st</sup>.” Furthermore, the “Commissioners decided to postpone additional infrastructure funding until January, when better information will be available on the first year status of the waiver and the effectiveness of the initial infrastructure funding can be evaluated.”<sup>1</sup> As we near completion of the first full year under the state’s new all-payer demonstration model, it is important to recall the final recommendations from the HSCRC’s Advisory Council, which advised the Commission to “...*strike a balance between near-term cost control, which is paramount, and making the required investments in physical and human infrastructure necessary for success. If we do not meet the near-term targets, there will be no long-term program. But, if we fail to make the needed infrastructure investments, we will not have the toolkit of reforms necessary to achieve lasting success*” and “(g)iven the challenging targets in this initiative, goals should be set in the aggregate as close to the targets as practicable based on the degree of comfort that individual targets will be met.”<sup>2</sup> There is sufficient information now available to the Commission to re-visit its original action. On behalf of our 65 hospital and health system members, the Maryland Hospital Association (MHA) requests that the Commission increase rates statewide, by 0.75 percent, effective January 1, 2015. We make this request in light of the following:

**1) Maryland’s hospitals have outperformed the limits**

Maryland’s hospitals will significantly outperform the all-payer model limits in the first calendar year. Projected Maryland hospital spending per capita for the year is 2.01 percent - 44 percent below the waiver’s 3.58% per capita limit. Further, although the five-year cumulative savings requirement of \$330 million did not anticipate savings in the first year of the new model, Center for Medicare & Medicaid Innovation data show Maryland’s hospitals on target to generate between \$30 million and \$40 million of savings this year alone. The

---

<sup>1</sup> Minutes of the 509<sup>th</sup> meeting of the Health Services Cost Review Commission, June 11, 2014

<sup>2</sup> Advisory Council final report dated January 31, 2014, p.6

results of calendar year 2014 are clear: Maryland's hospitals are outperforming the financial targets of the new model.

- 2) **A January 1 rate adjustment creates no risk of exceeding the waiver's financial limits**  
Aggregate Maryland hospital revenue is capped under the Global Budget Revenue /Total Patient Revenue (GBR/TPR) payment model. Under the old waiver, hospital revenues increased as volume increased, so limiting hospital rates did not guarantee hospital revenue control. This is no longer the case: *hospital revenues cannot exceed the collective GBR/TPR caps*. A January 1 increase in rates does not threaten Maryland's ability to meet the new waiver's revenue ceiling. The GBR/TPR methodologies cap revenue, both prices and volume, providing stable and predictable costs for payers no longer at risk for increased hospital volume. Moreover, when the original update was considered last June, not all hospitals had completed individual global budget contracts with the Commission that would ensure individual spending ceiling compliance; those agreements are now in place in every hospital in the state, with all applicable Maryland hospital revenues capped.

- 3) **Investing in care coordination and population health infrastructure is essential to waiver success**

The spending limits included in the new waiver along with the global budget limits were intended to be aggressive, creating incentives for hospitals and health systems to dramatically change the way they provide hospital care and health care in their communities. And that is exactly what is happening in Maryland. But moving rapidly from volume-based to value-based payment requires significant and immediate change and investment in new health care delivery models. A January 1 rate adjustment would help ensure and speed the needed investments. The HSCRC Advisory Council underscored to this Commission the essential investment in care coordination activities needed for Maryland to be successful under the new waiver, including activities outside the regulated hospital environment. Care coordinators, community health workers, transportation services, behavioral health services, population health-related information technology and data analytics are just a few examples of the new investments required for the five year success under the new model. The need for these investments was acknowledged by the Commission, when GBR hospitals received slightly higher global budgets to help fund needed new infrastructure. As Maryland's hospitals will significantly outperform the all-payer financial requirements this year, now is the time to release additional funds by way of a mid-year rate increase to facilitate those investments.

- 4) **Hospital margins have improved, but remain vulnerable**

As reflected in the attached chart, hospital operating margins have increased this year, but previous declines in 2012 and 2013, forced severe operational cutbacks and created for hospitals an unstable financial footing. As Maryland's hospitals embrace the new value-based model, they must do better with less, controlling health care spending in accordance

with the triple aim. However, hospitals are only beginning to recover from these recent downturns and a six-year history of below-inflation updates.

Maryland's hospitals are doing their part to meet the objectives of the waiver and lower health care costs for everyone. But all stakeholders, including health plans and the public, share responsibility for transforming care in Maryland. A 0.75 percent mid-year rate increase balances population health investment needs with cost containment. Maryland hospital financial performance is well below the waiver's ceiling. We ask the state and the HSCRC to partner with hospitals to invest now to leverage even greater savings and performance improvement as the new waiver model evolves.

We appreciate the Commission's consideration of this critically important issue. If you have any questions, please contact me.

Sincerely,

Carmela Coyle  
President & CEO  
Maryland Hospital Association

Attachment

cc: Herbert Wong, PhD, Vice Chairman  
George H. Bone, MD  
Stephen F. Jencks, MD, MPH  
Jack C. Keane  
Donna Kinzer, Executive Director  
Bernadette Loftus, MD  
Thomas R. Mullen



Maryland  
Hospital Association

December 30, 2014

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

Dear Chairman Colmers:

Following up on Maryland hospitals' December 5 request for a 0.75 percent hospital rate increase effective January 1, 2015, we ask the Commission to act on this request at your January 14, 2015 public meeting. Commissioners did not consider our request at your December public meeting. Instead, staff asked the HSCRC's Payment Models Workgroup to "analyze" our request and make a recommendation to the Commission. Delegation of this issue to this workgroup is inappropriate. We ask that the Commission act promptly and approve our request in January.

The authority to determine updates and timing rests solely with the Commission. The Payment Models Workgroup was created to make recommendations on the structure of new payment models and how the Commission might change its historic approach to annual rate updates. Important guidance was provided by the workgroup to the Commission in the spring of 2014. Maryland hospitals' request is not for new structures or payment policies. In fact, off cycle update adjustments have been made by the Commission in the past. Our request is that the Commission honor its June 11, 2014 commitment to revisit at mid year the approved annual update amount, considering strong calendar year 2014 waiver performance and hospitals' additional critical infrastructure investment needs.

Waiver performance for 2014 is now clear: Maryland hospitals will save Medicare some \$53 million to \$65 million in the first year of the new model, exceeding both the first and second year savings goal; Maryland hospital spending will grow at about 2.0 percent per capita, well below the 3.58 percent per capita ceiling. Every hospital in the state is now governed by a global budget -- a goal not expected to be achieved for years -- and, as a result, the Commission has certainty today over statewide hospital revenue growth.

The fact that every hospital selected a global budget approach demonstrates that Maryland hospitals are "all in" on a new way to pay for and provide hospital and health care in our state. But that new approach challenges Maryland's hospitals, and requires them -- and no other stakeholder -- to assume significant financial and organizational risk in transforming the delivery system. In order for Maryland to succeed, hospitals need to invest in new services, new staff, new data analytics capabilities and more. Maryland hospitals must retool to address not only the acute care needs of patients, but the broader health care needs and non-clinical barriers that must be overcome to meet the tight constraints of the new waiver. Now is the time for the state and the Commission to be our partner and invest a small portion of the return

already generated to allow for the investments hospitals need to make now to ensure Maryland's future success under the waiver.

The Commission's own Advisory Council recommended setting rates as close to the per capita ceiling as possible to allow hospitals to make investments that will ensure long term success. Maryland's hospitals are exceeding all of the financial goals of the new waiver. Our ability to succeed on the more difficult goal of reducing Maryland's readmissions rate will depend on new investments, new relationships, new partnerships and new ways of coordinating care in the community, outside of the hospital. Success in Maryland will only become more difficult, because our pace of improvement must continue to outpace the rest of the nation. That won't happen unless we invest in change now.

We urge the Commission to act on our request at the January public meeting. If you have any questions, please contact me or Mike Robbins.

Sincerely,



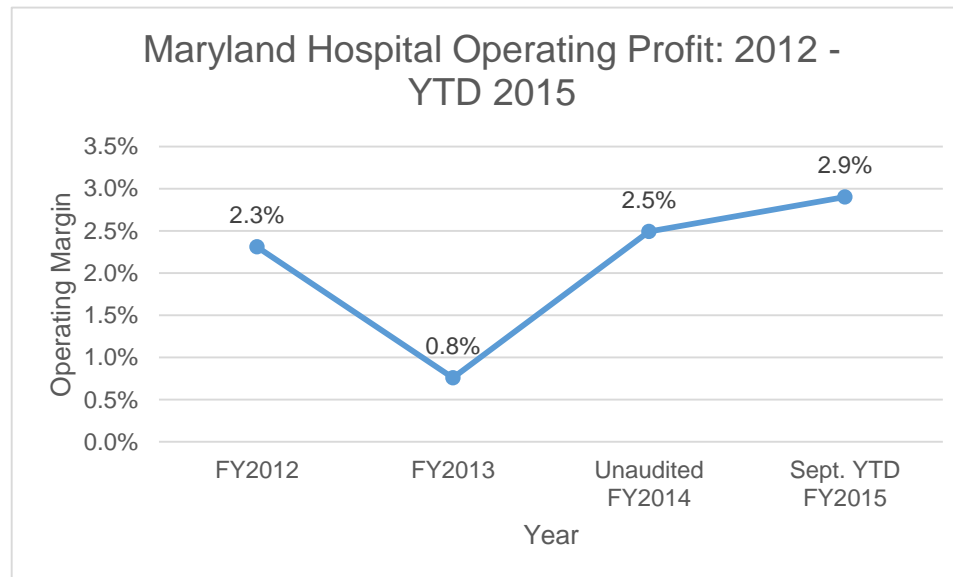
Carmela Coyle  
President & CEO  
Maryland Hospital Association

Attachment

cc: Herbert Wong, PhD, Vice Chairman  
George H. Bone, MD  
Stephen F. Jencks, MD, MPH  
Jack C. Keane  
Bernadette Loftus, MD  
Thomas R. Mullen  
Donna Kinzer, Executive Director

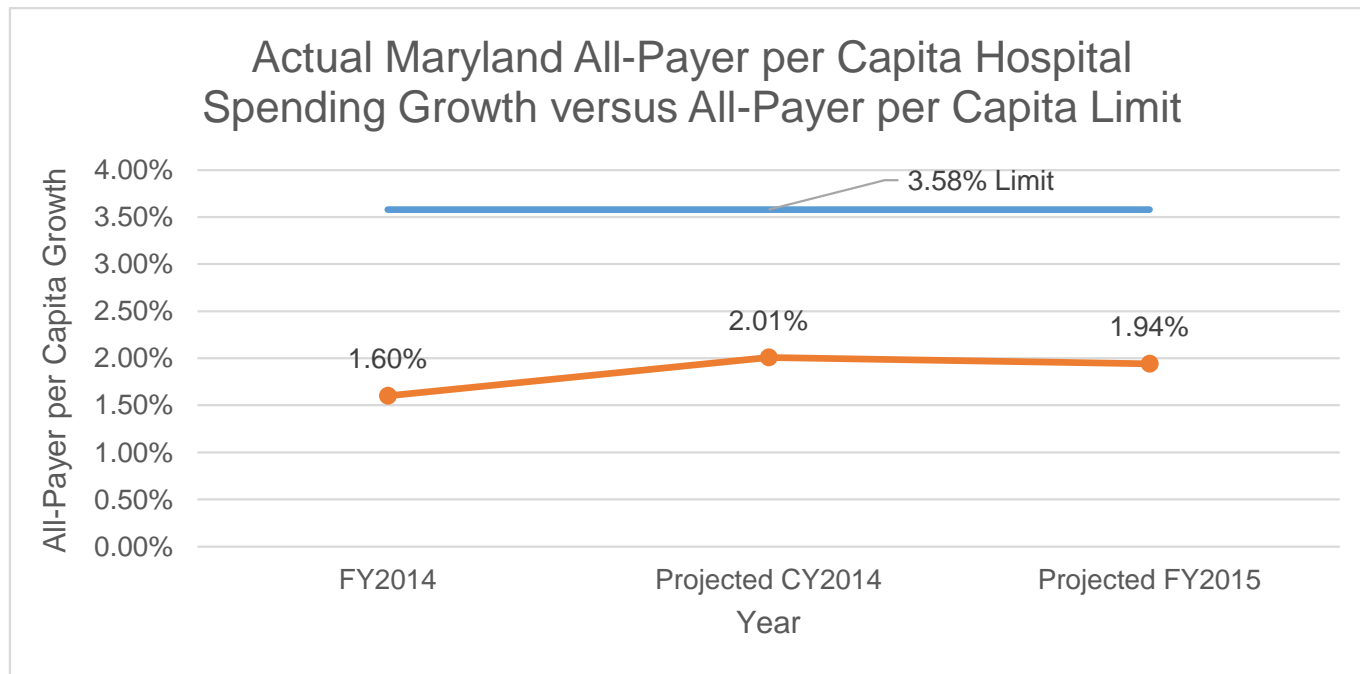
# Operating Margins

- Hospital operating margins are below the traditional 2.75 percent target
  - Neither one year (FY 2014), nor three months (FY 2015), are sufficient to reflect stable profitability



# All-Payer per Capita Growth

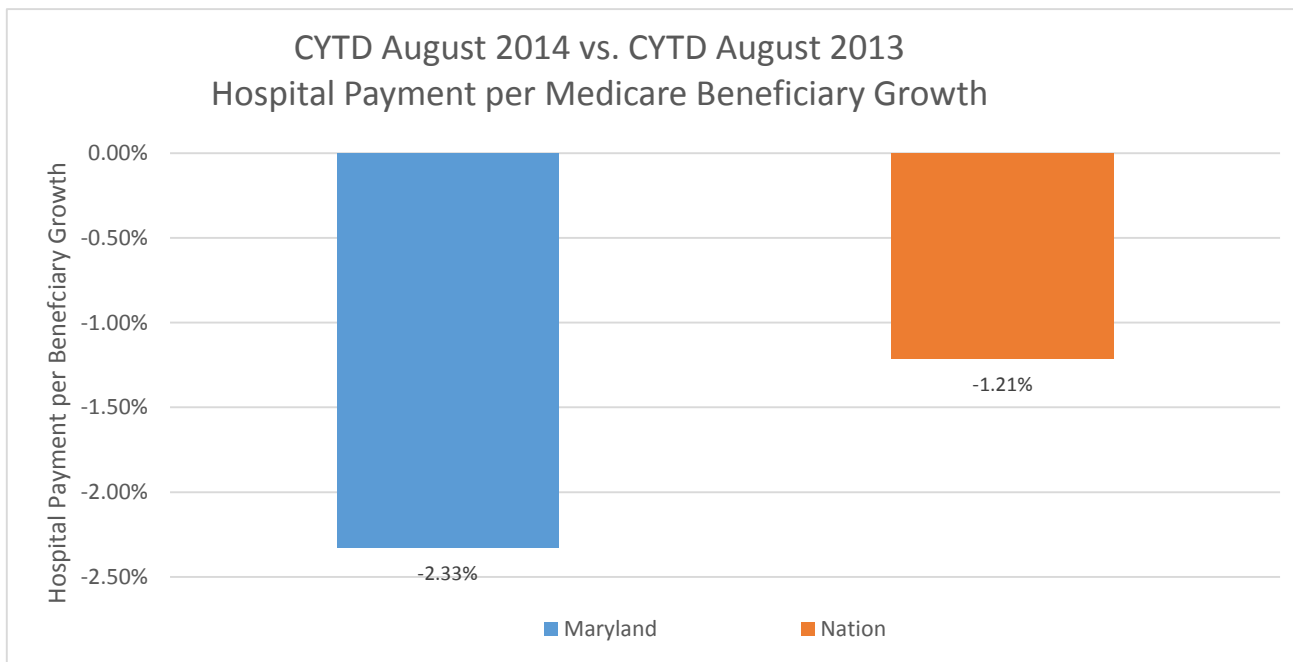
- Maryland's hospitals are significantly below the 3.58 percent limit, and will continue below the limit through FY 2015





# Growth in Medicare Hospital Payment per Beneficiary

- Maryland Medicare Hospital Payment per Beneficiary is growing slower than the national average.
  - Maryland's hospitals are expected to generate savings in year one, exceeding the model's requirement for year one.





# Update on Work Groups

- Consumer Engagement
- Care Coordination
- Payment Models Work Group
  - GBR Market Shift Draft Principles
  - GBR Transfer Adjustment

# Care Coordination & Consumer Engagement Work Groups

---

## ▶ Care Coordination

- ▶ Work Plan, Work to date
- ▶ Promising care management strategies
- ▶ Potential areas for state-wide coordination (Medicare data, Predictive analytics, Electronic Health records)
- ▶ Jan 7<sup>th</sup> meeting is cancelled.

## ▶ Consumer Engagement Work Group

- ▶ First meeting on Jan 9<sup>th</sup> discussed work plan and goals

## ▶ Consumer Focus Groups

- ▶ Focus Group Complete
- ▶ Developing Report and Recommendations on Messaging to Consumers

# Briefing on the Cost of Defensive Medicine

---

- ▶ Joint meeting with Physician Engagement, Performance Measurement and Payment Models held on Jan 9<sup>th</sup>
- ▶ MOU with UM Law School and Dr. Bradley Herring (JHSPH)
  - ▶ Defining Defensive Medicine
  - ▶ Summarizing and synthesizing key studies
  - ▶ Implications for Maryland under New All Payer Model
- ▶ Findings
- ▶ Comments from Stakeholders

# Payment Models Work Group

---

- ▶ **December 15<sup>th</sup>**
  - ▶ Market *Shift* Principles
  - ▶ GBR Transfer Adjustments
  - ▶ Principles for off-cycle adjustments
  - ▶ Aggregate revenue at risk in value-based programs
- ▶ **Market Shift Subgroup**
  - ▶ FY2013 and FY2014 data distributed for verifications and modeling
    - ▶ Resubmissions

# Market Share Adjustments (MSAs) Draft Principles--Purpose

---

- ▶ Purpose of MSAs is to provide a basis for increasing or decreasing the approved regulated revenue of hospitals operating under global revenue arrangements to ensure that revenue is appropriately reallocated when shifts in patient volumes occur between hospitals.
  - ▶ Support objectives of Triple Aim
  - ▶ Fundamentally different than a volume adjustment
  - ▶ Independent of general volume increases
  - ▶ Focus is on “shifts” rather than share

# Market Share Adjustments (MSAs) Draft Principles--Application

---

- ▶ Applied as part of global budget mechanism.
- ▶ Only one of many mechanisms.
- ▶ Examples of other situations where global budgets might be adjusted for changes in volumes include;
  - ▶ Opening of a new hospital,
  - ▶ Increases in transfers of patients,
  - ▶ Discontinuation of services, changes in levels of services,
  - ▶ Shifts to unregulated settings, or
  - ▶ Actions that undermine the Triple Aim.

# Market Share Adjustments (MSAs) Draft Principles--Features

---

- ▶ **Specified population**
  - ▶ Staff is using a virtual service area based on zip codes for urban and suburban hospitals. More defined service area used for rural areas, or aggregation of “geo zips”.
- ▶ **Defined set of covered services**
- ▶ **Budget neutral to maximum extent practicable**
- ▶ **Generally excludes reductions in potentially avoidable utilization**



# Calculations—Shift, not share

---

## ▶ The Math

- ▶ If a hospital's volume increases in a particular service and zip code (or market area for rural areas) and no hospitals have volume decreases, there is no adjustment
- ▶ If one hospital's volume decreases and another increases, the limit of the shift adjustment is based on the lesser of the two

# Market Share Adjustment Work in Progress

---

- ▶ A work in progress
- ▶ Turning to define the calculation of the revenue transfer
  - ▶ Intend to utilize 50% variable cost in routine calculations
- ▶ Topics to be reviewed include
  - ▶ Approach to calculating budget adjustments
  - ▶ Possible use of corridors for minor variations
  - ▶ Timing
  - ▶ Relative value

# GBR Transfer Adjustments Recap

---

- ▶ Payment Models Work Group and Transfer Subgroup meetings since June
- ▶ Focused on ensuring access to care for complex cases and patient protections
- ▶ Worked to develop transfer cases payment adjustments to GBR revenues based on variation from the baseline transfer rates to academic medical centers (AMCs)

# Transfer Definitions

---

- ▶ Transfers to University of Maryland Medical Center (UMMC) and Johns Hopkins University Hospital (JHH)
- ▶ Transfers from Inpatient and Emergency Departments
- ▶ Inpatient Admission to AMCs within one day
- ▶ Exclusions
  - ▶ Categorical cases (transplants, research, burn etc)
  - ▶ Out of state patients
  - ▶ MDC-5 (Cardiology and cardiac surgery), psychiatric DRGs, and Rehabilitation DRGs

# GBR Transfer Adjustments

---

- ▶ Average cost of transfer calculated separately for transfers from ED and transfers from inpatient in the base year
- ▶ **AMC adjustments**
  - ▶ Quarterly adjustment to budget based on rate of change compared to the base period
- ▶ **Sending hospital adjustments**
  - ▶ Annual adjustments to budgets
  - ▶ Adjustments for hospitals with more than 10% increase and at least 10 additional cases
  - ▶ If statewide transfers increase by more than 5% (\$5 million payment to AMCs), quarterly adjustments and lowering the threshold to 5%.

# Average Adjusted Cost of Transfers for GBR Adjustments, FY2015

---

**Table 3: Average Adjusted Transfer Cost for GBR Adjustments, FY2015**

<b>Price Update (FY 2015)</b>	A		2.41%
<b>VCF</b>	B		50%
<b>Average Charge of ED Transfer Cases, FY 2014</b>	C		\$25,092
<b>Average ED Transfer Case Cost for GBR Adjustment</b>	D=	$C*(1+A)*B$	<b>\$12,848</b>
<b>Average Charge of Inpatient Transfer Cases, FY 2014</b>	H		\$50,303
<b>Average Inpatient Transfer Case Cost for GBR Adjustment</b>	I=	$H*(1+A)*B$	<b>\$25,758</b>

# DRAFT DOCUMENT FOR COMMISSION DISCUSSION

## Principles for Market Share Adjustments under Global Revenue Models

*This draft document, prepared in conjunction with the Payment Models Work Group, contains principles for consideration as market share adjustments are developed and applied. It is a work in progress and may be modified as the approaches and calculations for adjustments are finalized.*

### Introduction

The Market Share Adjustments (MSAs) mechanism is part of a much broader set of tools that link global budgets to populations and patients under the State's new All-Payer Model.

The specific purpose of MSAs is to provide a basis for increasing or decreasing the approved regulated revenue of Maryland hospitals operating under Global Budget Revenue (GBR) rate arrangements to ensure that revenue is appropriately reallocated when shifts in patient volumes occur between hospitals as a result of efforts to achieve the Triple Aim of better care, better health, and lower costs. MSAs under a global budget revenue system are fundamentally different from a volume adjustment. Hospitals under a population-based payment system have a fixed budget for providing services to the population in their service area. By definition, a global budget is not fixed if it is subject to volume adjustments. Therefore, it is imperative that MSAs reflect shifts in patient volumes independent of general volume increases in the market. Additionally, MSAs should not be so sensitive that they respond to random fluctuations in the volume of services at individual hospitals.

This document lays out the principles governing the development of MSA mechanisms that will be applied as part of Maryland's global budget system—the specific adjustments are being developed and are expected to evolve over time.

### Overview

In order for an MSA to be consistent with a population-based approach, it should have certain features such as the following:

- A specified population from which hospitals' market shares will be calculated;
- A defined set of covered services of the MSA ; and
- An MSA approach that is budget neutral to the maximum extent practicable and/or results in demonstrably higher quality.

# DRAFT DOCUMENT FOR COMMISSION DISCUSSION

## Principles for Market Share Adjustments under Global Revenue Models

The MSA should not hinder the global budget incentive to eliminate marginal services that do not add value, are unnecessary or result from better community based care. Therefore, MSAs should not be applied for such appropriate reductions in utilization. MSAs are just one mechanism necessary to account for changes in levels and patterns of utilization. The global budget agreements also contain mechanisms intended to ensure the continued provision of needed services for Maryland patients including:

- **Population/Demographic Adjustments:** Changing demographics may result in growth in the demand for services. The annual update factor adjusts revenue to capture changes in overall population. Annual hospital level population adjustments will capture changes in total population/demographics in each patient service area.
- **Annual Update Provides Flexibility to Fund Innovation/New Services/Growth in Selected Quaternary Services:** Targeted funding can be provided through the Update Process. For example, the new Holy Cross Germantown Hospital was partially funded from the general update process. Consideration is given to annual budget changes for quaternary services such as transplants, burns, and highly specialized cancer care for Johns Hopkins Hospital and University Hospital Center under their global budget agreements.
- **Transfers to Johns Hopkins Hospital, University Hospital Center, and Shock Trauma Center:** Adjustments will be made for increases in transfers to these centers to ensure that resources are available to treat patients needing the specialized care provided in these settings.
- **Potentially Avoidable Utilization (PAU):** PAU is excluded from the market share analysis and will be analyzed separately. Exclusion of PAU from the general market share analysis avoids the potential to reward a hospital that increased PAU at the expense of a hospital that appropriately reduced PAU. A PAU focused analysis, when warranted, will allow an assessment PAU reductions that are not driven by improvements in population health, such as diversion of patients to an unregulated setting, transfer of patients due to changes in referral patterns by purchasers, or a less favorable change in service delivery (eliminating or contracting service lines that have high PAU volumes) that should not be rewarded.

The basis for distinguishing between desirable and undesirable utilization changes is the Triple Aim of the new system: to improve health care outcomes, enhance patient experiences, and control costs. MSAs, together with other global budget agreement provisions and HSCRC policies, will need to focus on efforts that support the Triple Aim.

Examples of actions that help achieve the Triple Aim are those that result from:

- Providing high quality hospital care resulting in fewer hospital-acquired conditions;
- Making efforts to improve care coordination and patient discharge planning resulting in fewer re-hospitalizations;



## DRAFT DOCUMENT FOR COMMISSION DISCUSSION

### Principles for Market Share Adjustments under Global Revenue Models

- Promoting the provision of care in the most appropriate setting, resulting in fewer initial hospitalizations for ambulatory care sensitive conditions and conditions that can be treated equally effectively in other settings at lower cost; and
- Providing services in a lower cost settings without compromising patient care.

Possible examples of actions that undermine the Triple Aim and should be avoided include:

- Prompting patients with unprofitable service needs to seek care elsewhere or reducing the volume of non-profitable services below the amount needed by patients within the hospital's service area;
- Reducing capacity or service ability to the point of creating long waiting lists or delays;
- Under investing in new technology or modes of care proven to be efficient ways of improving patient health, safety or quality; and
- Reducing the total level of a hospital's medical staff or the quality of affiliated providers to the point of compromising patient care.

Similarly, the MSA together with other mechanisms and policies must distinguish between increases in utilization at any given hospital that should be recognized and those that should not be recognized. For example, hospitals should receive increases to their approved regulated revenue in circumstances that result in a shift of patient volumes that are beyond the hospital's control, such as the closure of a service at a particular hospital and resulting relocation of patients receiving that service to another facility, or other discrete and readily identifiable events. As long as the financial drivers of the shift are transparent and value based, hospitals should also receive a market share adjustment if organizations such as Health Maintenance Organizations, Accountable Care Organizations or Primary Care Medical Homes direct their members to the facility to improve efficiency, cost-effectiveness and quality.

The MSA policy should not encourage shifts in volume that are not clearly relatable to improvements in the overall value of care, such as marketing or acquisition strategies that merely shift the location or ownership of resources without increasing access, improving outcomes, or reducing costs in a geographic area. In February 2014, the Commission reduced the variable cost factor for volume changes from 85% to 50% for services provided outside of global budgets that are subject to the All Payer Model. Applying this lower variable cost factor to market share adjustments will contribute to limiting incentives to increase volume through strategies that do not improve care or value.

#### Guiding Principles

In developing its MSA approach, the HSCRC should follow certain guiding principles. These include:

# DRAFT DOCUMENT FOR COMMISSION DISCUSSION

## Principles for Market Share Adjustments under Global Revenue Models

### 1. Provide clear incentives

- 1.1. Promote the three part aim
- 1.2. Emphasize value, recognizing that this concept will take some time to develop
- 1.3. Promote investments in care coordination
- 1.4. Encourage appropriate utilization and delivery of high quality care
- 1.5. Avoid paying twice for the same service

### 2. Reinforce the maintenance of services to the community.

- 2.1. Encourage competition to promote responsive provision of services
- 2.2. Competition should be based on value
- 2.3. Revenue should generally follow the patient
- 2.4. Support strategies pursued by entities such as ACOs, PCMH, and MCOs seeking to direct patients to low cost, high quality settings

### 3. Changes constituting market share shifts should be clearly defined.

- 3.1. Volume increase alone is not a market share change.
- 3.2. Market share shifts should be evaluated in combination with the overall volume trend to ensure that shift has occurred, rather than volume growth
- 3.3. If one hospital has higher volume and other hospitals serving the same area do not have corresponding declines in volume, a market share shift should not be awarded.
- 3.4. Increases in the global budget of one hospital should be funded fully by the decrease in other hospitals' budgets
- 3.5. Market share changes should reflect services provided by the hospital
- 3.6. Substantial reductions at a facility may result in a global budget reduction even if not accompanied by shift to other facilities in service area. (Investigate shift to unregulated, limitations on types of procedures)
- 3.7. Closures of services or discrete readily identifiable events should result in a global budget adjustment and a market share adjustment as needed
- 3.8. Market shifts in Potentially Avoidable Utilization (PAU) should be evaluated separately<sup>1</sup>

---

<sup>1</sup> There are limited circumstances where HSCRC might want to recognize a market shift in PAUs. For example, if an HMO moved all of its patients from one facility to another, there may be an appropriate shift in revenue for some level of PAU cases. Similarly, if a PCMH changed its hospital affiliation, there may be a shift in PAU volumes from one facility to another.

# DRAFT DOCUMENT FOR COMMISSION DISCUSSION

## Principles for Market Share Adjustments under Global Revenue Models

### Topics to Be Reviewed after Methodology Development for Calculating Shift

1. Adjust budgets for substantial shift in market share
2. Use corridors to avoid shifts for minor variations
3. Adjust budgets gradually to reflect the fixed nature of capital and other costs
4. Timing of market share adjustments
5. Relative value of market shifts

### Market Share Shift Calculation

Based on the principles listed above:

- **Both** volume and market share at a hospital must have increased to receive a positive market share adjustment.
- **Both** volume and market share at a hospital must have decreased to receive a negative market share adjustment.

The developed algorithms applied should compare changes in volume at Hospital ABC to net change in volume for the other hospitals serving the market.

Hospital ABC for Service Area	Aggregate of Other Hospitals for Service Area	Market Share Adj. for Hospital ABC
Volume Increase	Volume Increase	No
Volume Decrease	Volume Decrease	No
Volume Increase	Volume Decrease	<b>Yes - Increase:</b> Hospital ABC increase = The lesser of the increase at ABC or the net aggregate decrease at other hospitals with patients from the service area.  <b>Example 1:</b> ABC = +40 Rest of Area = -30 Market Share Adjustment of 30 cases <u>to</u> ABC.  <b>Example 2:</b> ABC = +40 Rest of Area = -70 Market Share Adjustment of 40 cases <u>to</u> ABC.

## DRAFT DOCUMENT FOR COMMISSION DISCUSSION

### Principles for Market Share Adjustments under Global Revenue Models

Hospital ABC for Service Area	Aggregate of Other Hospitals for Service Area	Market Share Adj. for Hospital ABC
Volume Decrease	Volume Increase	<p><b>Yes – Decrease:</b> Hospital ABC Decrease = Lesser of decrease in cases at ABC or net aggregate increase at other hospital serving patients from the service area.</p> <p><b>Example 1:</b>                      ABC= -40                      Rest of Area= +50                      Market Share Adjustment of 40 cases <u>from</u> ABC</p> <p><b>Example 2:</b>                      ABC= -40                      Rest of Area= +30                      Market Share Adjustment of 30 cases <u>from</u> ABC</p>

## Transfer Cases Payment Adjustment under Global Revenue Models

### Introduction

Under the new All-Payer Model, inter-hospital transfers are an area of concern that must be addressed to ensure that revenue appropriately follows the patient when changes to transfer rates occur and that resources are readily available to care for complex cases. As academic medical centers (AMCs) providing quaternary services, Johns Hopkins Hospital and University of Maryland Medical Center play a distinct role in the health care system by handling a large proportion of highly acute cases, accepting regional referrals, and serving as centers for clinical and technological innovation in the State. For global models to be successful in Maryland, different regulatory treatment must be given to specific areas of service at these AMCs that will allow them to function effectively within this new payment structure. Under global models, hospitals are incentivized to lower expenses and volume by taking measures to reduce avoidable utilization and promote care management and quality improvement. This may result in community hospitals transferring complex cases to AMCs in order to get patients the advanced care they need and reduce the high costs associated with those patients. Patients transferred to AMCs are often critically ill patients or patients with highly specialized care not available at the transferring hospitals whose access to care should be ensured. Utilizing AMCs as regional referral centers may improve outcomes for critically ill patients and thus be beneficial to the entire Maryland health system. AMCs must have the capacity to take on a possible influx of complex cases without facing financial penalty under a global model.

Global budgets change financial incentives. Hospitals have reduced incentives to keep highly complex cases that are beyond their capabilities in order to garner revenue. Additionally there is a risk that hospitals could take steps to avoid complex cases altogether. HSCRC has included a number of requirements in global budget agreements to monitor and curb against such outcomes including:

- Review of changes in severity levels or case mix of patients treated, with possible revenue reductions for declines;
- Review of volume declines beyond a specified level; and
- Potential revenue adjustments for shifts of services between hospitals (referred to as the Market Share Adjustment).

While each of these measures will detect overall changes to utilization patterns, the relatively small number of complex cases makes transfers a special category of focus. HSCRC wants to ensure that financial policies are in place early on in the process of global budget implementation in order to respond to potential changing patterns, to support the transfer of patients based on their clinical needs, and to ensure that the receiving entities have the capacity to take on the possible influx of complex cases without facing financial penalty under a global model.

## Objectives/Guiding Principles

The HSCRC staff has collected data to aid in the development of a transfer policy. The following are some basic principles to guide the development and implementation of the Commission's transfer policy.

- The primary consideration is to support the well-being of the transferred patient and to support the provision of the most appropriate treatment. Transfers should occur expressly to serve the best interest of the patient.
- Transfer payment adjustments to the GBR revenues should depend upon corridors to avoid minor adjustments to the GBR revenues.
- The current level and pattern of transfers should be used as the baseline, with subsequent revenue adjustments based on changes in transfer levels from the current level above determined thresholds.
- The Commission should regularly monitor hospitals for changes in transfer patterns for both financial and quality implications.
- The charge for increased transfers should be at a fixed predetermined level. The level should be low enough so that it does not pose a barrier to transfers yet high enough to provide for average incremental resource needs of a complex transferred patient.
- Significant changes in the case mix of transfers should be addressed in the review of the AMC annual budgets.
- Unique circumstances such as changing clinical protocols, ambulance patterns, or other altered circumstances should be evaluated on a hospital-specific basis.
- As transfers are a special subcategory of market share, HSCRC should take into account any adjustments made for transfers when making a market share adjustment.

## Data Collection

HSCRC staff proposes defining transfers as same or next day admissions, meaning the discharge date of the initial admission or emergency "admission" must be the same day or the next day as the admission date of the second admission to the AMC. The subgroup recommended expanding the definition from same day to next day to include transfers that are admitted after midnight based on the validation results of same day transfers.

HSCRC staff has collected data to aid in the evaluation of transfer cases. Initially, staff focused on the transfer-in/transfer-out recorded in the HSCRC case mix data, representing inpatient-to-inpatient transfers. However, this data has never been used for reimbursement in Maryland and did not prove to be accurate.

- There was confusion regarding whether a patient was being transferred from the emergency room or from the inpatient setting. This may be attributable to the increasing numbers of observation cases.
- Referrals were recorded as transfers in this data. There were sometimes multi-day gaps between the transfer out and the transfer in.

- The record of transfers-out did not align with the record of transfers-in.

In order to overcome these problems, HSCRC staff has used the master patient index (MPI) provided from Chesapeake Regional Information System for our Patients (CRISP) to track patient flow from one hospital to another. In doing so, patients were tracked with direct transfers from emergency room settings as well as inpatient settings. HSCRC staff will request that selected hospitals review this data to ensure that transfers are being properly identified.

#### **DATA VALIDATION RESULTS INCOMPLETE DRAFT**

The table below provides results from the process of reconciling transfer-out records of transferring hospitals with transfer-in reducers of AMCs based on data provided to HSCRC as of 10/01/2014. In general, the information received from transferring hospitals validates the measurement counts (Table 1). On the other hand, AMCs indicated that they have found additional transfer cases that were not included in the HSCRC transfer case list (Table 2). Some of these additional transfer cases sent by the University of Maryland Medical Center (UMMC) do not have CRISP ID (3% of transfer cases identified by HSCRC), which was further analyzed in partnership with CRISP.

Table 1: Validation Results from Referring Hospitals

ID	Sending Hospital Name	Total Number of Included Cases	Total Number of Cases Disagreed	Percent Disagree	Total Number of Additional Transfers Sent	Total Number of Additional Transfers met the Inclusion Criteria	Percent Additional	Total Number of Additional Transfers Send - Inpatient	CRISP ID NOT FOUND- Inpatient	Additional Transfers that met the Inclusion Criteria from Inpatient	Total Number of Additional Transfers Send - Outpatient	CRISP ID NOT FOUND- Outpatient	Additional Transfers that met the Inclusion Criteria from Outpatient
210012	SINAI	237	55	23%	0	0	0%	0					
210033	CARROLL COUNTY	511	23	5%	0	0	0%	0					
210005	FREDERICK MEMORIAL	398	15	4%	0	0	0%	0					
210051	DOCTORS COMMUNITY	153	4	3%	0	0	0%	0					
210035	CHARLES REGIONAL	38	0	0%	1186	0	0%	13		0	1173	0	0
210043	BALTIMORE WASHINGTON MEDICAL CENTER	127	0	0%	776	0	0%	37	3	0	725	11	0
210049	UPPER CHESAPEAKE HEALTH	137	0	0%	659	0	0%	90		0	569	0	0
210006	HARFORD	44	0	0%	389	0	0%	37	0	0	352	0	0
210030	CHESTERTOWN	28	0	0%	252	2	0%	5		0	247	0	2
210010	DORCHESTER	20	0	0%	247	1	0%	5		0	242	0	1
210037	EASTON	82	0	0%	239	1	0%	26	1	0	213	1	1
210063	UM ST. JOSEPH	50	0	0%	111	0	0%	10	2	0	99	1	0
210038	UMMC MIDTOWN	42	0	0%	78	0	0%	19		0	59	0	0
210008	MERCY	283											
210015	FRANKLIN SQUARE	419											
210018	MONTGOMERY GENERAL	59											
210024	UNION MEMORIAL	215											
210028	ST. MARY	79											
210034	HARBOR	299											
210044	G.B.M.C.	224											
210056	GOOD SAMARITAN HOSPITAL	375											
210058	REHAB & ORTHO	10											
210062	SOUTHERN MARYLAND	95											
210088	QUEEN ANNE'S EMERGENCY CENTER	69											
218992	UNIVERSITY OF MD SHOCK TRAUMA												
<b>Total</b>		<b>3,994</b>	<b>97</b>	<b>2%</b>	<b>3937</b>	<b>4</b>	<b>0%</b>	<b>242</b>	<b>6</b>	<b>0</b>	<b>3679</b>	<b>13</b>	<b>4</b>



Receiving Hospital Name	University of Maryland and MIEMS	Johns Hopkins University
Total Number of Included Cases	4,569	3,102
Total Number of Cases Disagreed	0	
Percent Disagree	0%	
Additional Cases Send	1,387	
Missing EID	126	
Previous Visit more than 1 day	1,222	
Same System	13	
Not From ED	2	
Total Number of Additional Transfers	0	
Percent Additional	0%	

### Transfer Case Exclusions

Certain types of cases have been excluded from the transfer analysis. Each exclusion and the rationale are discussed below:

- Categorical cases were excluded, because these cases are already being handled under a different global budget review mechanism. See Appendix A. for a detailed definition of categorical cases.
- Non-Maryland resident transfer cases have been excluded. This may require additional evaluation for hospitals located near the State's borders.
- MDC 5 (cardiology and cardiac surgery) cases have been excluded. There are alternative competitors for this care, and the HSCRC staff has focused on those categories where the special resources of an AMC resulted in the transfer.
- Psychiatric transfer cases (based on the receiving institution's recorded APR-DRG of 740,750-760) have been excluded as this is a category where there are a number of institutions providing the service.
- Rehab cases have been excluded (APR\_DRG 860, 980-989) based on the planned nature of these transfers.

In addition, transfers within the same hospital or hospital system were excluded from the analysis. Transfers within the same hospital are under the same global budget. Transfers within a hospital system may reflect resource planning approaches and specialization. While global budgets may be adjusted for these transfers, it should occur under a different process.

### Transfer Monitoring Categories

To monitor out-of-state transfers, particularly for border hospitals, and to evaluate the possibility of unintended consequences of the transfer policy, the following additional categories will be closely monitored:

1. Transfers that are excluded from payment adjustments
2. Transfers to out-of-state providers
3. Levels of ED Diversion
4. Case mix intensity of transfer cases
5. Length of stay of transfer cases in sending and receiving hospitals

## Transfer Payment Measures

HSCRC staff proposes the following measurement for the payment adjustments:

### *AMC GBR Transfer Adjustments*

On a quarterly basis, AMC GBR budgets are adjusted by the increase or decrease in transfer cases net of population adjustment weighted by the average adjusted cost per transfer case. The average adjusted cost is calculated as the base year average charge \*Price Update\*Variable Cost Factor. The adjustments are done separately for patient transferred from inpatient setting and from emergency departments based on the recommendations from the sub-workgroup. Table 3 below provides the calculation for FY 2015 GBR adjustments using FY2014 transfer rates.

<b>Table 3: Average Adjusted Transfer Cost for FY2015 GBR adjustments</b>		
<b>Price Update (FY 2015)</b>	A	2.41%
<b>VCF</b>	B	50%
<b>Transfers From ED</b>		
Average Charge of Transfer Cases in FY 2014	C	\$25,092
Average Transfer Case Adjustment	D= $C*(1+A)*B$	\$12,848
<b>Transfers From Inpatient</b>		
Average Charge of Transfer Cases in CY2013	H	\$50,303
Average Transfer Case Adjustment	I= $H*(1+A)*B$	\$25,758

Average Adjusted Transfer Cost for FY 2015

### *Sending Hospital GBR Transfer Adjustments*

Sending hospital transfer rates will be monitored on a quarterly basis and the GBR revenues will be reduced on an annual basis by the increase in transfer cases weighted by the average adjusted cost per transfer case. The average adjusted cost for these adjustments will be determined according to the formula stated in AMC adjustment section above. If cumulative payment adjustments to the AMCs exceed 5% of the base year transfer charges, HSCRC staff may adjust the transferring hospital GBR budgets during the course of the fiscal year. Otherwise, transfer adjustments will be

implemented on an annual basis. For hospitals with increases above a 10% threshold and with at least 10 additional transfers, those cases above the 10% threshold will be charged to the budget of the sending GBR hospital, thereby reducing the GBR revenue for the preceding year for that hospital. If the net amount of transfers for the entire State does not exceed an increase of 5% of the base transfers, then no reductions will be made for transfers below a 10% threshold. If the net transfer amount exceeds an increase of 5%, then the excess over 5% will be deducted on a per case basis for those hospitals with increases in transfer cases between 5% and 10%. Table 4 below illustrates the sample calculation for sending hospitals.

**Table 4: Example GBR Transfer Payment Adjustment Calculation for Sending Hospitals**

<b>Average Cost of Transfers</b>		
<b>From ED</b> A		\$ 12,885
<b>From Inpatient</b> B		\$ 25,806
<b>Base Year Transfer Cases for Hospital A</b>		
<b>From ED</b> C		100
<b>From Inpatient</b> D		100
<b>Total</b> E= C+D		200
<b>Current Year Transfer Cases for Hospital A</b>		
<b>From ED</b> F		120
<b>From Inpatient</b> G		110
<b>Total</b> H=F+G		230
<b>Transfer Case Growth</b>	I=H-E	<b>30</b>
<b>Base Year Total Transfer Cost</b>		
<b>From ED</b> J=A*C		\$ 1,288,523
<b>From Inpatient</b> K=B*D		\$ 2,580,634
<b>Total</b> L=J+K		\$ 3,869,156
<b>Current Year Total Transfer Cost</b>		
<b>From ED</b> M=A*F		\$ 1,546,227
<b>From Inpatient</b> N=B*G		\$ 2,838,697
<b>Total</b> O=M+N		\$ 4,384,924
<b>Transfer Cost Growth (\$)</b>	P=O-L	\$ 515,768
<b>10% Transfer Cost Threshold</b>	R=L*10%	\$ 386,916
<b>GBR transfer Payment Adjustment</b>	S=P-L	\$ (128,852)
<b>If State tranfer Cost Growth&gt;5%</b>		
<b>5% Transfer Cost Threshold</b>	T=L*5%	\$ 193,458
<b>GBR transfer Payment Adjustment</b>	U=P-T	\$ (322,310)

The trends in transfers will be monitored using monthly case mix data submissions and the CRISP MPI. The adjustments will start with October-December 2014 period. Table 4 provides the schedule for adjustments for rate year 2016, 2017 and 2018 time periods.

Table 5: GBR Transfer Adjustment Schedules

AMC Quarterly Adjustments				Sending Hospital Annual Adjustments			
Measurement Period	Baseline Period	Transfer Analysis Complete	Budget Adjustment (+/-)	Measurement Period	Baseline Period	Transfer Analysis Complete	Budget Adjustment
Oct-Dec 2014	Oct-Dec 2013	Mar-2015	FY 15 GBR	Oct-Dec 2014	Oct-Dec 2013		FY 16 GBR
Jan-Mar 2015	Jan-Mar 2013	Jun-2015	FY 16 GBR	CY 15	CY 14	Mar-2016	FY 17 GBR
Apr-Jun 2015	Apr-Jun 2014	Sep-2015	FY 16 GBR				
July-Sep 2015	July-Sep 2014	Dec-2015	FY 16 GBR				
Oct-Dec 2015	Oct-Dec 2014	Mar-2016	FY 16 GBR				
Jan-Mar 2016	Jan-Mar 2015	Jun-2016	FY 17 GBR	CY 16	CY 15	Mar-2017	FY 18 GBR
Apr-Jun 2016	Apr-Jun 2015	Sep-2016	FY 17 GBR				
July-Sep 2016	July-Sep 2015	Dec-2016	FY 17 GBR				
Oct-Dec 2016	Oct-Dec 2015	Mar-2017	FY 17 GBR				

Appendix: Data Analysis Results (Data updated on December 18<sup>th</sup>, 2014)

	Receiving Hospital				Total	Percent Total	AMC Percent
	UMMS	MIEMSS	JHH	Non-AMC			
<b>Total Same Day Transfers</b>	8,423	2,927	7,385	34,731	53,466	100%	35%
<b>Transfer Exclusions</b>							
<b>1. Same Hospital</b>	689	429	1414	12144	14,676	27%	-
<b>2. Same System</b>	2923	845	1514	6231	11,513	22%	-
<b>3. Non-Resident</b>	201	123	189	764	1,277	2%	-
<b>4. MDC 5</b>	714	23	649	2272	3,658	7%	<b>38%</b>
<b>5. Rehab</b>	0	0	7	1928	1,935	4%	<b>0%</b>
<b>6. Pysch</b>	638	1	229	4018	4,886	9%	<b>18%</b>
<b>7. Categorical Exclusions</b>	27	0	12	127	166	0%	<b>23%</b>
<b>Sam Day Transfers Included in the Analysis</b>	3,231	1,506	3,371	7,247	15,355	<b>29%</b>	<b>53%</b>

Counts are mutually exclusive in hieratical order as displayed in the table. \*Burn cases at Johns Hopkins Bayview Hospital.

	Number of Transfers			Average Charge			Total Charge		
	Source			Source			Source		
	From ED	From Inpatient	All	From ED	From Inpatient	All	From ED	From Inpatient	All
<b>Receiving Hospital</b>	1,718	1,513	3,231	\$26,473	\$45,861	\$35,552	\$45,481,296	\$69,387,963	\$114,869,259
<b>UMMS</b>									
<b>MIEMSS</b>	1,216	290	1,506	\$28,175	\$73,843	\$36,969	\$34,260,354	\$21,414,370	\$55,674,723
<b>JHH</b>	2,272	1115	3,387	\$22,563	\$50,457	\$31,745	\$51,262,129	\$56,259,273	\$107,521,401
<b>Total</b>	5,206	2,918	8,124	\$25,164	\$50,398	\$34,228	\$131,003,778	\$147,061,605	\$278,065,383
<b>Non-AMC</b>	5,345	2,283	7,628	\$11,024	\$18,083	\$13,137	\$58,922,148	\$41,283,694	\$100,205,842

Table 8: AMC Transfers DRGS with 10 or more Cases, FY 2014

APR DRG Code	APR DRG NAME	Total charges			Average Age
		N	Mean	Sum	
720	Septicemia & disseminated infections	242	\$44,775	\$10,835,475	51.14
53	Seizure	208	\$13,206	\$2,746,835	24.79
55	Head trauma w coma >1 hr or hemorrhage	176	\$14,517	\$2,554,978	56.11
21	Craniotomy except for trauma	170	\$83,861	\$14,256,431	51.99
141	Asthma	169	\$8,595	\$1,452,570	6.73
45	CVA & precerebral occlusion w infarct	166	\$21,513	\$3,571,178	59.37
254	Other digestive system diagnoses	156	\$11,147	\$1,738,913	35.46
44	Intracranial hemorrhage	135	\$24,682	\$3,332,061	61.01
315	Shoulder, upper arm & forearm procedures	128	\$19,585	\$2,506,823	26.88
4	ECMO or tracheostomy w long term mechanical ventilation w extensive procedure	120	\$262,106	\$31,452,765	50.42
58	Other disorders of nervous system	119	\$13,616	\$1,620,281	49.63
710	Infectious & parasitic diseases including HIV w O.R. procedure	119	\$119,116	\$14,174,807	54.39
313	Knee & lower leg procedures except foot	116	\$36,511	\$4,235,256	44.29
279	Hepatic coma & other major acute liver disorders	114	\$27,739	\$3,162,203	51.29
139	Other pneumonia	108	\$14,058	\$1,518,261	26.55
383	Cellulitis & other bacterial skin infections	105	\$11,047	\$1,159,896	33.14
721	Post-operative, post-traumatic, other device infections	101	\$17,301	\$1,747,388	46.34
347	Other back & neck disorders, fractures & injuries	93	\$12,485	\$1,161,095	59.08
282	Disorders of pancreas except malignancy	90	\$13,235	\$1,191,168	44.82
308	Hip & femur procedures for trauma except joint replacement	88	\$36,678	\$3,227,659	56.28
221	Major small & large bowel procedures	86	\$55,876	\$4,805,329	49.06
466	Malfunction, reaction, complic of genitourinary device or proc	83	\$21,342	\$1,771,390	50.86
284	Disorders of gallbladder & biliary tract	78	\$13,029	\$1,016,225	54.9
92	Facial bone procedures except major cranial/facial bone procedures	76	\$24,451	\$1,858,278	35.82
690	Acute leukemia	74	\$104,607	\$7,740,882	52.72
861	Signs, symptoms & other factors influencing health status	73	\$11,662	\$851,354	34.6
420	Diabetes	72	\$9,832	\$707,886	22.11
130	Respiratory system diagnosis w ventilator support 96+ hours	68	\$79,287	\$5,391,528	45.49
5	Tracheostomy w long term mechanical ventilation w/o extensive procedure	66	\$169,374	\$11,178,706	55.62
247	Intestinal obstruction	66	\$11,393	\$751,921	53.27
660	Major hematologic/immunologic diag exc sickle cell crisis & coagul	65	\$49,892	\$3,242,972	46.31
133	Pulmonary edema & respiratory failure	64	\$36,562	\$2,339,988	42.39
143	Other respiratory diagnoses except signs, symptoms & minor diagnoses	63	\$23,723	\$1,494,562	43.87

Table 8: AMC Transfers DRGS with 10 or more Cases, FY 2014

APR DRG Code	APR DRG NAME	Total charges			Average Age
		N	Mean	Sum	
720	Septicemia & disseminated infections	242	\$44,775	\$10,835,475	51.14
813	Other complications of treatment	63	\$12,508	\$787,999	50.14
252	Malfunction, reaction & complication of GI device or procedure	62	\$17,874	\$1,108,169	50.4
283	Other disorders of the liver	61	\$17,719	\$1,080,840	48.66
351	Other musculoskeletal system & connective tissue diagnoses	61	\$10,780	\$657,550	40.87
281	Malignancy of hepatobiliary system & pancreas	59	\$21,494	\$1,268,162	61.19
138	Bronchiolitis & RSV pneumonia	58	\$11,589	\$672,182	1.79
662	Sickle cell anemia crisis	58	\$16,084	\$932,888	25.76
812	Poisoning of medicinal agents	58	\$10,875	\$630,729	22.19
711	Post-op, post-trauma, other device infections w O.R. procedure	56	\$56,729	\$3,176,822	53.61
248	Major gastrointestinal & peritoneal infections	53	\$19,831	\$1,051,050	44.06
463	Kidney & urinary tract infections	53	\$10,466	\$554,712	42.53
41	Nervous system malignancy	52	\$20,199	\$1,050,363	57.83
566	Other antepartum diagnoses	52	\$12,014	\$624,738	26.81
460	Renal failure	51	\$34,194	\$1,743,876	55.57
280	Alcoholic liver disease	50	\$24,102	\$1,205,082	53.16
791	O.R. procedure for other complications of treatment	49	\$41,892	\$2,052,688	56
342	Fractures & dislocations except femur, pelvis & back	48	\$9,017	\$432,798	43.31
225	Appendectomy	47	\$16,686	\$784,233	13.47
930	Multiple significant trauma w/o O.R. procedure	47	\$18,527	\$870,780	53.89
317	Tendon, muscle & other soft tissue procedures	46	\$60,051	\$2,762,347	44.65
54	Migraine & other headaches	45	\$7,305	\$328,717	35.71
115	Other ear, nose, mouth,throat & cranial/facial diagnoses	45	\$11,811	\$531,510	33.49
121	Other respiratory & chest procedures	45	\$55,303	\$2,488,656	50.67
253	Other & unspecified gastrointestinal hemorrhage	45	\$13,929	\$626,820	58.47
844	Partial thickness burns w or w/o skin graft	45	\$4,532	\$203,922	3.47
241	Peptic ulcer & gastritis	44	\$18,624	\$819,449	49.11
384	Contusion, open wound & other trauma to skin & subcutaneous tissue	44	\$8,204	\$360,984	35.36
113	Infections of upper respiratory tract	43	\$6,495	\$279,297	18.35
22	Ventricular shunt procedures	42	\$52,554	\$2,207,265	33.79
82	Eye disorders except major infections	42	\$10,181	\$427,598	41.48
346	Connective tissue disorders	42	\$31,436	\$1,320,314	49.55
691	Lymphoma, myeloma & non-acute leukemia	41	\$44,529	\$1,825,676	56.41
57	Concussion, closed skull Fx nos,uncomplicated intracranial injury, coma < 1 hr or no coma	40	\$8,633	\$345,306	28.45
663	Other anemia & disorders of blood & blood-forming organs	40	\$9,822	\$392,883	27.9

Table 8: AMC Transfers DRGS with 10 or more Cases, FY 2014

APR DRG Code	APR DRG NAME	Total charges			Average Age
		N	Mean	Sum	
720	Septicemia & disseminated infections	242	\$44,775	\$10,835,475	51.14
301	Hip joint replacement	39	\$55,642	\$2,170,047	67.95
135	Major chest & respiratory trauma	38	\$14,077	\$534,944	65.45
245	Inflammatory bowel disease	38	\$19,777	\$751,513	29.47
249	Non-bacterial gastroenteritis, nausea & vomiting	38	\$10,128	\$384,858	34.37
344	Osteomyelitis, septic arthritis & other musculoskeletal infections	38	\$28,683	\$1,089,950	47.13
912	Musculoskeletal & other procedures for multiple significant trauma	38	\$59,225	\$2,250,559	46.87
20	Craniotomy for trauma	37	\$49,633	\$1,836,428	56.86
23	Spinal procedures	37	\$72,891	\$2,696,980	59
48	Peripheral, cranial & autonomic nerve disorders	37	\$17,722	\$655,728	45.32
951	Moderately extensive procedure unrelated to principal diagnosis	37	\$66,105	\$2,445,891	50.32
137	Major respiratory infections & inflammations	37	\$29,814	\$1,103,126	40.22
724	Other infectious & parasitic diseases	37	\$23,307	\$862,342	43.35
42	Degenerative nervous system disorders exc mult sclerosis	36	\$37,565	\$1,352,347	54.5
134	Pulmonary embolism	36	\$23,795	\$856,624	49.06
240	Digestive malignancy	36	\$17,968	\$646,844	60.97
561	Postpartum & post abortion diagnoses w/o procedure	36	\$3,332	\$119,947	27.97
98	Other ear, nose, mouth & throat procedures	34	\$16,642	\$565,843	40.97
114	Dental & oral diseases & injuries	34	\$9,195	\$312,636	40.5
136	Respiratory malignancy	34	\$29,671	\$1,008,822	64.21
321	Cervical spinal fusion & other back/neck proc exc disc excis/decomp	34	\$62,146	\$2,112,950	60.59
723	Viral illness	34	\$15,565	\$529,193	25.38
52	Nontraumatic stupor & coma	33	\$49,099	\$1,620,273	52.61
24	Extracranial vascular procedures	32	\$60,245	\$1,927,833	55.91
950	Extensive procedure unrelated to principal diagnosis	32	\$84,876	\$2,716,044	50.41
220	Major stomach, esophageal & duodenal procedures	32	\$56,937	\$1,821,982	56.28
251	Abdominal pain	31	\$7,419	\$229,980	38.68
144	Respiratory signs, symptoms & minor diagnoses	30	\$16,279	\$488,361	36.5
243	Other esophageal disorders	30	\$10,179	\$305,357	38.1
263	Laparoscopic cholecystectomy	30	\$21,101	\$633,037	43.07
309	Hip & femur procedures for non-trauma except joint replacement	30	\$69,911	\$2,097,340	40.97
364	Other skin, subcutaneous tissue & related procedures	30	\$20,356	\$610,687	39.73
468	Other kidney & urinary tract diagnoses, signs & symptoms	29	\$15,700	\$455,296	49.31
229	Other digestive system & abdominal procedures	28	\$43,209	\$1,209,854	47.79



Table 8: AMC Transfers DRGS with 10 or more Cases, FY 2014

APR DRG Code	APR DRG NAME	Total charges			Average Age
		N	Mean	Sum	
720	Septicemia & disseminated infections	242	\$44,775	\$10,835,475	51.14
244	Diverticulitis & diverticulosis	27	\$15,112	\$408,024	68.74
304	Dorsal & lumbar fusion proc except for curvature of back	27	\$109,778	\$2,964,002	56.44
314	Foot & toe procedures	26	\$36,545	\$950,166	43.62
890	HIV w multiple major HIV related conditions	26	\$49,270	\$1,281,032	46.62
260	Major pancreas, liver & shunt procedures	25	\$75,308	\$1,882,691	47.84
424	Other endocrine disorders	25	\$17,592	\$439,812	51.24
425	Electrolyte disorders except hypovolemia related	25	\$20,505	\$512,619	46.32
722	Fever	25	\$9,298	\$232,455	38.96
305	Amputation of lower limb except toes	23	\$53,569	\$1,232,098	51.83
385	Other skin, subcutaneous tissue & breast disorders	23	\$7,479	\$172,024	33.96
43	Multiple sclerosis & other demyelinating diseases	22	\$27,760	\$610,730	45.36
56	Brain contusion/laceration & complicated skull Fx, coma < 1 hr or no coma	22	\$9,746	\$214,420	40.55
816	Toxic effects of non-medicinal substances	22	\$18,386	\$404,483	33.41
343	Musculoskeletal malignancy & pathol fracture d/t muscstel malig	21	\$34,393	\$722,251	42.57
633	Neonate birthwt >2499g w major anomaly	21	\$51,696	\$1,085,612	0
661	Coagulation & platelet disorders	21	\$31,537	\$662,284	41
815	Other injury, poisoning & toxic effect diagnoses	21	\$25,420	\$533,819	18.43
634	Neonate, birthwt >2499g w resp dist synd/oth maj resp cond	21	\$54,095	\$1,136,005	0
26	Other nervous system & related procedures	20	\$37,781	\$755,610	47.75
50	Non-bacterial infections of nervous system exc viral meningitis	20	\$36,460	\$729,195	49.95
775	Alcohol abuse & dependence	19	\$11,216	\$213,105	43.63
49	Bacterial & tuberculous infections of nervous system	18	\$29,768	\$535,828	48.33
422	Hypovolemia & related electrolyte disorders	18	\$11,777	\$211,981	51.44
443	Kidney & urinary tract procedures for nonmalignancy	18	\$32,797	\$590,349	51.39
631	Neonate birthwt >2499g w other major procedure	18	\$85,544	\$1,539,793	0
120	Major respiratory & chest procedures	17	\$89,852	\$1,527,488	45.24
224	Peritoneal adhesiolysis	17	\$32,881	\$558,972	41.12
560	Vaginal delivery	17	\$23,410	\$397,962	24.47
640	Neonate birthwt >2499g, normal newborn or neonate w other problem	17	\$4,148	\$70,508	0
228	Inguinal, femoral & umbilical hernia procedures	16	\$22,794	\$364,710	27.31
312	Skin graft, except hand, for musculoskeletal & connective tissue diagnoses	16	\$91,708	\$1,467,326	45
320	Other musculoskeletal system & connective tissue procedures	16	\$49,655	\$794,482	50.19

Table 8: AMC Transfers DRGS with 10 or more Cases, FY 2014

APR DRG Code	APR DRG NAME	Total charges			Average Age
		N	Mean	Sum	
720	Septicemia & disseminated infections	242	\$44,775	\$10,835,475	51.14
349	Malfunction, reaction, complic of orthopedic device or procedure	16	\$26,234	\$419,745	58.19
140	Chronic obstructive pulmonary disease	15	\$10,785	\$161,780	66.53
142	Interstitial lung disease	15	\$23,020	\$345,294	57.87
223	Other small & large bowel procedures	15	\$46,177	\$692,660	29.33
341	Fracture of pelvis or dislocation of hip	15	\$10,430	\$156,452	58.4
540	Cesarean delivery	15	\$27,199	\$407,991	28.53
911	Extensive abdominal/thoracic procedures for mult significant trauma	15	\$100,263	\$1,503,940	33
70	Orbital procedures	14	\$20,028	\$280,394	44.5
262	Cholecystectomy except laparoscopic	14	\$45,902	\$642,627	66
340	Fracture of femur	14	\$8,823	\$123,525	31.79
380	Skin ulcers	14	\$23,798	\$333,167	58.14
423	Inborn errors of metabolism	14	\$23,125	\$323,751	20
681	Other O.R. procedures for lymphatic/hematopoietic/other neoplasms	14	\$67,501	\$945,010	58.57
694	Lymphatic & other malignancies & neoplasms of uncertain behavior	14	\$27,793	\$389,095	55.43
40	Spinal disorders & injuries	13	\$18,247	\$237,212	60
47	Transient ischemia	13	\$9,162	\$119,112	54.23
952	Nonextensive procedure unrelated to principal diagnosis	13	\$32,407	\$421,289	58.08
222	Other stomach, esophageal & duodenal procedures	12	\$30,657	\$367,882	4.42
401	Pituitary & adrenal procedures	12	\$54,971	\$659,657	48.92
461	Kidney & urinary tract malignancy	12	\$12,078	\$144,936	67.75
892	HIV w major HIV related condition	12	\$15,473	\$185,676	41.5
80	Acute major eye infections	11	\$16,008	\$176,086	46.36
242	Major esophageal disorders	11	\$18,475	\$203,230	51.91
316	Hand & wrist procedures	11	\$23,597	\$259,572	23.73
381	Major skin disorders	11	\$5,999	\$65,993	34.45
421	Malnutrition, failure to thrive & other nutritional disorders	11	\$13,870	\$152,573	16.18
447	Other kidney, urinary tract & related procedures	11	\$60,732	\$668,052	47.18
465	Urinary stones & acquired upper urinary tract obstruction	11	\$8,440	\$92,837	42.45
513	Uterine & adnexa procedures for non-malignancy except leiomyoma	11	\$21,029	\$231,319	37.18
773	Opioid abuse & dependence	11	\$5,288	\$58,173	41.91
46	Nonspecific CVA & precerebral occlusion w/o infarct	10	\$7,424	\$74,240	47.8
51	Viral meningitis	10	\$13,044	\$130,442	20.9

**Table 8: AMC Transfers DRGS with 10 or more Cases, FY 2014**

APR DRG Code	APR DRG NAME	Total charges			Average Age
		N	Mean	Sum	
720	Septicemia & disseminated infections	242	\$44,775	\$10,835,475	51.14
131	Cystic fibrosis - pulmonary disease	10	\$12,182	\$121,824	20.9

Table 9: Transfers to AMCs by Sending Hospital , FY2014								
Sending Hospital		Receiving Hospital						All
		UMMS		MIEMSS		JHH		
		Source		Source		Source		
		ED	INPT	ED	INPT	ED	INPT	
Prov ID	HOSPITALNAME							
210033	CARROLL COUNTY	110	76	170	13	136	43	548
210011	ST. AGNES	114	82	126	19	121	41	503
210005	FREDERICK MEMORIAL	69	110	53	12	99	91	434
210019	PENINSULA REGIONAL	53	58	73	10	163	62	419
210015	FRANKLIN SQUARE	125	75	44	24	101	47	416
210023	ANNE ARUNDEL	42	73	57	18	132	74	396
210001	MERITUS	118	75	69	19	67	36	384
210056	GOOD SAMARITAN	105	56	72	17	79	37	366
210034	HARBOR	76	65	63	<10	65	23	298
210008	MERCY	82	51	21	<10	92	24	279
210013	BON SECOURS	97	44	72	<10	36	20	274
210040	NORTHWEST	70	52	29	<10	69	31	257
210048	HOWARD COUNTY	92	54	88	12	.	.	246
210012	SINAI	41	55	13	14	76	43	242
210044	G.B.M.C.	27	37	26	<10	70	67	235
210039	CALVERT	69	44	18	10	61	22	224
210024	UNION MEMORIAL	56	27	27	<10	59	19	196
210055	LAUREL REGIONAL	47	47	34	<10	20	12	169
210049	UPPER CHESAPEAKE	.	.	.	.	130	32	162
210043	BALTIMORE WASHINGTON MEDICAL CENTER	.	.	.	.	107	53	160
210051	DOCTORS COMMUNITY	23	66	23	<10	13	22	156
210057	SHADY GROVE	11	53	15	<10	29	37	153
210027	WESTERN MARYLAND HEALTH SYSTEM	15	27	11	<10	52	23	134
210062	SOUTHERN MARYLAND	23	36	15	<10	30	17	128
210061	ATLANTIC GENERAL	24	41	16	<10	29	<10	125
210003	PRINCE GEORGE	37	45	10	<10	10	16	124
210028	ST. MARY	33	20	<10	<10	32	12	109
210032	UNION HOSPITAL OF CECIL COUNT	22	30	<10	<10	27	14	107
210004	HOLY CROSS	10	27	<10	<10	19	24	90
210002	UNIVERSITY OF MARYLAND	.	.	.	.	52	38	90
210037	EASTON	.	.	.	.	68	22	90
210016	WASHINGTON ADVENTIST	24	34	<10	<10	<10	12	86
210088	QUEEN ANNES	24	.	24	.	20	.	68
210009	JOHNS HOPKINS	38	11	<10	<10	.	.	59
210018	MONTGOMERY GENERAL	<10	10	<10	.	30	<10	57
210063	UM ST. JOSEPH	.	.	.	.	26	24	50
210006	HARFORD	.	.	.	.	34	16	50
210035	CHARLES REGIONAL	.	.	.	.	27	17	44
210038	UMMC MIDTOWN	.	.	.	.	27	12	39
210029	HOPKINS BAYVIEW MED.	17	10	<10	<10	.	.	32
210030	CHESTERTOWN	.	.	.	.	30	<10	32
210060	FT. WASHINGTON	<10	<10	<10	<10	<10	<10	31

Table 9: Transfers to AMCs by Sending Hospital , FY2014								
Sending Hospital		Receiving Hospital						All
		UMMS		MIEMSS		JHH		
		Source		Source		Source		
		ED	INPT	ED	INPT	ED	INPT	
Prov ID	HOSPITALNAME							
210022	SUBURBAN	<10	<10	<10	.	.	.	19
210010	DORCHESTER	.	.	.	.	12	<10	15
210017	GARRETT COUNTY	.	<10	.	<10	<10	<10	<10
210058	REHAB & ORTHO	.	.	.	.	.	<10	<10
210045	MCCREADY	<10	.	<10	.	<10	.	<10
210333	BOWIE HEALTH	<10	.	<10	.	<10	.	<10
<b>Total</b>		<b>1,718</b>	<b>1,513</b>	<b>1,216</b>	<b>290</b>	<b>2,271</b>	<b>1,115</b>	<b>8,123</b>

<b>Table 10: CY 2014 TYD Quarterly Trends</b>																	
		<b>Transfer Cases</b>							<b>Annual Growth Rates</b>					<b>Calendar Year To Date</b>			
		<b>2013</b>				<b>2014</b>			<b>2013</b>		<b>2014</b>						
		<b>Calendar Quarter</b>				<b>Calendar Quarter</b>			<b>Calendar Quarter</b>		<b>Calendar Quarter</b>						
	<b>Receiving Hospital</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>CY 13</b>	<b>CY 14</b>	<b>Change Count</b>	<b>Change %</b>
<b>Number of Cases</b>	<b>1_UMMS</b>	753	795	831	866	745	789	676	16.1%	9.1%	-1.1%	-0.8%	-18.7%	<b>2,379</b>	<b>2,210</b>	<b>-169</b>	<b>-7.1%</b>
	<b>2_MIEMSS</b>	361	401	425	349	357	375	375	15.8%	-3.9%	-1.1%	-6.5%	-11.8%	<b>1,187</b>	<b>1,107</b>	<b>-80</b>	<b>-6.7%</b>
	<b>3_JHH</b>	800	838	886	795	792	898	896	18.4%	-1.4%	-1.0%	7.2%	1.1%	<b>2,524</b>	<b>2,586</b>	<b>62</b>	<b>2.5%</b>
<b>Average Charge</b>	<b>1_UMMS</b>	\$38,259	\$32,147	\$30,156	\$29,826	\$42,122	\$40,998	\$38,085	9.7%	-2.6%	10.1%	27.5%	26.3%	\$100,563	\$121,205	\$20,642	20.5%
	<b>2_MIEMSS</b>	\$29,816	\$37,730	\$35,938	\$37,189	\$37,921	\$37,128	\$40,168	36.0%	32.5%	27.2%	-1.6%	11.8%	\$103,485	\$115,217	\$11,732	11.3%
	<b>3_JHH</b>	\$31,169	\$29,992	\$33,026	\$32,611	\$29,742	\$30,804	\$34,297	19.8%	16.6%	-4.6%	2.7%	3.8%	\$94,187	\$94,843	\$656	0.7%
<b>Total Charges</b>	<b>1_UMMS</b>	\$28,809,383	\$25,556,691	\$25,059,871	\$25,829,002	\$31,380,777	\$32,347,174	\$25,745,554	27.3%	6.2%	8.9%	26.6%	2.7%	\$79,425,945	\$89,473,505	\$10,047,559	12.7%
	<b>2_MIEMSS</b>	\$10,763,632	\$15,129,838	\$15,273,826	\$12,979,057	\$13,537,670	\$13,923,145	\$15,062,885	57.5%	27.4%	25.8%	-8.0%	-1.4%	\$41,167,296	\$42,523,700	\$1,356,404	3.3%
	<b>3_JHH</b>	\$24,935,219	\$25,132,982	\$29,261,230	\$25,925,552	\$23,555,420	\$27,661,922	\$30,730,487	41.9%	15.0%	-5.5%	10.1%	5.0%	\$79,329,431	\$81,947,829	\$2,618,398	3.3%

Table 11: CY 2014 Jan-Oct Year to Date Trends					
ID	Hospital Name	CY 13	CY14	Annual Change	
				Count	%
210017	GARRETT COUNTY	<10	<10	6	150%
210009	JOHNS HOPKINS	31	42	11	35%
210028	ST. MARY	65	87	22	34%
210043	BALTIMORE WASHINGTON MEDICAL CENTER	99	131	32	32%
210030	CHESTERTOWN	24	31	7	29%
210032	UNION HOSPITAL OF CECIL COUNT	73	91	18	25%
210048	HOWARD COUNTY	167	196	29	17%
210002	UNIVERSITY OF MARYLAND	65	73	8	12%
210063	UM ST. JOSEPH	37	41	4	11%
210011	ST. AGNES	336	372	36	11%
210001	MERITUS	261	284	23	9%
210037	EASTON	73	78	5	7%
210039	CALVERT	149	159	10	7%
210040	NORTHWEST	181	193	12	7%
210049	UPPER CHESAPEAKE HEALTH	111	115	4	4%
210035	CHARLES REGIONAL	32	33	1	3%
210019	PENINSULA REGIONAL	310	316	6	2%
210022	SUBURBAN	13	13	0	0%
210038	UMMC MIDTOWN	27	27	0	0%
210023	ANNE ARUNDEL	320	317	-3	-1%
210033	CARROLL COUNTY	409	400	-9	-2%
210006	HARFORD	37	36	-1	-3%
210005	FREDERICK MEMORIAL	326	317	-9	-3%
210012	SINAI	181	174	-7	-4%
210044	G.B.M.C.	178	171	-7	-4%
210015	FRANKLIN SQUARE	311	298	-13	-4%
210034	HARBOR	232	222	-10	-4%
210013	BON SECOURS	227	216	-11	-5%
210057	SHADY GROVE	121	112	-9	-7%
210029	HOPKINS BAYVIEW MED CTR	25	23	-2	-8%
210062	SOUTHERN MARYLAND	74	68	-6	-8%
210010	DORCHESTER	12	11	-1	-8%
210088	QUEEN ANNES	58	53	-5	-9%
210055	LAUREL REGIONAL	119	106	-13	-11%
210027	WESTERN MARYLAND HEALTH SYSTEM	102	90	-12	-12%
210051	DOCTORS COMMUNITY	121	104	-17	-14%
210060	FT. WASHINGTON	23	19	-4	-17%
210003	PRINCE GEORGE	93	76	-17	-18%
210018	MONTGOMERY GENERAL	64	52	-12	-19%
210024	UNION MEMORIAL	168	136	-32	-19%

Table 11: CY 2014 Jan-Oct Year to Date Trends					
ID	Hospital Name	CY 13	CY14	Annual Change	
				Count	%
210016	WASHINGTON ADVENTIST	75	60	-15	-20%
210008	MERCY	221	173	-48	-22%
210056	GOOD SAMARITAN	295	224	-71	-24%
210061	ATLANTIC GENERAL	124	85	-39	-31%
210004	HOLY CROSS	94	60	-34	-36%
210045	MCCREADY	<10	<10	-3	-38%
210058	REHAB & ORTHO	<10	<10	-4	-57%
210333	BOWIE HEALTH	<10	<10	-7	-100%
<b>Total</b>		6,090	5,903	-187	-3%



<b>Table 12: Transfer Charges by Category of Service, FY2014</b>				
Service Line	Total charges			Age in years
	N	Mean	Sum	Average Age
Neurology	1,076	\$18,711	\$20,133,118	47.3
Gastroenterology	1,004	\$16,354	\$16,419,602	46.5
General Surgery	772	\$55,002	\$42,461,331	46.26
Pulmonary	680	\$24,111	\$16,395,406	28.21
Orthopedic Surgery	576	\$44,423	\$25,587,924	44.54
Infectious Disease	535	\$30,741	\$16,446,553	43.87
Oncology	382	\$41,859	\$15,990,043	56.75
Neurological Surgery	299	\$70,918	\$21,204,475	50.66
General Medicine	238	\$12,312	\$2,930,290	22.62
Nephrology	220	\$21,689	\$4,771,669	49.44
Orthopedics	187	\$12,316	\$2,303,065	52.65
Hematology	184	\$28,429	\$5,231,027	35.22
Ventilator Support	174	\$230,999	\$40,193,908	52.84
Trauma	141	\$37,214	\$5,247,143	52.35
ENT Surgery	128	\$23,318	\$2,984,743	36.07
Injuries/complic. of prior care	112	\$25,363	\$2,840,687	52.71
Neonatology	110	\$95,536	\$10,508,940	0
Rheumatology	103	\$19,203	\$1,977,864	44.41
Other Obstetrics	99	\$8,545	\$845,983	26.95
Otolaryngology	93	\$8,898	\$827,481	28.8
Endocrinology	93	\$17,642	\$1,640,736	41.11
Dermatology	92	\$10,132	\$932,168	38.37
Diabetes	73	\$9,702	\$708,253	22.1
Spinal Surgery	70	\$65,933	\$4,615,297	59.06
Thoracic Surgery	62	\$64,461	\$3,996,569	48.98
Urological Surgery	61	\$42,634	\$2,600,701	48.08
Ophthalmology	54	\$11,881	\$641,595	41.96
HIV	49	\$33,265	\$1,629,974	43.2
Substance Abuse	46	\$8,550	\$393,304	43.91
Obstetrics/Delivery	34	\$25,359	\$862,206	26.79
Dental	33	\$9,376	\$309,396	40.3
Gynecological Surg	23	\$18,534	\$426,280	36.78
Ophthalmologic Surg	20	\$22,992	\$459,836	36.8
Endocrinology Surgery	18	\$50,998	\$917,957	54.72
Gynecology	18	\$13,752	\$247,531	41.83
Urology	17	\$11,143	\$189,437	42.53
Newborn	10	\$5,804	\$58,038	0
Ungroupable	<10	\$1,739	\$5,218	43.67
Invasive Cardiology	<10	\$22,308	\$22,308	73
Cardiology	<10	\$185,498	\$185,498	40

Table 13: CY 2014 Jan-Oct year to Date Trends in AMC Transfers by Product Line				
	CY13 YTD	CY14 YTD	Annual Change	
			Count	%
Substance Abuse	34	41	7	21%
Hematology	128	150	22	17%
Ventilator Support	117	134	17	15%
Pulmonary	435	487	52	12%
General Surgery	573	612	39	7%
Neonatology	86	90	4	5%
Diabetes	60	62	2	3%
Urological Surgery	43	44	1	2%
General Medicine	166	168	2	1%
Endocrinology	76	76	0	0%
Thoracic Surgery	42	42	0	0%
Nephrology	173	169	-4	-2%
Neurological Surgery	231	225	-6	-3%
Trauma	108	105	-3	-3%
Gastroenterology	761	728	-33	-4%
Orthopedic Surgery	438	412	-26	-6%
Infectious Disease	388	362	-26	-7%
Gynecology	14	13	-1	-7%
Urology	14	13	-1	-7%
Oncology	286	265	-21	-7%
Neurology	822	746	-76	-9%
Gynecological Surg	19	17	-2	-11%
Spinal Surgery	56	50	-6	-11%
Other Obstetrics	91	78	-13	-14%
Injuries/complic. of prior care	97	80	-17	-18%
HIV	47	37	-10	-21%
Endocrinology Surgery	<10	<10	-2	-22%
ENT Surgery	113	86	-27	-24%
Orthopedics	166	124	-42	-25%
Rheumatology	80	54	-26	-33%
Newborn	<10	<10	-3	-33%
Obstetrics/Delivery	29	19	-10	-34%
Dermatology	96	60	-36	-38%
Otolaryngology	100	57	-43	-43%
Ophthalmology	60	32	-28	-47%
Ophthalmologic Surg	25	11	-14	-56%
Dental	59	21	-38	-64%
Cardiology	<10	<10	-1	-100%
Ungroupable	<10	<10	1	50%
Invasive Cardiology	<10	<10	3	
Psychiatry	<10	<10	0	

## Appendix A. Categorical Cases Definitions

### 1. Categorical Case Exclusions

- 1.1. Solid Organ Transplants APR DRGS = 001, 002, 003, 006 or 440  
(any procedure = 5280, 5282 or 5283 or any procedure = 5280, 5282, 5283, 4100, 4101, 4102, 4103, 4104, 4105, 4106, 4107, 4108 or 3751 Heart Transplantation 4109 or 336 or 3350 , 3351, 3352, 5569, 5561, 5281, 5051, or 5059)
- 1.2. Melodysplastic - Any Diagnosis = 2387 for Johns Hopkins Oncology Center
- 1.3. JHU Pediatric Burn Cases (Age < 18) - 3rd Degree Burns
- 1.4. Johns Hopkins and University Oncology Center
  - 1.4.1. Transplant Cases (Reserve Flag = 1)
  - 1.4.2. Research Cases (Reserve Flag = 2)
  - 1.4.3. Hematological Cases (Reserve Flag = 3)
  - 1.4.4. Transfer in Cases (Reserve Flag = 4)

See Excel File:

9d- Transfer Tables - 20150107

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.

Stephen F. Jencks,  
M.D., M.P.H.

Jack C. Keane

Bernadette C. Loftus,  
M.D.

Thomas R. Mullen

Donna Kinzer  
Executive Director

Stephen Ports  
Principal Deputy Director  
Policy and Operations

David Romans  
Director  
Payment Reform  
and Innovation

Gerard J. Schmith  
Deputy Director  
Hospital Rate Setting

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

**Health Services Cost Review Commission**

4160 Patterson Avenue, Baltimore, Maryland 21215  
Phone: 410-764-2605 · Fax: 410-358-6217  
Toll Free: 1-888-287-3229  
hsrc.maryland.gov

**TO: Commissioners**

**FROM: HSCRC Staff**

**DATE: January 7, 2015**

**RE: Hearing and Meeting Schedule**

---

February – To Be Determined (Tentatively Feb. 11)      Time to be determined, 4160 Patterson Avenue  
HSCRC/MHCC Conference Room

March 11, 2015      Time to be determined, 4160 Patterson Avenue  
HSCRC/MHCC Conference 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.hsrc.maryland.gov/commission-meetings-2015.cfm>

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