

**457th MEETING OF THE**  
**HEALTH SERVICES COST REVIEW COMMISSION**

**JUNE 3, 2009**

Chairman Young called the meeting to order at 8:58 a.m. Commissioners Joseph R. Antos, Ph.D., Raymond J. Brusca, J.D., Trudy R. Hall, M.D., C. James Lowthers, and Herbert S. Wong, Ph.D. were also present.

**ITEM I**  
**REVIEW OF THE MINUTES OF THE PUBLIC SESSION**  
**OF MAY 13, 2009**

The Commission voted unanimously to approve the amended minutes of the May 13, 2009 Public Meeting.

**ITEM II**  
**EXECUTIVE DIRECTOR'S REPORT**

Robert Murray, Executive Director, summarized the major initiatives and high priority issues that the Commission and staff are working on. They include: 1) discussion by a technical workgroup on how the Maryland Hospital Acquired Conditions (MHAC) policy will be applied in the FY 2011 update; 2) beginning a study of how to include potentially preventable re-admissions in the Commission's quality initiative; 3) expansion of the outpatient Charge per Visit (CPV) methodology; 4) potential further modifications of the Community Benefit Report to enable staff to evaluate hospital performance; 5) exploring revisions to the Uncompensated Care Policy to encourage the provision of charity care; 6) convening a workgroup to review and recommend standards for hospital credit and collection policies; 7) evaluating the use and coding of Observation Services and high incidence of one-day length of stay admissions; 8) the consideration of Patient Experience of Care and other enhancements to Quality-based Reimbursement system with the Evaluation Work Group; 9) the preparation the Annual Disclosure of Hospital Financial and Statistical Data for release at the July 1<sup>st</sup> public meeting; and 10) beginning the annual discussion of Reasonableness of Charges (ROC) methodology focusing on peer groups and outlier payments.

**ITEM III**  
**DOCKET STATUS CASES CLOSED**

2009A – University of Maryland Medical Center      2022R – Civista Medical Center  
2023A – University of Maryland Medical Center

**ITEM IV**  
**DOCKET STATUS CASES OPEN**

**The Johns Hopkins Hospital – 2025N**

On April 15, 2009, Johns Hopkins Hospital submitted an application requesting the Commission approve a rate for its new Audiology (AUD) service, effective May 15, 2009.

After review of the Hospital's application, staff recommended:

- 1) That COMAR 10.37.10.07, requiring that a rate application be made 60 days before the initiation of a new service be waived;
- 2) That the AUD rate of \$7.03 per RVU be approved effective May 15, 2009;
- 3) That no change be made to the Hospital's Charge per Case standard for the new AUD services; and
- 4) That the AUD rate not be rate realigned until a full year's experience data have been reported to the Commission.

The Commission voted unanimously to approve staff's recommendation.

**McCready Memorial Hospital – 2026N**

On April 20, 2009, McCready Memorial Hospital filed a partial application requesting a rebundled Renal Dialysis (RDL) rate in order to be able to charge inpatients for RDL services provided off-site.

After review of the Hospital's application, staff recommended:

- 5) That COMAR 10.37.10.07, requiring that a rate application be made 60 days before the initiation of a new service be waived;
- 6) That the RDL rate of \$637.53 per treatment be approved effective June 1, 2009;

- 7) That no change be made to the Hospital's Charge per Case standard for the new RDL services; and
- 8) That the RDL rate not be rate realigned until a full year's experience data have been reported to the Commission.

The Commission voted unanimously to approve staff's recommendation.

#### **Good Samaritan Hospital – 2027R**

On April 29, 2009, Good Samaritan Hospital submitted an application requesting that its Medical Surgical Intensive Care (MIS) and Coronary Care (CCU) units be combined effective July 1, 2009.

After reviewing the Hospital's application, staff recommended that the Commission approve the Hospital's request to combine its MIS and CCU rate centers effective July 1, 2009.

The Commission voted unanimously to approve staff's recommendation.

#### **Holy Cross Hospital – 2029A**

On May 18, 2009, Holy Cross Hospital filed an application requesting approval to continue to participate in an alternative method of rate determination with Kaiser Health Plan of the Mid-Atlantic States, Inc. (Kaiser).

This arrangement, approved for two years in July 2005 and subsequently extended an additional two years in July 2007, grants a reduction in rates of 3.15% to Kaiser members to reflect the cost savings to Holy Cross generated by activities performed by Kaiser. In addition, Kaiser was allowed to use its greater purchasing power to reduce the cost of major medical devices for its members; in return, Holy Cross agreed to reduce its Total Allowable Revenue by the cost of the devices.

Based on a letter of attestation and data provided by Holy Cross, the activities of Kaiser continued to justify the rate reduction provided to Kaiser's members, and Holy Cross' Total Allowable Revenue was reduced by more than \$900,000 in FY 2008.

Therefore, staff recommended that the Commission approve Holy Cross' request to participate in this arrangement for an additional two years beginning July 1, 2009.

The Commission voted unanimously to approve staff's recommendation.

**ITEM V**  
**FINAL RECOMMENDATIONS ON THE IMPLEMENTATION OF THE PAYMENT  
POLICY FOR HIGHLY PREVENTABLE HOSPITAL ACQUIRED CONDITIONS**

Diane Feeney, Associate Director-Quality Initiative, presented the final recommendations on the HSCRC Payment Policy for Highly Preventable Hospital Acquired Conditions (attachment A). The final recommendation reflected the changes resulting from the comments from the industry and the Commissioners, as well as technical meetings among representatives of the stakeholders - - 3M, hospitals, staff, consultants, and St. Paul Computer Center. The revised methodology compares actual hospital performance to the normative expected standard of potentially preventable complications (PPCs) on a risk adjusted basis. Ms. Feeney reported that concerns regarding clinical issues will be addressed at two clinical vetting sessions in July.

Beverly Miller, Senior Vice President, Professional Services of the Maryland Hospital Association (MHA) and T. Michael White, M.D, Chief Medical Officer of the Washington County Hospital, commented on the recommendation on behalf of the hospital industry.

Ms. Miller stated that this policy is groundbreaking; if adopted Maryland will be the first state in the nation to link PPCs to reimbursement. Ms. Miller also suggested that the revised rate based approach is clearly superior to the original methodology; however, she further suggested that since this is a pioneering effort, that a modest amount of revenue be at risk in the early years of the policy. Ms. Miller also expressed support for staff's recommendation that a technical issues/payment workgroup be formed to begin identifying technical payment-related issues. Ms. Miller pointed out that it is critically necessary that there be a process to receive and review clinical input on the PPCs.

Dr. White described Washington County Hospital's experience in doing clinical review of a number of cases identified as having PPCs. According to Dr. White, the care provided to the patients was appropriate; however, the recording of an inappropriate diagnosis and subsequent inappropriate coding resulted in the cases having a PPC.

Dr. White asserted that the HSCRC has discovered and introduced the most powerful tool to advance quality and patient safety, but it is clinically unrefined. Dr. White expressed strong support for a meaningful process for reviewing clinical input on the PPCs to be covered in this policy so that appropriate refinements may be made. Dr. White expressed the hope that this new tool will enable hospitals to focus their precious resources efficiently on those areas where they can make a real difference.

Ms. Miller expressed the industry's support for a clinical review process for the PPCs and urged the Commission to delay the vote on the recommendation until it can be completed.

Hal Cohen, Ph.D., representing CareFirst of Maryland and Kaiser Permanente, agreed that the revised methodology was a significant improvement and urged approval of staff's recommendation.

Commissioner Hall supported the revised methodology, but expressed concern, based on the number of changes that had already been made to the policy, that the Commission was being asked to vote on an incomplete policy. Commissioner Hall made a motion that the Commission vote today on the methodology, but postpone voting on the PPCs until the July public meeting when they will have been vetted.

Mr. Murray noted that because of the scheduling of the two clinical vetting sessions, the vetting process will not be completed before the July public meeting.

Commissioner Antos stated that because the policy utilizes a rating methodology, it does not matter when it begins. According to Commissioner Antos, implementation of the policy could be delayed until the PPC vetting is completed, and the methodology could still be applied to a 12 month period.

Commissioner Wong stated that the Commission should not deviate from the July 1, 2009 implementation date.

Mr. Murray noted that the Commission had the option of voting on the methodology and later, after the clinical review process, to approve the vetted PPCs so that implementation of the policy would not be delayed.

The Commission voted unanimously to approve staff's recommendation with the understanding that staff would report the results of the PPC vetting process at the August 2009 public meeting for final approval of the list of PPCs.

**ITEM VI**  
**FINAL RECOMMENDATIONS ON MARYLAND PATIENT SAFETY**  
**CENTER FUNDING FOR FY 2010**

Steve Ports, Principal Deputy Director-Policy & Operations, provided a summary of the Commission's involvement in the funding of the Maryland Patient Safety Center in prior years and its purpose, accomplishment, and outcomes.

Mr. Murray presented staff's final recommendation for continued funding of the Maryland Patient Safety Center (MPSC). This recommendation remains unchanged from the draft recommendations presented at the May public meeting: 1) that FY 2010 funding cover 45% of the costs of the MPSC, less 50% of the carry-over from FY 2009 or \$1.6 million; 2) that in future years the percentage of budgeted costs funded be reduced by at least 5% per year, but not exceed the amount provided in the previous year; 3) that the HSCRC maintain a reasonable base level of support (potentially 25% of budgeted costs); 4) that the MPSC update the HSCRC periodically on health care outcomes and expected savings resulting from its programs; and 5) that the MPSC aggressively pursue other sources of revenue to help support it into the future.

William F. Minogue, M.D., Executive Director and President of the MPSC, thanked the Commission for its continued support of the MPSC. Dr. Minogue stated that he felt that the diminution of HSCRC funding provides the appropriate challenge to the MPSC to find new sources of funding. Dr. Minogue stated that he was optimistic that MPSC would meet its funding goal.

The Commission voted unanimously to approve staff's recommendation.

**ITEM VII**  
**DRAFT RECOMMENDATIONS FOR REVISIONS TO THE CHARGE PER VISIT**  
**METHODOLOGY**

Charlotte Thompson, Associate Director-Policy Analysis and Research, reported that since the adoption of the CPV methodology, staff has been working, with the help of the Outpatient Technical Workgroup, to refine the exclusion logic and address issues to incorporate more revenue into the methodology. If adopted, the methodology revisions proposed by staff would bring approximately 80% of outpatient revenue under the CPV methodology in FY 2010 up from 55% in FY 2009. The recommendations include methodology refinements that would: 1) exclude cycle-billed visits based on the number of visits field on the outpatient tape; 2) give the appropriate case weight for radiology procedures performed in the emergency department or in clinics; 3) group infusion Ambulatory Patient Groups (APGs) based on the associated drug's APGs; and 4) reflect the added resource utilization for encounters where multiple procedures are performed.

Graham Atkinson, Ph.D., Commission Consultant, noted that one important feature of this recommendation that we are retaining is the modified methodology that assigns a single case mix category to each case. This makes it easier for hospitals to monitor and implement and to do case mix adjustments. Dr. Atkinson noted that staff and the industry are working diligently to develop a method to include cycle-billed visits in the methodology next year.

Robert Vovak, Senior Vice President & CFO of MHA, and Kim Repac, Senior Vice President & CFO of the Western Maryland Health System, presented MHA's recommendations on the proposed expansion of the CPV system.

Mr. Vovak outlined the progress to date on the expansion of the CPV system and expressed agreement with most of staff's methodology refinement recommendations. Mr. Vovak expressed the industry's opposition to the inclusion of referred ancillary services under the CPV. According to Mr. Vovak if included, rewards or penalties would be created simply by those procedures or tests that physicians refer to a hospital.

Ms. Repac expressed concern with: 1) including referred ancillary services; 2) the method by which infusion and radiation therapy is to be handled; and 3) the lack of separate weights for APGs with extended observation. Ms. Repac stated that the industry strongly believes that the

Commission should not go forward with the recommendation until the vetting by the Outpatient Technical Workgroup is completed.

Mr. Murray stated that the Outpatient Technical Workgroup will be reconvened to complete the vetting process.

Dr. Atkinson noted that the only referred ancillaries to be included in the CPV are what 3M identifies as significant procedures, which are largely CAT scans, PET scans, and MRIs, not routine radiology procedures and laboratory tests.

Mr. Vovak urged the Commission to postpone making a decision until the August public meeting.

Dr. Cohen indicated that it was extremely important to approve staff's recommendation because it will increase the total revenue in the system that is under revenue constraint by an additional \$1 billion. Dr. Cohen pointed out that you do not need detailed data to respond to incentives. You only need to know what the incentives are. Under the CPV system, hospitals know what the incentives are. Dr. Cohen strongly recommended that the Commission move forward on staff's recommendations.

Mr. Murray announced that public comments on the draft recommendation should be received in the Commission's offices by June 24, 2009.

**ITEM VIII**  
**DRAFT RECOMMENDATIONS REGARDING CASE-MIX AND THE CASE-MIX**  
**GOVERNOR**

Andy Udum, Associate Director-Research and Methodology, presented two draft recommendations. The first recommendation proposed modifying the case mix methodology to provide separate case-weights to voluntary and involuntary psychiatric admissions effective July 1, 2009 (FY 2010).

The second recommendation involved the application of FY 2010 case mix adjustments. Mr. Udum explained that staff proposed that case mix growth be calculated by treating the first 0.6% of case mix growth as equal to zero (the 0.6% represents the 0.5% in case mix growth included in the rate base, adjusted to reflect the variable cost associated with increased volume) and then calculate overall case mix growth. If the state-wide increase is still greater than the target of 0.5%, calculate a proportional adjustment factor to achieve the 0.5% target.

Mr. Murray noted that the purpose of the proposed methodology was to allow hospitals with significant case mix growth to receive additional resources to cover the costs of treating higher need patients.

Dr. Cohen observed that he favored this approach for FY 2009 because he believed that it was fairer; however, the hospital industry correctly considered it retroactive rule making. Dr. Cohen indicated that staff was now giving the appropriate notice, and that he strongly supported both recommendations.

Mr. Murray announced that public comments should be received in the Commission's office by June 24, 2009.

**ITEM IX**  
**BRIEFING ON ACHIEVED AND EXPECTED OUTCOMES OF NURSE SUPPORT PROGRAM II**

Oscar Ibarra, Chief-program Administration & Information Management, introduced Mary O'Conner of the Maryland Higher Education Commission (MHEC) which administers the Nurse Support Program II (NSP II). Ms. O'Conner presented a report of the achieved and expected outcomes of the NSP II in response to the request made by Commissioner Antos at the May public meeting (attachment B). Ms. O'Conner explained that NSP II, a ten year project initiated in 2005, is funded by a 0.1% assessment on patient revenue and focuses on the education of nurses, including educating nurses to become faculty in order to ultimately produce more bedside nurses. Ms. O'Conner noted that in the first three years of the NSP II program, over \$18 million has been committed to nurse education.

Dr. Cohen asked the Commission to look into whether nurses were able to access student loans. Dr. Cohen noted that since the nursing shortage is a long term structural problem, and given the current nature of the economy, now is a great time to recruit nurses; however, if they can not obtain student loans, this presents a potential problem.

Ms. O'Conner stated that to her knowledge all qualified nursing undergraduates were approved for scholarships under NSP II.

Ms. Catherine M. Crowley, Ed.D., Vice President of MHA, asserted that the nursing shortage in Maryland is currently being masked by the recession, i.e., nurses are postponing retirement and some have been forced by the economy to return to the work force. Ms. Crowley noted that when the economy recovers, the nursing shortage will return. Ms. Crowley observed that NSP II is extremely unique and important; however it is not enough. Ms. Crowley stated that the goal is to complement the NSP II program and to increase nurse education capacity in order to double the number of nursing graduates in Maryland by 2016.

**ITEM X**  
**MARYLAND HOSPITAL COMMUNITY BENEFIT REPORT SUMMARY AND**  
**UPDATE**

Amanda Greene, Program Analysis-Audit & Compliance, summarized the background and outlined the changes made to the Community Benefit Report. Ms. Greene noted that the changes were made with the assistance of the Community Benefit Advisory Group. The changes include: 1) revising the reporting instructions and requiring the filing of additional information in order to provide consistency across hospitals; 2) issuing narrative guidelines in order to link hospitals' activities with the needs of the community as identified by formal needs assessment or through independent sources not affiliated with the hospital (optional for FY 2008 mandatory in FY 2009); 3) evaluating current programs; 4) identifying new areas of need; 4) creating a consistent structure to facilitate a comprehensive consolidated state report.

Ms. Greene announced that the FY 2008 Community Benefit Report would be available to the public within the next week. Ms. Greene stated that the Report indicated that: 1) Maryland hospitals provided more than \$861 million in community benefit activities in FY 2008, up from \$812 million in FY 2007 (an increase of 6%); 2) the indirect costs expended to provide the community benefits decreased from 24% to 17.5% of the total community benefits provided; and 3) of the total community benefits provided, \$286 million was in the form of charity care, up from \$260 million in FY 2007.

Ms. Greene noted that the next steps to refine the Report include: 1) vetting an evaluation template for the Community Benefit Narrative; 2) providing confidential feedback to the hospitals that filed in the new format; 4) developing a standard evaluation format for review of the quantitative data reported by hospitals; 5) reviewing and providing feedback that highlights best practices; and 6) educating hospitals not meeting the standards.

**ITEM XI**  
**LEGAL REPORT**

**Regulations**

**Proposed**

**Uniform Accounting and Reporting System for Hospitals and Related Institutions – COMAR 10.37.01.03**

The purpose of this regulation is to shorten the time for nonprofit hospitals to submit the Annual Nonprofit Hospital Community Benefit Report to the Commission; and to increase the civil penalty associated with the failure to timely file required reports with the Commission.

The Commission voted unanimously to forward the proposed regulations to the AELR Committee for review and publication in the Maryland Register.

**ITEM XII**  
**HEARING AND MEETING SCHEDULE**

July 1, 2009

Time to be determined, 4160 Patterson Avenue, HSCRC  
Conference Room

August 5, 2009

Time to be determined, 4160 Patterson Avenue, HSCRC  
Conference Room

There being no further business, the meeting was adjourned at 11:31 a.m.

# Attachment A

## **Final Staff Recommendations Regarding HSCRC Payment Policy for Highly Preventable Hospital Acquired Conditions**

Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, MD 21215  
(410) 764-2605  
Fax (410) 358-6217  
May 29, 2009

This document represents a final recommendation presented to the Commission at the June, 3, 2009 meeting.

## **Background**

In March 2009 the Commission approved a payment policy based on 11 Maryland Hospital Acquired Conditions (MHACs). The MHACs are a subset of the 64 potentially preventable complications (PPCs) developed by 3M. The 11 MHACs were chosen for several reasons:

- They are conceptually similar to the hospital acquired conditions (HACs) developed by CMS;
- They were judged the “most highly preventable” of the 3M PPCs, and therefore amenable to a straightforward payment adjustment.

In the course of the discussion of the MHAC policy recommendation, several concerns were raised about the MHAC approach. Primary among those concerns were the following:

- MHACs are case specific. Adjustments to allowable charges are calculated based on specific cases, leading to debate on whether the adjustment was correct in that specific case, and conversely, cases where an adjustment was clearly appropriate not occurring. In other words, disagreement over the likelihood of false positives and false negatives.
- MHACs are narrowly focused. The choice of only 11 MHACs effectively narrows the focus of the quality incentive that the Commission is trying to introduce. It should be noted that the MHACs are broader than the CMS HACs, but still narrower than is desirable.

As part of his motion at the March meeting approving the MHAC policy, Commissioner Wong directed staff to continue to look at the list of conditions that were candidates for MHACs and to consider deletions or expansions to the MHAC approach that would address some of the concerns that arose in the discussions. Additionally, Commissioner Sexton strongly encouraged staff to look at alternative, more balanced and more macro method of incentives to help the industry focus on sustained quality improvement.

## **Additional Analysis**

Staff, in cooperation with 3M, has in turn developed an alternative approach. The revised approach improves on MHACs in two ways. First, it moves from the case specific mechanism of MHACs to a broader, rate-based approach. Second, it expands the number of conditions included for consideration when assessing hospitals. The revised approach leverages one of the key features of the MHAC payment adjustment: the regression determined adjustment to outlier payments. The new approach, however, applies that analysis more comprehensively.

## **Regression Results**

3M has estimated a dollar impact for each of the 64 PPCs using a regression analysis. Essentially, the regression estimates the amount of additional charges that result from each

PPC. In the current MHAC policy these regression results are used to adjust payments where there are outlier charges or the APR-DRG assignment changes. In the revised approach these estimates of additional charges are used to create an index of either additional, or averted, resource use based on a hospital's rate of potentially preventable complications.

The regression analysis looked at patients' admission DRG and compared that with the additional charges associated with each of the 64 PPCs. Not all PPCs lead to statistically significant additional charges. For eleven (11) PPCs the T value in the regression was less than 1.96 indicating that the difference between the mean of the average charge with and without the particular PPC was not statistically significant. Specifically, PPCs 26, 30, 43, 46, 55, 57, 58, 59, 60, 61, 62 do not have statistically significant charge estimates. Appendix A contains the estimation calculation for the regression analysis.

### Using the Regression Results to Create a Hospital Index

Using the results of the regression 3M has calculated the FY08 impact on each hospital for which we have acceptable coding of present on admission (POA)- 43 out of 47 hospitals. This was done by comparing the hospital's actual PPC incidence with the expected statewide incidence. The expected value of PPCs is the number of PPCs a hospital, given its mix of patients as defined by APR DRG category and severity of illness level, would have experienced had its rate of PPCs been identical to that experienced by a reference or normative set of hospitals. This is discussed more completely in the Technical Note in Appendix B.

For each hospital 3M calculated the statewide average for each PPC, compared to the hospital's rate. Where:

PPC = Each of the 64 PPC

A = the hospital's actual rate of the PPC

E = the hospital's expected rate of the PPC

RA = the regression determined statewide adjustment for the PPC

SF = the hospital's standardization factor

$IMPACT = PPC (A - E) * RA$  = Difference for expected resource use for the PPC.

$SF * IMPACT$  = Adjusted Difference for expected resource use for the PPC.

The sum of each individual PPC difference from resource use for the hospital yields an overall impact for the hospital. Since the charge values in the regression file used standardized charges, the additional per case charge value for each PPC represents a statewide estimated and should be converted back to a hospital specific value by the ratio of the hospital CPC divided by the statewide average CPC. The results for each hospital and each PPC are presented in Appendix C, Table 3.

In estimating these results we have made a zero adjustment for the 11 PPCs where the T test was not significant. In addition, we drop PPC 63, for the same reasons that were identified in the development of the MHAC policy. So, our analysis is based on 52 PPCs.

This analysis provides an estimate of excess, or avoided, resource use for each hospital based on their PPC performance. Staff considered two approaches to normalizing these dollar estimates to the size of the hospital. The first was to rank hospitals on the basis of their percentage of total inpatient charges, and the second was based on the percentage of total charges that are at risk of incurring a PPC that is not globally excluded. Appendix D, Table 4 presents each hospital in terms of its performance on this index using both normalizing approaches. Hospitals with higher number rankings are the poor performers in that these hospitals have a high rate of adjustment relative to total inpatient charges. The scaling approach has little effect on the rankings of the hospitals.

The statewide average value for each of the PPCs was calculated by APR-DRG and by severity of illness (SOI) categories 1 through 4. Due to the volume of the data, this information is accessible upon request.

Some observations:

- The results, especially for poor performers, are generally consistent with findings from the process measures the Commission has developed.
- The results seem to indicate some positive and negative hospital enterprise system effects, as illustrated by Tables 2 and 3 (in the attached Appendix B and C) which display hospital-specific results.
- There do not appear to be reporting issues. Staff was concerned that hospitals that tended over-code diagnoses as present on admission would look better than other hospitals. This is because if a diagnosis was present on admission it, by definition, cannot be a preventable complication for that admission. Staff looked at the POA coding feedback reports and found no discernible relationship between high rates of POA reporting and improved performance on the PPC scale. Going forward, our auditing strategy will need to be adjusted to assure integrity of POA coding.

### **Transparency, Reporting and Vetting the Revised Approach**

Through March and April of 2009, HSCRC staff convened the MHAC Work Group as well as a technical subgroup to vet and further refine the revised methodology. Hospital industry representatives were generally supportive of the revised methodology and uniformly indicated it was an improvement over the previously approved MHAC methodology. This technical group emphasized the importance of transparency in the methodology and hospital-specific results so as to provide the clearest incentives for hospitals.

Another technical subgroup met on May 13<sup>th</sup>, 2009 to determine the layout and content of hospital specific MHAC/PPC reports. The meeting included representatives from the various hospital peer groups, including small hospitals, as well as MHA, 3M, St. Paul Computer Center, and consultants to the industry to ensure that data reports are developed as efficiently as possible and are as useful as possible.

Hospital case mix, finance, and quality staff participated in a statewide technical meeting that HSCRC convened on May 19, 2009 to review methodology and the calculations so hospitals are able to replicate their own MHAC/PPC rate calculations. HSCRC will continue to work with the industry and other stakeholders to identify and resolve technical issues as they come up during the implementation of the revised approach.

Appendix E provides a list and timeline of past and planned future efforts to provide reports on the PPCs to hospitals, to vet the technical and clinical components of the PPCs, and to provide and receive relevant critical feedback as we plan and embark upon implementation.

Comments on the draft recommendation were requested by May 27, 2009; two letters were received and are included with this document following Appendix E. HSCRC staff would address the concerns raised as follows:

- HSCRC will consider the clinical issues raised in the letters in the two clinical vetting sessions as outlined in the timeline in Appendix E.
- Regarding the concern that case reports have not been distributed to hospitals, hospitals have received their case reports the week of May 25, 2009.
- Regarding the concern about hospital POA data for three facilities, as of the first quarter of FY 2009, only one hospital has not complied with the requirements for valid POA data, and staff will work with this hospital, applying fines if needed, to bring the data into compliance.

### **Benefits of the Revised MHAC Approach**

The benefits of using the revised MHAC approach are summarized below.

- The revised approach moves away from a case by case approach where providers feel specifically targeted to one that considers aggregate rates of PPCs, in keeping with the fundamental rate setting system.
- The original focus on a case-specific payment decrement methodology inevitably lead to a focus on the need for the use of complication categories that were 100% preventable (as validated by rigorous scientific research). Conversely, use of a rate-based system that calculates actual versus expected values of PPCs that is risk adjusted based on the APR-DRG methodology and SOI patient mix of the hospital removes the clinical concern of level of preventability, and the use of the statewide average as the expected benchmark is one that is/should be reasonably achievable.
- The revised approach removes or greatly diminishes the concern that legal action may be taken against a specific provider on a specific case.
- The revised approach shifts from a punitive model that removes revenue from the system to one that rewards good performers and penalizes bad performers in a revenue neutral manner.

- The proposed broader list of PPCs allows for hospitals to spread their risk more broadly; however, the amount of revenue “at risk” is a separate discussion and is not related to the methodology per se.
- Compared with an alternative approach using the admission DRG for payment purposes, embedding higher payments at the APR DRG charge per case level, the revised approach incents complete coding by the hospitals, and clearly shows evidence of quality improvement for each of the individual PPCs and in the aggregate as the rates improve.
- Related to the clear evidence of quality improvement, the revised approach demonstrates to CMS and the public at large that there is a focus on decreasing hospital acquired conditions in Maryland that has greater potential for positive impact.

### **Final Recommendations**

- 1) Implement the proposed rate-based methodology that compares actual hospital performance to a normative expected standard of potentially preventable complications (PPCs) on a risk-adjusted basis using APR-DRGs;<sup>1</sup>
- 2) Use of 52 Potentially Preventable Complications (out of a total of 64 PPCs) that were found to yield a statistically significant result in the regression analysis performed to estimate the marginal hospital charge increase associated with the presence of a PPC;<sup>2</sup>
- 3) Use the proposed indexing method for calibrating and ranking relative hospital performance as illustrated in Appendix D (table 4) which compares the dollar impact of a presence (or absence of a PPC - relative to the normative expected standard) relative to a hospital’s “at-risk” inpatient revenue;<sup>3</sup>
- 4) Implement this methodology effective July 1, 2009 through June 30, 2010 (FY 2010 measurement year);
- 5) Use normative expected standards as calculated from experience during FY 2009;<sup>4</sup>
- 6) Apply rewards and penalties to the update factor per a scaling methodology (subject to further discussion and review) on a revenue neutral basis beginning FY 2011; and,

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<sup>1</sup> Note: Potentially Preventable Complications are a product of 3M Health Information Systems.

<sup>2</sup> Note: the recommendation is also to drop PPC 63 for the same reasons cited in the original March 4, 2009 MHAC recommendation adopted by the Commission.

<sup>3</sup> Note: “At-risk” revenue reflects revenue after global exclusions.

<sup>4</sup> Note: Hospitals have been given available data through December 2008 and will receive subsequent quarters to enable them to keep track of expected rates on an on-going basis. Final expected values will be provided to hospitals when final case-mix data are submitted, likely in October 2009.

- 7) Consistent with the process for the APR-DRGs, provide a mechanism on an ongoing basis to receive input and feedback from the industry and other stakeholders to refine and improve the MHAC/PPC codes and logic.

#### **Other Recommendations and Important Considerations**

- 8) Collapse the performance of Johns Hopkins Oncology into the performance of the overall hospital for index measurement and scaling considerations (consistent with the handling of oncology units of other hospitals).
- 9) Staff is further recommending allowing a period for additional input and suggested changes to the PPC exclusion logic through July 15, 2009.
- 10) It is further recommended that comments and input regarding the HSCRC's MHACs and PPCs received after July 15 be accumulated and considered for future (FY 2011) refinements of the MHAC methodology (although staff will be receptive to examining any concerns raised that it believes may substantially threaten the efficacy of the MHAC methodology during the course of FY 2010 and thereafter).
- 11) A technical issues/payment workgroup will be assembled in June 2009 to begin to identify and consider payment-related issues – such as the most appropriate scaling methodology, the most appropriate magnitude of revenue to put at risk for the application of rewards and penalties based on relative hospital performance and other issues raised.
- 12) Other completed and planned activity and discussions include (Appendix E):
  - o Technical conference on data and reporting considerations- in May;
  - o HSCRC convening an initial clinical input session – in June; and
  - o HSCRC convening a final clinical input session – in early July.
- 13) In future years, staff recommends inclusion and/or exclusion of PPCs from the approved list of PPCs used in the HSCRC's MHAC methodology based on the yield (or failure to yield) of a statistically significant result in the regression analysis performed to estimate the marginal hospital charge increase associated with the presence of a PPC over two consecutive years.
- 14) Staff is finalizing an arrangement with St. Paul Computer Center and 3M for the availability of a tracking tool to enable hospitals to track performance vis-a-vis an estimated/actual normative expected standard.

**BRIEFING ON ACHIEVED AND EXPECTED OUTCOMES OF THE NURSE  
SUPPORT PROGRAM II**

**JUNE 3, 2009**

**HEALTH SERVICES COST REVIEW COMMISSION  
4160 Patterson Ave.  
Baltimore, MD 21215**

Nurse Support Program II  
Recap of First Three Years of the Program  
September, 2008

In May, 2005, the Health Services Cost Review Commission (HSCRC) unanimously approved an increase of 0.1% of regulated patient revenue for the use of expanding the pool of nurses in the State. A committee of deans and directors of nursing programs helped design this program, Nurse Support Program II, funded at approximately \$8.8 million per year over a ten-year period. This program focuses on the education of nurses, including educating nurses to become the faculty members so desperately needed.

HSCRC contracted with the Maryland Higher Education Commission (MHEC) to administer the Nurse Support Program II. On behalf of HSCRC, the Maryland Higher Education Commission is also responsible for (1) the development of applications and guidelines, (2) overseeing the review and selection of applicants, and (3) the monitoring and evaluation of recipients of NSP II awards. Monthly NSP II payments are transferred from Maryland hospitals to MHEC and distributed by MHEC to institutions of higher education, hospitals, faculty, and students selected to receive NSP II funding.

MHEC provides the programmatic and administrative support necessary to successfully administer the NSP II program. As the coordinating board for all Maryland institutions of higher education, MHEC contributes its extensive experience and expertise with (1) the management of institutional grants, (2) the administration of student financial aid, and (3) the collection, review, and evaluation of programmatic and financial data from Maryland's higher education institutions. In addition, MHEC is responsible for working collaboratively with Maryland's colleges, universities, and community colleges to address workforce needs, including the State's critical nursing shortage.

Under the Nurse Support Program II, funding supports two types of initiatives:

1. Competitive Institutional Grants
2. Statewide Initiatives

Both are administered by MHEC, and allow institutions and individuals throughout the State who are involved in nursing education to benefit from the Nurse Support Program II. The Competitive Institutional Grants fund the providers of nursing education, and the Statewide Initiatives fund individual students or faculty members.

NSP II is now funding 19 Competitive Institutional Grants for schools of nursing, which are either working alone or are affiliated with other schools and/or hospitals, for a total awarded amount of \$14,905,026.

Types of programs funded are:

- Admitting nontraditional students, such as EMTs, into specialized programs;
- Increasing the number of nursing students admitted;
- Increasing the retention of admitted students through tutoring, mentoring, review classes;
- Instituting accelerated programs leading to RNs;
- Providing a pipeline for students to obtain BSNs and MSNs;
- Transferring nursing classes to distance-learning modes and sharing these classes among schools;

- Conducting remote classes within hospitals;
- Educating new faculty in Master's and Doctoral programs.

Now in their third year, the initial 7 projects are beginning to show results:

- 19 new faculty members have been hired;
- 539 additional students were admitted to nursing programs;
- 14 new courses were initiated, most in a distance-learning format to share with other schools;
- 122 new graduates, 8 of whom will be new faculty.

Through the Statewide Initiatives, NSP II assists individual students and faculty.

Graduate students are supported by the Graduate Nursing Faculty Scholarships and the Living Expenses Grants. Graduate students accepting these grants must agree to become faculty members in Maryland schools of nursing upon graduation. In the past three years, 109 students have been awarded \$708,987 in scholarships, and \$1,041,160 has been awarded as living expenses grants to 56 of these students, allowing them to return to school to become the next generation of faculty.

Over the past three years, NSP II has supported undergraduate nursing students by supplementing the Workforce Shortage Student Assistance Grant Program with an additional \$600,000 for scholarship awards to undergraduate nursing students. This past year, support has also been given to the Janet L. Hoffman Loan Assistance Repayment Program, which helps working nursing faculty repay their student loans.

Another award given through NSP II is the New Nursing Faculty Fellowships, which are given to full-time, tenure-track faculty hired by schools of nursing within the past year. The individual award amount is \$20,000, with \$10,000 given to the faculty member their first year, and \$5,000 in each of the next two years. This money may be used as a hiring bonus, to help pay educational loans, for professional development, and other relevant expenses. Over the first three years, 52 new faculty members have been awarded \$840,000.

During the first three years of its ten-year existence, NSP II has committed over \$18,000,000 to the education of new bedside nurses and new nursing faculty in order to alleviate the nursing shortage. From 2006 to 2008, the number of nursing degrees awarded in Maryland increased by 273. Of those 273 degrees, 224 of them were given by the fourteen schools with NSP II grants. Because the Graduate Nursing Scholarship requires a two-year service obligation as a nursing faculty for each award year, and the Workforce Shortage Student Assistance Grant requires a one-year service obligation as a nurse for each award year, NSP II is making a significant contribution to the Maryland nursing shortage.

NURSE SUPPORT PROGRAM II								
	Lead Institution	Consortium Members	Program Description	Program Duration	Projected Outcomes	Outcomes to Date	Funding to Date	Total Funding
<b>FY 2007</b>								
NSP II-06-104	College of Southern Maryland	Calvert Memorial Hospital, Civista Medical Ctr., St. Mary's Hospital	Increase faculty by 2 FTEs, student retention, (recruitment new nurses to hospital)	5 years	Increase enrollment by 25% (50 students)	81 additional graduates; 1 additional faculty hired	\$ 400,000	\$ 1,075,000
NSP II-06-105	University of Maryland Baltimore	UMMC, Franklin Sq. Hospital	Master's preparation of hospital-based nurses	5 years	100 Master's prepared nurses	3 additional graduates; 83 additional students admitted	\$ 700,000	\$ 1,324,000
NSP II-06-106	Hurford Community College	Upper Chesapeake	Fast-Track 15 month ADN Program; student retention initiatives	4 years	94 additional ADN graduates	24 additional graduates; 52 additional students admitted; 72 review sessions	\$ 106,302	\$ 663,792
NSP II-06-107	Anne Arundel Community College	Villa Julie College, College of St. Md.	RN-to-BSN concurrent enrollment option	3 years	64 RN-to-BSN students	1 additional student admitted	\$ 322,813	\$ 327,813
NSP II-06-110	University of Maryland Baltimore	None	Practice-focused doctoral program	5 years	125 - 184 nurse DNP's	29 additional students admitted; 1 new faculty hired	\$ 360,000	\$ 1,020,000
NSP II-06-122	Villa Julie College (Stevens)	Carroll Comm. Hospital, Union Memorial Hospital, Upper Chesapeake Mid. General Hospital	RN to BSN Program	4 years	96 additional BSN students; 200 RN to BSN students	70 additional BSN students admitted; 1 new faculty hired	\$ 536,655	\$ 1,084,631
NSP II-06-126	Coppin State University	Kerman Hospital; Union Memorial Hospital	BS to MSN program using current hospital-based nurses	5 years	Enroll 50 additional students; graduate 40 MSN nurses & recruit 9 new faculty positions	14 additional students admitted; 8 new faculty hired	\$ 115,000	\$ 560,000
<b>TOTAL FUNDING OF FY 2007 PROJECTS</b>							\$ 2,625,770	\$ 5,495,236
<b>FY 2008</b>								
NSP II-08-105	College of Notre Dame	Good Samaritan; Harbor Hospital; St. Agnes Hospital	Increase BSN nurses; increase retention; begin MSN/Ed. Focus	5 years	425 additional BSNs; 66 additional MSN/Ed; retention rate of 85%	106 RN-BSN and 17 MSN additional students admitted	\$ 295,283	\$ 1,375,978
NSP II-08-106	Comm. Col. Of Baltimore County	Allegany College & Chesapeake College	EMT to RN program by distance learning	3 years	192 students over 3 yrs	8 additional students admitted	\$ 110,862	\$ 295,005
NSP II-08-107	Comm. Col. Of Baltimore County	Mercy Med. Ctr; St. Agnes Hosp.; Union Memorial Hospital	Increase retention by clinical tutoring, mentoring & nurse success class	3 years	Retain 282 students	5 tutors provided 603 hours of assistance	\$ 131,449	\$ 396,033
NSP II-08-111	Hagerstown Comm. College	Washington Co. Health System	Increase pre-nurse students; outreach to minorities; increase retention	5 years	202 additional students	23 additional students admitted; 2 new faculty hired	\$ 224,760	\$ 1,029,140
NSP II-08-114	Johns Hopkins Univ.	Howard Co. Hospital, St. Agnes Hospital, Mercy Medical	On-line graduate courses for hospital staff & support during coursework	5 years	125 DNP's	25 additional students admitted	\$ 351,673	\$ 970,299
NSP II-08-116	Prince George's Comm. College	MedStar (Good Sam); Drs. Comm. Hospital	Increase enrollment in LPN to RN prog. & retention; satellite prog. At Good Sam's Hospital	5 years	240 more students; hire new faculty	38 additional students admitted	\$ 81,967	\$ 876,052
NSP II-08-117	Salisbury University	none	Create CNE & RN to MSN tracks; some distance learning courses	3 years	14 Nurse Educators; 5 MSNs	10 additional RN-MSN students admitted; 2 new courses initiated	\$ 112,794	\$ 261,009
NSP II-08-119	Towson University	Sheppard Pratt; GBMC; Frederick Mem. Hospital	MS/nurse ed. or admin. program; distance learning; add. clinical sites	5 years	80 MS & 25 BSN students	14 MSNs & 4 RN-BSN additional students admitted; hired 2 faculty	\$ 219,182	\$ 445,357
NSP II-08-123	Wor-Wic Comm. College	Atlantic Gen. Hosp.; Peninsula Reg. MC	Expand LPN & RN program by sharing resources & adding faculty	3 years	96 students added	32 additional students admitted	\$ 75,112	\$ 284,520
<b>TOTAL FUNDING OF FY 2008 PROJECTS</b>							\$ 1,603,082	\$ 5,933,393
<b>FY 2009</b>								
NSP II-09-101	Allegany Comm. Coll	Western Md. Health System, Garrett Memorial Hospital	Establish nursing program in Garrett Co - Double capacity of evening program in Allegany Co	5 years	80 graduates	First year of project	\$ 162,031	\$ 993,052
NSP II-09-103	U. of MD, Baltimore	None	Use online and blended learning methods with flexible schedule in DNP program	5 years	136 new faculty	First year of project	\$ 213,394	\$ 1,308,095
NSP II-09-104	U. of MD, Baltimore	None	nursing students into teaching certificate program	3 years	200 new faculty	First year of project	\$ 111,079	\$ 499,990
<b>TOTAL FUNDING OF FY 2009 PROJECTS</b>							\$ 486,504	\$ 2,801,137
Please Note: All Outcomes and Funding to Date are as of September, 2008. Updated figures will be available in September, 2009.								