NOTICE OF WRITTEN COMMENT PERIOD

Notice is hereby given that the public and interested parties are invited to submit written comments to the Commission on the staff draft recommendation that will be presented at the December 11, 2019 Public Meeting:

1) Draft Recommendation on the Maryland Hospital Acquired Conditions Policy for RY 2022 (12/20/2019)
2) Draft Recommendation on the Innovation Policy (1/10/20)

WRITTEN COMMMENTS ON THE AFOREMENTIONED STAFF DRAFT RECOMMENDATIONS ARE DUE IN THE COMMISSION'S OFFICES ON THE DATE SPECIFIED IN THE RECOMMENDATION.

State of Maryland
Department of Health

Nelson J. Sabatini
Chairman

Joseph Antos, PhD
Vice-Chairman

Victoria W. Bayless

Stacia Cohen

John M. Colmers

James N. Elliott, M.D.

Adam Kane

Health Services Cost Review Commission
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Katie Wunderlich
Executive Director

Allan Pack, Director
Population Based
Methodologies

Chris Peterson, Director
Payment Reform &
Provider Alignment

Gerard J. Schmith, Director
Revenue & Regulation
Compliance

William Henderson, Director
Medical Economics &
Data Analytics

567th MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION
December 11, 2019

EXECUTIVE SESSION
12:00 p.m.

(The Commission will begin in public session at 12:00 pm for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00 p.m.)

1. Discussion on Planning for Model Progression – Authority General Provisions Article, §3-103 and §3-104

2. Update on Administration of Model - Authority General Provisions Article, §3-103 and §3-104

PUBLIC SESSION
1:00 p.m.

1. **Review of the Minutes from the Public and Closed Meetings held on November 13, 2019**

2. **Docket Status – Cases Closed**
   2498A- University of Maryland Medical Center
   2501A- University of Maryland Medical Center
   2502A- University of Maryland Medical Center
   2504A- Johns Hopkins Health System
   2505A- Johns Hopkins Health System

3. **Docket Status – Cases Open**
   2490R- Suburban Hospital
   2492A- MedStar Health
   2493A- Johns Hopkins Health System
   2497N- UM Shore Emergency Center Queenstown
   2499A- Maryland Physicians Care
   2503R- Johns Hopkins Bayview Medical Center
   2506A- University of Maryland Medical Center
   2507A- University of Maryland Medical Center
   2508A- Johns Hopkins Health System
   2509A- Johns Hopkins Health System
   2510A- Johns Hopkins Health System
   2511A- Johns Hopkins Health System

4. **Final Recommendation on Capital Policy**

5. **Final Recommendation on the Nurse Support Program (NSP) II Renewal**

6. **Final Maximum Quality Guardrail Policy**

7. **Final Recommendation on Quality-Based Reimbursement (QBR) Policy for RY 2022**

8. **Draft Recommendation on Maryland Hospital Acquired Conditions (MHAC) Policy for RY 2022**

9. **Draft Innovation Policy**

10. **Policy Update and Discussion**

    a **Model Monitoring**
    b **Capital Region Hospitals RY 2020 Updates**

11. **Hearing and Meeting Schedule**

Cases Closed

The closed cases from last month are listed in the agenda

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

AS OF DECEMBER 2, 2019

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
2490R	Suburban Hospital	8/13/2019	1/10/2020	1/10/2020	FULL RATE	GS	OPEN
2492A	MedStar Health	8/22/2019	N/A	N/A	ARM	DNP	OPEN
2493A	Johns Hopkins Health System	8/26/2019	N/A	N/A	ARM	DNP	OPEN
2497N	UM Shore Emergency Center Queenstown	9/11/2019	12/15/2019	2/10/2020	OBSERVATION	WH	OPEN
2499A	Maryland Physicians Care	9/17/2019	N/A	N/A	ARM	DNP	OPEN
2503R	Johns Hopkins Bayview Medical Center	10/15/2019	3/13/2020	3/13/2020	FULL RATE	GS	OPEN
2506A	University of Maryland Medical Center	11/3/2019	N/A	N/A	ARM	DNP	OPEN
2507A	University of Maryland Medical Center	11/3/2019	N/A	N/A	ARM	DNP	OPEN
2508A	Johns Hopkins Health System	11/8/2019	N/A	N/A	ARM	DNP	OPEN
2509A	Johns Hopkins Health System	11/18/2019	N/A	N/A	ARM	DNP	OPEN
2510A	Johns Hopkins Health System	11/18/2019	N/A	N/A	ARM	DNP	OPEN
2511A	Johns Hopkins Health System	11/18/2019	N/A	N/A	ARM	DNP	OPEN

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

NONE

IN RE: THE ALTERNATIVE	*****	**BEFORE THE HEALTH**	
RATE APPLICATION OF	*****	**SERVICES COST REVIEW**	
MEDSTAR HEALTH	*****	**COMMISSION**	
SYSTEM	*****	**DOCKET:**	**2019**
	*****	**FOLIO:**	**2302**
COLUMBIA, MARYLAND	*****	**PROCEEDING:**	**2492A**

Final Recommendation

December 11, 2019

I. Introduction

On August 22, 2019, MedStar Health filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of the MedStar Hospitals ("the Hospitals"). MedStar Health seeks renewal for the continued participation of MedStar Family Choice ("MFC") in the Medicaid Health Choice Program. MedStar Family Choice is the MedStar entity that assumes the risk under this contract. The Commission most recently approved this contract under proceeding 2453A for the period from January 1, 2019 through December 31, 2019. The Hospitals are requesting to renew this contract for one year beginning January 1, 2020.

II. Background

Under the Medicaid Health Choice Program, MedStar Family Choice, a Managed Care Organization ("MCO") sponsored by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services, as well as certain non-hospital services, while MFC receives a State-determined capitation payment. MFC pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees.

The Hospitals supplied information on their most recent experience as well as their preliminary projected revenues and expenditures for the upcoming year based on the Medicaid capitation rates.

III. Staff Review

This contract has been operating under previous HSCRC approval (proceeding 2453A). Staff reviewed the operating performance under the contract as well as the terms of the capitation pricing agreement. Staff reviewed available final financial information and projections for CYs

2018, 2019, and 2019. Over this three year period, Medstar has sustained slightly favorable performance.

IV. Recommendation

Based on past and projected performance, staff believes that the proposed renewal arrangement for Medstar is acceptable. Therefore staff recommends that the Commission approve the Hospitals request to participate in the Medicaid Health Choice Program for a one-year period beginning January 1, 2020. The Hospitals must file a renewal application annually for continued participation. Also, MFC must meet with Commission staff before the October 2020 public meeting of the Commission on the actual CY 2019 experience, and preliminary CY 2020 financial performance, as well as projections for CY 2021 using a prescribed template that the HSCRC will provide.

Staff recommends that this approval be subject to the following additional conditions:

1) The Hospitals shall provide the Commission in a timely manner with access to all financial records associated with the contractual relationship between MFC and the Hospitals as they relate to implementation of the Agreement. All materials submitted to the Commission relative to the Agreement, inclusive of those materials described in Paragraph 2(b) and (c) above, shall be treated as proprietary and confidential in conformance with applicable law and regulation. The Commission shall provide the Hospitals with prior written notice of any request for release of confidential information to third parties in order to allow the Hospitals to contest the requested release of such information.
2. The Hospitals shall comply with all current and future applicable Maryland statutory

and regulatory requirements, including, but not limited to, those of: the Health Services Cost Review Commission, the Health Care Commission, the Department of Health, and the Maryland Insurance Administration.

3. Hospital services, as defined in Health-General Article §19-201, shall be reimbursed at 100% of Commission approved rates, subject to the Commission's regulations regarding Working Capital Differentials (COMAR 10.37.10.26B) the terms of the Medicare New Model agreement and the Special Audit Procedures conducted annually. The following attestation will be required annually as part of the Special Audit Procedures:

   "The undersigned, Chief Executive Officer or Chief Financial Officer, hereby certifies that to the best of my knowledge, information and belief that hospitals have been reimbursed at 100% of Commission approved rates."

4. There are not now, nor there be in the future, any transfer of funds, in-kind goods or services, or any other consideration associated with, or as a result of this Agreement involving the Hospitals, directly or indirectly, which has the effect of discounting the Commission approved rates. This provision, however, does not preclude investments in the related entity by the Hospitals that are not intended to fund the provision of health care services. Such investments may include recapitalization for the purpose of replenishing or augmenting start-up costs, administrative and/or overhead or expansion of other activities not related to this arrangement. A written description of such investments shall promptly be reported to the Commission. A violation of this provision may subject the Hospitals to all

penalties provided for in Commission regulation including, but not limited to:

a) Fixed price contracting COMAR 10.37.12;

b) Inaccurate reporting, COMAR 10.37.01 and 10.37.10;

c) Price corridors, COMAR 10.37.03; and

d) Global Budget Revenue/Total Patient Revenue Agreements.

IN RE: THE ALTERNATIVE	*****	**BEFORE THE HEALTH**	
RATE APPLICATION OF	*****	**SERVICES COST REVIEW**	
THE JOHNS HOPKINS HEALTH	*****	**COMMISSION**	
SYSTEM	*****	**DOCKET:**	**2019**
	*****	**FOLIO:**	**2303**
BALTIMORE, MARYLAND	*****	**PROCEEDING**	**2493A**

Final Recommendation

December 11, 2019

I. Introduction

On August 26, 2019 Johns Hopkins Health System ("JHHS," or the "System") filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Suburban Hospital, and Howard County General Hospital ("the Hospitals"). The System seeks renewal for the continued participation of Priority Partners, Inc. in the Medicaid Health Choice Program. Priority Partners, Inc. is the entity that assumes the risk under the contract. The Commission most recently approved this contract under proceeding 2452A for the period from January 1, 2019 through December 31, 2019. The Hospitals are requesting to renew this contract for a one-year period beginning January 1, 2020.

II. Background

Under the Medicaid Health Choice Program, Priority Partners, a provider-sponsored Managed Care Organization ("MCO") sponsored by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. Priority Partners was created in 1996 as a joint venture between Johns Hopkins Health Care (JHHC) and the Maryland Community Health System (MCHS) to operate an MCO under the Health Choice Program. Johns Hopkins Health Care operates as the administrative arm of Priority Partners and receives a percentage of premiums to provide services such as claim adjudication and utilization management. MCHS oversees a network of Federally Qualified Health Clinics and provides member expertise in the provision of primary care services and assistance in the development of provider networks.

The application requests approval for the Hospitals to continue to provide inpatient and

outpatient hospital services, as well as certain non-hospital services, while the MCO receives a State-determined capitation payment. Priority Partners pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees. The Hospitals supplied information on their most recent experience as well as their preliminary projected revenues and expenditures for the upcoming year based on the initially revised Medicaid capitation rates.

III. Staff Review

Staff reviewed the operating performance under the contract as well as the terms of the capitation pricing agreement. Staff reviewed available final financial information and projections for CYs 2018, 2019, and 2020. The statements provided by Priority Partners to staff represent both a "stand-alone" and "consolidated" view of Priority's operations. The consolidated picture reflects certain administrative revenues and expenses of Johns Hopkins Health Care. When other provider-based MCOs are evaluated for financial stability, their administrative costs relative to their MCO business are included as well; however, they are all included under the one entity of the MCO.

The consolidated financial performance of Priority Partners was favorable in CY 2018. Priority Partners is projecting an unfavorable performance in CY 2019 and a favorable performance in CY 2020; however, the CY19 unfavorable performance is mainly due to the positing of a large premium deficiency reserve that may not be necessary given recent actions taken by the Maryland Department of Health to increase rates for childless adult population.

IV. Recommendation

Based on past and projected performance, staff believes that the proposed renewal arrangement for Priority Partners is acceptable. Therefore staff recommends that the Commission

approve the Hospitals request to participate in the Medicaid Health Choice Program for a one-year period beginning January 1, 2020. The Hospitals must file a renewal application annually for continued participation. In addition, Priority Partners must meet with Commission staff before the October 2020 public meeting of the Commission on the actual CY 2019 experience, and preliminary CY 2020 financial performance, as well as projections for CY 2021 using a prescribed template that the HSCRC will provide.

Staff recommends that this approval be subject to the following additional conditions:

1) The Hospitals shall provide the Commission in a timely manner with access to all financial records associated with the contractual relationship between Priority Partners and the Hospitals as they relate to implementation of the Agreement. All materials submitted to the Commission relative to the Agreement, inclusive of those materials described in Paragraph 2(b) and (c) above, shall be treated as proprietary and confidential in conformance with applicable law and regulation. The Commission shall provide the Hospitals with prior written notice of any request for release of confidential information to third parties in order to allow the Hospitals to contest the requested release of such information.
2. The Hospitals shall comply with all current and future applicable Maryland statutory and regulatory requirements, including, but not limited to, those of: the Health Services Cost Review Commission, the Health Care Commission, the Department of Health, and the Maryland Insurance Administration.
3. Hospital services, as defined in Health-General Article §19-201, shall be

reimbursed at 100% of Commission approved rates, subject to the Commission's regulations regarding Working Capital Differentials (COMAR 10.37.10.26B) the terms of the Medicare New Model agreement and the Special Audit Procedures conducted annually. The following attestation will be required annually as part of the Special Audit Procedures:

"The undersigned, Chief Executive Officer or Chief Financial Officer, hereby certifies that to the best of my knowledge, information and belief that hospitals have been reimbursed at 100% of Commission approved rates."

4. There are not now, nor there be in the future, any transfer of funds, in-kind goods or services, or any other consideration associated with, or as a result of this Agreement involving the Hospitals, directly or indirectly, which has the effect of discounting the Commission approved rates. This provision, however, does not preclude investments in the related entity by the Hospitals that are not intended to fund the provision of health care services. Such investments may include recapitalization for the purpose of replenishing or augmenting start-up costs, administrative and/or overhead or expansion of other activities not related to this arrangement. A written description of such investments shall promptly be reported to the Commission. A violation of this provision may subject the Hospitals to all penalties provided for in Commission regulation including, but not limited to:

    a) Fixed price contracting COMAR 10.37.12;

    b) Inaccurate reporting, COMAR 10.37.01 and 10.37.10;

c) Price corridors, COMAR 10.37.03; and

d) Global Budget Revenue/Total Patient Revenue Agreements.

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IN RE: THE ALTERNATIVE	*	**BEFORE THE HEALTH**	
RATE APPLICATION OF	*	**SERVICES COST REVIEW**	
SAINT AGNES HEALTH	*	**COMMISSION**	
WESTERN MARYLAND HEALTH SYSTEM	*	**DOCKET:**	**2019**
MERITUS HEALTH	*	**FOLIO:**	**2309**
HOLY CROSS HEALTH	*	**PROCEEDING:**	**2499A**

Final Recommendation

December 11, 2019

I. Introduction

September 17, 2019 Saint Agnes Health System, Western Maryland Health System, Holy Cross Health, and Meritus Health ("the Hospitals") filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06. The Hospitals seek renewal for the continued participation of Maryland Physicians Care ("MPC") in the Medicaid Health Choice Program. MPC is the entity that assumes the risk under this contract. The Commission most recently approved this contract under proceeding 2459A for the period January 1, 2019 through December 31, 2019. The Hospitals are requesting to renew this contract for one year beginning January 1, 2020.

II. Background

Under the Medicaid Health Choice Program, MPC, a Managed Care Organization ("MCO") sponsored by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services as well as certain non-hospital services, while the MCO receives a State-determined capitation payment. MPC pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees.

The Hospitals supplied information on their most recent experience as well as their preliminary projected revenues and expenditures for the upcoming year based on the revised Medicaid capitation rates.

III. Staff Review

This contract has been operating under previous HSCRC approval (Proceeding 2459A). Staff reviewed the operating performance under the contract as well as the terms of the capitation

pricing agreement. Staff reviewed available final financial information and projections for CYs 2018, 2019, and 2020. In CY 2018 MPC had favorable performance and is projecting slightly unfavorable performance in CY 2019; however, the MCO is projecting favorable performance in CY 2020.

IV. Recommendation

Based on past and projected performance, staff believes that the proposed renewal arrangement for MPC is acceptable. Therefore staff recommends that the Commission approve the Hospitals request to participate in the Medicaid Health Choice Program for a one-year period beginning January 1, 2020. The Hospitals must file a renewal application annually for continued participation. In addition, MPC must meet with Commission staff before the October 2020 public meeting of the Commission on the actual CY 2019 experience, and preliminary CY 2020 financial performance, as well as projections for CY 2021 using a prescribed template that the HSCRC will provide.

Staff recommends that this approval be subject to the following additional conditions:

1) The Hospitals shall provide the Commission in a timely manner with access to all financial records associated with the contractual relationship between MPC and the Hospitals as they relate to implementation of the Agreement. All materials submitted to the Commission relative to the Agreement, inclusive of those materials described in Paragraph 2(b) and (c) above, shall be treated as proprietary and confidential in conformance with applicable law and regulation. The Commission shall provide the Hospitals with prior written notice of any request for release of confidential

information to third parties in order to allow the Hospitals to contest the requested release of such information.

2. The Hospitals shall comply with all current and future applicable Maryland statutory and regulatory requirements, including, but not limited to, those of: the Health Services Cost Review Commission, the Health Care Commission, the Department of Health, and the Maryland Insurance Administration.

3. Hospital services, as defined in Health-General Article §19-201, shall be reimbursed at 100% of Commission approved rates, subject to the Commission's regulations regarding Working Capital Differentials (COMAR 10.37.10.26B) the terms of the Medicare New Model agreement and the Special Audit Procedures conducted annually. The following attestation will be required annually as part of the Special Audit Procedures:

   "The undersigned, Chief Executive Officer or Chief Financial Officer, hereby certifies that to the best of my knowledge, information and belief that hospitals have been reimbursed at 100% of Commission approved rates."

4. There are not now, nor there be in the future, any transfer of funds, in-kind goods or services, or any other consideration associated with, or as a result of this Agreement involving the Hospitals, directly or indirectly, which has the effect of discounting the Commission approved rates. This provision, however, does not preclude investments in the related entity by the Hospitals that are not intended to fund the provision of health care services. Such investments may include recapitalization for the purpose of replenishing or augmenting start-up costs,

administrative and/or overhead or expansion of other activities not related to this arrangement. A written description of such investments shall promptly be reported to the Commission. A violation of this provision may subject the Hospitals to all penalties provided for in Commission regulation including, but not limited to:

a) Fixed price contracting COMAR 10.37.12;

b) Inaccurate reporting, COMAR 10.37.01 and 10.37.10;

c) Price corridors, COMAR 10.37.03; and

d) Global Budget Revenue/Total Patient Revenue Agreements.

IN RE: THE ALTERNATIVE	*****	**BEFORE THE HEALTH**
RATE APPLICATION OF	*****	**SERVICES COST REVIEW**
UNIVERSITY OF MARYLAND MEDICAL	*****	**COMMISSION**
SYSTEM CORPORATION		
	*****	**DOCKET: 2019**
	*****	**FOLIO: 2316**
	*****	**PROCEEDING: 2506A**

Final Recommendation

December 11, 2019

I. Introduction

On November 11, 2019 University of Maryland Health Partners, Inc. (UMHP), a Medicaid Managed Care Organization ("MCO"), on behalf of The University of Maryland Medical System Corporation ("the Hospitals"), filed an application for an Alternative Method of Rate Determination ("ARM") pursuant to COMAR 10.37.10.06. UMHP and the Hospitals seek approval for the MCO to continue to participate in the Medicaid Health Choice Program. UMHP is the entity that assumes the risk under this contract. The Commission most recently approved this contract under proceeding 2463A for the period from January 1, 2019 through December 31, 2019. UMHP and the Hospitals are requesting to implement this new contract for one year beginning January 1, 2020.

II. Background

Under the Medicaid Health Choice Program, UMHP, an MCO owned by the Hospitals, is responsible for providing a comprehensive range of health care benefits to Medical Assistance enrollees. The application requests approval for the Hospitals to provide inpatient and outpatient hospital services as well as certain non-hospital services, while the MCO receives a State-determined capitation payment. UMHP pays the Hospitals HSCRC-approved rates for hospital services used by its enrollees. UMHP supplied information on its most recent financial experience as well as its preliminary projected revenues and expenditures for the upcoming year based on the revised Medicaid capitation rates.

III. Staff Review

This contract has been operating under previous HSCRC approval (proceeding 2463A). Staff reviewed the operating financial performance under the contract. Staff reviewed available

final financial information and projections for CYs 2018, 2019, and 2020. UMHP reported unfavorable financial performance for CY 2018. Initial projections for CYs 2019 are unfavorable and 2020 is to breakeven. It should be noted that UMHP has amended its projection for CY 2019 to a much diminished unfavorable performance as a result of the implementation of medical and administration mitigation efforts, as well as mid-year retroactive rate adjustments.

IV. Recommendation

Based on past and projected performance, staff believes that the proposed renewal arrangement for UMHP is acceptable. Therefore staff recommends that the Commission approve the Hospitals request to participate in the Medicaid Health Choice Program for a one-year period beginning January 1, 2020. The Hospitals must file a renewal application annually for continued participation. In addition, UMHP must meet with Commission staff before the October 2020 public meeting of the Commission on the actual CY 2019 experience, and preliminary CY 2020 financial performance, as well as projections for CY 2021 using a prescribed template that the HSCRC will provide.

Staff recommends that this approval be subject to the following additional conditions:

1) The Hospitals shall provide the Commission in a timely manner with access to all financial records associated with the contractual relationship between UMHP and the Hospitals as they relate to implementation of the Agreement. All materials submitted to the Commission relative to the Agreement, inclusive of those materials described in Paragraph 2(b) and (c) above, shall be treated as proprietary and confidential in conformance with applicable law and regulation. The Commission shall provide the Hospitals with prior written notice of any request for release of confidential

information to third parties in order to allow the Hospitals to contest the requested release of such information.

2. The Hospitals shall comply with all current and future applicable Maryland statutory and regulatory requirements, including, but not limited to, those of: the Health Services Cost Review Commission, the Health Care Commission, the Department of Health, and the Maryland Insurance Administration.

3. Hospital services, as defined in Health-General Article §19-201, shall be reimbursed at 100% of Commission approved rates, subject to the Commission's regulations regarding Working Capital Differentials (COMAR 10.37.10.26B) the terms of the Medicare New Model agreement and the Special Audit Procedures conducted annually. The following attestation will be required annually as part of the Special Audit Procedures:

   "The undersigned, Chief Executive Officer or Chief Financial Officer, hereby certifies that to the best of my knowledge, information and belief that hospitals have been reimbursed at 100% of Commission approved rates."

4. There are not now, nor there be in the future, any transfer of funds, in-kind goods or services, or any other consideration associated with, or as a result of this Agreement involving the Hospitals, directly or indirectly, which has the effect of discounting the Commission approved rates. This provision, however, does not preclude investments in the related entity by the Hospitals that are not intended to fund the provision of health care services. Such investments may include recapitalization for the purpose of replenishing or augmenting start-up costs,

administrative and/or overhead or expansion of other activities not related to this arrangement. A written description of such investments shall promptly be reported to the Commission. A violation of this provision may subject the Hospitals to all penalties provided for in Commission regulation including, but not limited to:

a) Fixed price contracting COMAR 10.37.12;

b) Inaccurate reporting, COMAR 10.37.01 and 10.37.10;

c) Price corridors, COMAR 10.37.03; and

d) Global Budget Revenue/Total Patient Revenue Agreements.

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IN RE: THE ALTERNATIVE	*****	**BEFORE THE HEALTH**	
RATE APPLICATION OF	*****	**SERVICES COST REVIEW**	
UNIVERSITY OF MARYLAND	*****	**COMMISSION**	
MEDICAL SYSTEM	*****	**DOCKET:**	**2019**
	*****	**FOLIO:**	**2307**
BALTIMORE, MARYLAND	*****	**PROCEEDING:**	**2507A**

Staff Recommendation

December 11, 2019

I. Introduction

On November 3, 2019, the University of Maryland Medical System (UMMS) filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of its constituent hospitals (the "Hospitals"). UMMS seeks approval for University of Maryland Health Advantage, Inc. ("UMHA") to continue to participate in a Centers for Medicare and Medicaid Services (CMS) approved Medicare Advantage Plan. UMHA is the UMMS entity that assumes the risk under this contract. UMHA is requesting an approval for one year beginning January 1, 2020.

II. Background

CMS granted UMHA approval to operate a Medicare Advantage Plan to provide coverage to Maryland eligible residents in Anne Arundel, Baltimore, Caroline, Carroll, Cecil, Charles, Dorchester, Harford, Howard, Kent, Montgomery, Prince George's, Queen Anne's, Talbot counties and Baltimore City. UMHA currently offers two products - - UMHA Complete, which is a general enrollment Medicare Advantage Plan that includes Medicare Part D prescription drug coverage, and UMHA Duel Special Needs Plan that limits membership to people with special needs that are eligible for both Medicare and Medicaid. For economic reasons UMHA plans to stop offering the UMHA Complete Plan and to provide only the UMHA Duel Special Needs Plan in CY 2020. The application requests approval for UMHA to provide for inpatient and outpatient hospital services, as well as certain non-hospital services, in return for a CMS-determined capitation payment. UMHA will pay the Hospitals HSCRC-approved rates for hospital services used by its enrollees. UMHA supplied staff with a copy of its contract with CMS.

III. Staff Review

Staff reviewed the reviewed the financial projections for CY 2020, as well as UMHA's experience and projections for CY 2019. The information reflected the anticipated negative financial results associated with the start-up of a Medicare Advantage Plan in CY 2019, however, according to UMHA its concentration on the Duel Special Needs market and its exit from the general enrollment market will result in favorable experience in CY 2020.

IV. Recommendation

Based on the financial projections, staff believes that the proposed arrangement for UMHA is acceptable under Commission policy. Therefore, staff recommends that the Commission approve the Hospitals' request to participate in CMS' Medicare Part C Medicare Advantage Program for a period of one year beginning January 1, 2020. The Hospitals must file a renewal application annually for continued participation. UMHA must meet with HSCRC staff prior to August 31, 2020 to review its financial projections for CY 2021. In addition, UMHA must submit to the Commission a copy of its quarterly and annual National Association of Insurance Commissioners' (NAIC's) reports within 30 days of submission to the NAIC.

Staff recommends that this approval be subject to the following additional conditions:

1) The Hospitals shall provide the Commission in a timely manner with access to all financial records associated with the contractual relationship between UMHA and the Hospitals as they relate to implementation of the Agreement. All materials submitted to the Commission relative to the Agreement, inclusive of those materials described

in Paragraph 2(b) and (c) above, shall be treated as proprietary and confidential in conformance with applicable law and regulation. The Commission shall provide the Hospitals with prior written notice of any request for release of confidential information to third parties in order to allow the Hospitals to contest the requested release of such information.

2. The Hospitals shall comply with all current and future applicable Maryland statutory and regulatory requirements, including, but not limited to, those of: the Health Services Cost Review Commission, the Health Care Commission, the Department of Health, and the Maryland Insurance Administration.

3. Hospital services, as defined in Health-General Article §19-201, shall be reimbursed at 100% of Commission approved rates, subject to the Commission's regulations regarding Working Capital Differentials (COMAR 10.37.10.26B) the terms of the Medicare New Model agreement and the Special Audit Procedures conducted annually. The following attestation will be required annually as part of the Special Audit Procedures:

   "The undersigned, Chief Executive Officer or Chief Financial Officer, hereby certifies that to the best of my knowledge, information and belief that hospitals have been reimbursed at 100% of Commission approved rates."

4. There are not now, nor there be in the future, any transfer of funds, in-kind goods or services, or any other consideration associated with, or as a result of this Agreement involving the Hospitals, directly or indirectly, which has the effect of discounting the Commission approved rates. This provision, however, does not

preclude investments in the related entity by the Hospitals that are not intended to fund the provision of health care services. Such investments may include recapitalization for the purpose of replenishing or augmenting start-up costs, administrative and/or overhead or expansion of other activities not related to this arrangement. A written description of such investments shall promptly be reported to the Commission. A violation of this provision may subject the Hospitals to all penalties provided for in Commission regulation including, but not limited to:

a) Fixed price contracting COMAR 10.37.12;

b) Inaccurate reporting, COMAR 10.37.01 and 10.37.10;

c) Price corridors, COMAR 10.37.03; and

d) Global Budget Revenue/Total Patient Revenue Agreements.

IN RE: THE ALTERNATIVE	*****	**BEFORE THE HEALTH**	
RATE APPLICATION OF	*****	**SERVICES COST REVIEW**	
JOHNS HOPKINS HEALTH	*****	**COMMISSION**	
SYSTEM	*****	**DOCKET:**	**2019**
	*****	**FOLIO:**	**2318**
BALTIMORE, MARYLAND	*****	**PROCEEDING:**	**2508A**

Staff Recommendation

December 11, 2019

I. Introduction

On November 7, 2019, the Johns Hopkins Health System (JHHS) filed an application for an Alternative Method of Rate Determination pursuant to COMAR 10.37.10.06 on behalf of its constituent hospitals (the "Hospitals"). JHHS seeks approval for Hopkins Health Advantage. Inc. ("HHA") to continue to participate in a Centers for Medicare and Medicaid Services (CMS) approved Medicare Advantage Plan. HHA is the JHHS entity that assumes the risk under this contract. JHHS is requesting approval for one year beginning January 1, 2020.

II. Background

On September 1, 2015, CMS granted HHA approval to operate a Medicare Advantage Plan to provide coverage to Maryland eligible residents in Anne Arundel, Baltimore, Calvert, Carroll, Howard, Montgomery, Somerset, Washington, Wicomico, Worcester counties and Baltimore City. HHA is jointly controlled by Johns Hopkins HealthCare, LLC, Advanced Health Collaborative II, LLC (consisting of Adventist Healthcare, Inc., Frederick Regional Health System, Inc., Lifebridge Health, Inc., and Peninsula Regional Health System, Inc.) and Anne Arundel Medical Center and Mercy Health Services, Inc. The application requests approval for HHA to provide inpatient and outpatient hospital services, as well as certain non-hospital services, in return for a CMS-determined capitation payment. HHA will pay the Hospitals HSCRC-approved rates for hospital services used by its enrollees. HHA has supplied the HSCRC staff with a copy of its contract with CMS (the "Agreement)".

III. Staff Review

Staff reviewed the reviewed the financial projections for CY 2020, as well as HHA's

experience and projections for CY 2019. The information reflected the anticipated negative financial results associated with the start-up of a Medicare Advantage Plan. The Plan's projections for CY 2020, however, show a significant decrease in the magnitude of its negative performance.

IV. Recommendation

Based on the financial projections, staff believes that the proposed arrangement for HHA is acceptable under Commission policy.Therefore, staff recommends that the Commission approve the Hospitals' request to participate in CMS' Medicare Part C Medicare Advantage Program for a period of one year beginning January 1, 2020. The Hospitals must file a renewal application annually for continued participation. In addition, HHA must meet with HSCRC staff prior to August 31, 2020 to review its financial projections for CY 2021. In addition, HHA must submit a copy of its quarterly and annual National Association of Insurance Commissioner's (NAIC's) reports to the Commission within 30 days of submission to the NAIC.

Staff recommends that this approval be subject to the following additional conditions:

1) The Hospitals shall provide the Commission, in the time frame prescribed by Commission regulation, with annual and quarterly reports to include but not be limited to those reports prescribed in COMAR 10.37.10.06(E). These reports are considered "Required Reports" in consonance with Commission regulation.
2) The Hospitals shall provide the Commission in a timely manner with access to all financial records associated with the contractual relationship between HHA and the Hospitals as they relate to implementation of the Agreement. All materials submitted

to the Commission relative to the Agreement, inclusive of those materials described in Paragraph 2(b) and (c) above, shall be treated as proprietary and confidential in conformance with applicable law and regulation. The Commission shall provide the Hospitals with prior written notice of any request for release of confidential information to third parties in order to allow the Hospitals to contest the requested release of such information.

3. The Hospitals shall comply with all current and future applicable Maryland statutory and regulatory requirements, including, but not limited to, those of: the Health Services Cost Review Commission, the Health Care Commission, the Department of Health, and the Maryland Insurance Administration.
4. Hospital services, as defined in Health-General Article §19-201, shall be reimbursed at 100% of Commission approved rates, subject to the Commission's regulations regarding Working Capital Differentials (COMAR 10.37.10.26B) the terms of the Medicare New Model agreement and the Special Audit Procedures conducted annually. The following attestation will be required annually as part of the Special Audit Procedures. The undersigned, Chief Executive Officer or Chief Financial Officer, hereby certifies that to the best of my knowledge, information and Belief that hospitals have been reimbursed at 100% of Commission approved rates.
5. There are not now, nor there be in the future, any transfer of funds, in-kind goods or services, or any other consideration associated with, or as a result of this Agreement involving the Hospitals, directly or indirectly, which has the effect of discounting the Commission approved rates. This provision, however, does not preclude investments in the related entity by the Hospitals that are not intended to fund the provision of health care services. Such investments may include recapitalization for the purpose of replenishing or augmenting start-up costs, administrative and/or overhead or expansion of other activities not related to this arrangement. A written description of such investments shall promptly be reported to the Commission. A violation of this provision may subject the Hospitals to all penalties provided for in Commission regulation including, but not limited to:

a) Fixed price contracting COMAR 10.37.12;

b) Inaccurate reporting, COMAR 10.37.01 and 10.37.10;

c) Price corridors, COMAR 10.37.03; and

d) Global Budget Revenue/Total Patient Revenue Agreements.

IN RE: THE APPLICATION FOR	*	**BEFORE THE MARYLAND HEALTH**	
ALTERNATIVE METHOD OF RATE	*	**SERVICES COST REVIEW**	
DETERMINATION	*	**COMMISSION**	
JOHNS HOPKINS HEALTH	*	**DOCKET:**	**201**
SYSTEM	*	**FOLIO:**	**2319**
BALTIMORE, MARYLAND	*	**PROCEEDING:**	**2509A**

Staff Recommendation

December 11, 2019

I. INTRODUCTION

Johns Hopkins Health System (the System) filed a renewal application with the HSCRC on November 18, 2019 on behalf of its member hospitals, the 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 for continued participation in a capitation arrangement serving persons insured with Tricare. The arrangement involves the Johns Hopkins Medical Services Corporation and Johns Hopkins Healthcare as providers for Tricare patients. The requested approval is for a period of one year beginning January 1, 2020.

II. OVERVIEW OF APPLICATION

The parties to the contract include the Johns Hopkins Medical Services Corporation and Johns Hopkins Healthcare, a subsidiary of the System. The program provides a range of health care services for persons insured under Tricare including inpatient and outpatient hospital services. Johns Hopkins Health Care will assume the risk under the agreement, and the Hospitals will be paid based on their approved HSCRC rates.

III. STAFF EVALUATION

Staff found the experience under this arrangement to be favorable for the last year. Staff believes that the Hospitals can continue to achieve favorable performance under this arrangement.

V. STAFF RECOMMENDATION

The staff recommends that the Commission approve the Hospitals' renewal application for an alternative method of rate determination for a one year period beginning January 1, 2020. Consistent with its policy paper regarding applications for alternative methods of rate determination, the staff recommends that this approval be contingent upon the execution of the standard Memorandum of Understanding ("MOU") with the Hospitals for the approved contract.

This document would formalize the understanding between the Commission and the Hospitals, and would include provisions for such things as payments of HSCRC-approved rates, treatment of losses that may be attributed to the contract, quarterly and annual reporting, confidentiality of data submitted, penalties for noncompliance, project termination and/or alteration, on-going monitoring, and other issues specific to the proposed contract, The MOU will also stipulate that operating losses under the contract cannot be used to justify future requests for rate increases.

IN RE: THE APPLICATION FOR	*	**BEFORE THE MARYLAND HEALTH**	
ALTERNATIVE METHOD OF RATE	*	**SERVICES COST REVIEW**	
DETERMINATION	*	**COMMISSION**	
JOHNS HOPKINS HEALTH	*	**DOCKET:**	**2019**
SYSTEM	*	**FOLIO:**	**2320**
BALTIMORE, MARYLAND	*	**PROCEEDING:**	**2510A**

Staff Recommendation

December 11, 2019

INTRODUCTION

Johns Hopkins Health System (System) filed a renewal application with the HSCRC on November 18, 2019 on behalf of the Johns Hopkins Bayview Medical Center (the "Hospital") for an alternative method of rate determination, pursuant to COMAR 10.37.10.06. The System requests approval from the HSCRC for continued participation in a capitation arrangement serving persons with mental health needs under the program title, Creative Alternatives. The arrangement is between the Johns Hopkins Health System and the Baltimore Mental Health Systems, Inc., with the services coordinated through the Hospital. The requested approval is for a period of one year beginning January 1, 2020.

II. OVERVIEW OF APPLICATION

The parties to the contract include the System and the Baltimore Mental Health Systems, Inc. Creative Alternatives provides a range of support services for persons diagnosed with mental illness and covers medical services delivered through the Hospital. The System will assume the risk under the agreement, and all Maryland hospital services will be paid based on HSCRC rates.

III. STAFF FINDINGS

Staff found that the experience under this arrangement for FY 2017 was favorable. Staff believes that the Hospital can continue to achieve a favorable performance under this arrangement.

IV. STAFF RECOMMENDATION

Staff recommends that the Commission approve the Hospital's renewal application for an alternative method of rate determination for a one year period commencing January 1, 2020.

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	*****	**BEFORE THE MARYLAND HEALTH**	
ALTERNATIVE METHOD OF RATE	*****	**SERVICES COST REVIEW**	
DETERMINATION	*****	**COMMISSION**	
JOHNS HOPKINS HEALTH	*****	**DOCKET:**	**2019**
SYSTEM	*****	**FOLIO:**	**2321**
BALTIMORE, MARYLAND	*****	**PROCEEDING:**	**2511A**

Staff Recommendation

December 11, 2019

I. INTRODUCTION

Johns Hopkins Health System ("System") filed a renewal application with the HSCRC on November 18, 2019 on behalf of the Johns Hopkins Bayview Medical Center (the "Hospital") requesting approval from the HSCRC for continued participation in a capitation arrangement among the System, the Maryland Department of Health and Mental Hygiene (DHMH), and the Centers for Medicare and Medicaid Services (CMS). The Hospital, doing business as Hopkins Elder Plus ("HEP"), serves as a provider in the federal "Program of All-inclusive Care for the Elderly" ("PACE"). Under this program, HEP provides services for a Medicare and Medicaid dually eligible population of frail elderly. The requested approval is for a period of one year effective January 1, 2020.

II. OVERVIEW OF APPLICATION

The parties to the contract include the System, DHMH, and CMS. The contract covers medical services provided to the PACE population. The assumptions for enrollment, utilization, and unit costs were developed on the basis of historical HEP experience for the PACE population as previously reviewed by an actuarial consultant. Johns Hopkins HealthCare, LLC assumes the risks under the agreement, and all Maryland hospital services are paid based on HSCRC rates.

III. STAFF EVALUATION

Staff found that the experience under this arrangement for FY 2018 to be favorable.

III. STAFF RECOMMENDATION

Staff recommends that the Commission approve the Hospital's renewal application for an alternative method of rate determination for one year beginning January 1, 2020. 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 formalizes the understanding between the Commission and the Hospital, and includes 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 also stipulates that operating losses under the contract cannot be used to justify future requests for rate increases.

Final Recommendations for a Capital Financing Policy

December 11, 2019

Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215
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FAX: (410) 358-6217

This is document includes the final staff recommendation for a Capital Financing Policy.

Table of Contents

Introduction

Since 2014, the State has operated under a per capita constraint imposed by the Centers for Medicare and Medicaid (CMS) as a condition of the All-Payer Model and the Total Cost of Care (TCOC) Model. The Commission has set the Global Budget Revenue (GBR) for hospitals and the annual update factor to manage the per capita growth rate. The GBR limits a hospital's incentive to grow volume unnecessarily. However, volume growth combined with HSCRC rate support were historically used to finance new capital projects, creating an inherent tension between the incentives of the TCOC Model and the ability to generate sufficient revenue to replace aging facilities.

Stakeholders have thus expressed concern that there is no defined or predictable route for hospitals to receive additional money for new capital projects under the GBR methodology. This recommendation establishes a policy to provide predictable rate updates for new capital projects, while also taking into account increased excess capacity produced by volume declines over the past 5 years and the inefficient use of fixed costs. Therefore, staff recommend that the rate updates for capital financing be scaled by the hospital's efficiency and excess capacity. The following final staff recommendation takes into account stakeholder feedback and staff work on an appropriate policy to fund capital projects under the TCOC Model.

Recommendations

Staff recommend that rate support be limited to capital projects that exceed a threshold of 35 percent for hospitals that have permanent revenue of $300 million or greater. For smaller hospitals with permanent GBR revenue less than $300 million, the threshold will be scaled up to 50 percent of the hospital's permanent revenue. Further, the amount of funding for which a hospital's capital project is eligible should be determined through the following three-step algorithm:

- Determine the Hospital's eligible funding based on the proposed project
- Apply a scaling factor based on efficiency
- Adjust for PAU and excess capacity

Staff further recommends that the amount determined by the algorithm be added to the hospitals permanent revenue beginning in the year in which a capital project comes online. In that year, staff will recommend that the amount of the capital project be subtracted from the inflation portion of the update factor, if the update factor inclusive of capital funding would cause Maryland to exceed the Medicare total cost of care guardrail tests or the growth in the gross state product (GSP).

Finally, if a hospital applies for a rate increase for a project after the conclusion of the Certificate of Need approval process, staff recommends that the amount of funding they receive should be equal to the lesser of the algorithm when the hospital submits a rate request and the year that the project was approved through the Certificate of Need process.

Capital Funding under a Total Revenue Constraint

Predictability in capital funding is important not just for hospitals but also for the Commission to manage the various total revenue constraints incorporated in the Total Cost of Care Model, as capital projects could increase costs suddenly when they come online. If a very large project or several simultaneous projects come online, the increase in costs could endanger the State's annual total cost of care guardrail test, as well as its annual total cost of care savings rate test.

Staff, therefore, considered limiting the amount of capital funding that could be distributed in any given year, which would require hospitals to potentially wait until the system could afford capital funding. However, the staff also believe that the two-pronged test used to set the hospital update factor, which limits growth to be less than both Maryland Gross State Product (GSP) growth and national Medicare growth guardrail tests, is a sufficient limitation on hospital cost growth. If the update factor would cause Maryland to exceed either GSP or national Medicare growth guardrail tests, then the amount of capital funding will be subtracted from general inflation in the update factor. But should the update factor – inclusive of capital funding – comply with the lesser of test then the staff do not recommend that an adjustment should be made to inflation.

In order to avoid a large growth in capital costs and to ensure that hospitals utilize retained revenues related to avoided utilization to finance smaller projects, staff recommend that a rate update be limited to projects whose value exceeds at least 35 percent of the GBR. Staff considered limiting rate increases to projects that exceed the greater of 35 percent of the GBR or $50 million. However, $50 million will exceed the permanent revenue of several small hospitals. Therefore, staff recommend limiting the applicability of rate increase for capital based on a percentage of the hospital's permanent revenue but scaling the threshold based on the size of the hospital. Staff recommends using permanent revenue instead of the annual GBR because certain allocated costs (such as the deficit assessment) can be large but are not available for funding capital.

The staff recommend maintaining the threshold for a project to receive capital funding at 35 percent of the hospital permanent revenue for a hospital near or above the median of all hospitals (about $300 million). Staff also recommend increasing the capital threshold by 0.06 percent for every million dollars that the hospital is below $300 million. This equates to scaling from a threshold of 35 percent for a hospital with permanent revenue of $300 million to a threshold of 50 percent for a hospital with permanent revenue of $50 million. For example, a hospital with permanent revenue of $200 million would have a capital threshold of 41 percent or $82 million dollars. The table below shows the capital threshold and the threshold amounts in increment of $50 million. While the threshold is a higher percent of the hospital's GBR, the actual dollar value of the threshold is lower for smaller hospitals. A hospital with a GBR of $50 million would have a threshold of only $25 million, down from the original recommendation of $50 million.

Permanent Revenue	Threshold for Capital Funding	Threshold Amount
> $300,000,000	35.0%	$105,000,000
$250,000,000	38.0%	$95,000,000
$200,000,000	41.0%	$82,000,000
$150,000,000	44.0%	$66,000,000
$100,000,000	47.0%	$47,000,000
< $50,000,000	50.0%	$25,000,000

Staff believe this will continue to limit applications for capital funding to large projects that could not be financed without rate support, primarily projects that include building new physical plants, while at the same time recognizing the smaller hospitals do not have the same level of capital reserves to finance projects that are large relative to their size. Smaller projects, i.e. less than the proposed scaled thresholds for capital funding listed in the above table, should be financed out of existing revenues. Hospitals currently receive funding for capital projects in the annual update factor and hospitals retain

the interest and depreciation costs on all their previous capital projects, even after those projects have completed their useful life.

Staff considered lowering the threshold for larger hospitals but did not recommend doing so for two reasons: first, capital is already funded through the update factor and projects smaller than a major plant replacement should have sufficient funding; and second, larger hospitals likely have additional financial flexibility to fund projects, such as philanthropy or large cash balances.

Additionally, staff recommend establishing a policy for when partial rate applications can be considered. When applying for a Certificate of Need for a capital project, a hospital must indicate whether they are seeking a rate update to cover a portion of the costs. A hospital is not required to seek a rate update and may delay doing so until a later date. However, staff are recommending a financing formula based on the ICC and Medicare total cost of care (TCOC) growth, both of which may change overtime. In the event that a hospital delays applying for a rate increase to cover the capital costs, staff recommends that the amount of capital funding they can receive be equal to the lesser of the calculation when the hospital certificate of need was approved and when the hospital actually applies for the capital funding.

Algorithm to Determine Capital Financing

Staff recommend a three-step algorithm to calculate the rate increase that a hospital can receive in order to finance a capital project. The three steps are:

1. First, determine the amount of a capital project that will be supported through rates.
2. Second, scale the amount of funding that a particular hospital will receive for its capital project by determining its relative capital efficiency as well as that hospital's ICC and TCOC efficiency.
3. Third, credit/penalize hospitals based on their potentially avoidable utilization (PAU) and excess capacity in order to ensure that efficient hospitals are funded while inefficient hospitals finance new capital through other cost reductions.

Step 1: Determine the Hospital's Eligible Funding

Staff will calculate the depreciation costs of the hospital's project using the straight line method with the hospital's estimate of the project's useful lifetime. Staff will also calculate cumulative interest on 70 percent of the project's value. By financing only 70 percent of the project's value, the staff expects that at least 30 percent of the project be paid by the hospital either through cash, philanthropy, or other sources of funding that are not direct rate support. Staff will calculate the hospital's estimated annual interest payments at the effective annual rate at which the project is expected to be financed.

Step 2: Apply a Scaling Factor based on Efficiency

Step 1 above determines the amount of capital funding that the hospital could receive on a project, however, staff recommends that a hospital be eligible to receive only portion of that amount, depending on its relative efficiency. The staff recommends using two measures of efficiency: the hospital's capital efficiency and the hospital's integrated cost per case and total cost of care efficiency.

The hospital's relative capital intensity is taken into account by taking the portion of total costs the hospital spends on capital and comparing it to its peer group. The hospital is only eligible to receive the average of its capital costs (inclusive of the new project) and its peer group average. Comparing a hospital to its peer group will discourage hospitals that may be already more capital intensive than their

peers from building additional capital projects. Alternatively, this process will provide credit to hospitals that are further in the capital cycle and therefore have greater need for a capital replacement project.

To measure integrated cost per case and total cost of care efficiency, staff employs the ICC and a Medicare total cost of care growth calculation. The ICC measures the efficiency of the hospital's cost per case relative to its peer group and in the case of capital evaluations does not include productivity adjustments, per historical practice. The ICC's productivity adjustment was intended to eliminate costs related to excess capacity. Staff believe it is critical to address excess costs when financing capital in order to avoid rebuilding or increasing excess capacity with a new project. Therefore, staff recommends that excess capacity costs be addressed directly rather than through the ICC's productivity adjustment and subsequent relative ranking. The excess capacity adjustment is described in Step 3.

The ICC is an important consideration for capital financing for two reasons. First, it ensures that hospitals that are using existing fixed costs efficiently receive more financing than hospitals that are using fixed costs less efficiently. Second, it ensures that hospitals with lower profit margins and more efficient costs receive more financing than hospitals with more significant profit margins that could more easily fund capital projects with existing rate structures.

In terms of total cost of care, staff is currently employing Medicare total cost of care growth using a geographic attribution relative to a 2013 base. It is important to use a 2013 base because growth calculations are more statistically reliable with multiple years of data and because the incentives of the Models since 2013 were to reduce total cost of care in line with the annual total cost of care guardrail tests. Because staff believes it is necessary to use growth relative to a 2013 base, the geographic attribution is necessary. That said, staff will consider supplanting the growth calculations with attainment analyses relative to nationally selected benchmarks once this work is complete.

Step 2A: Compare the Hospital's Requested Capital Costs with its Peer Group

Staff will adjust the amount of funding that the hospital can receive based on the average capital intensity of the hospital's peer group. The adjustment is necessary to ensure that hospital's that are already more capital intensive than their peers do not become more so and also to ensure that hospitals that have not recapitalized in some time have the opportunity to do so.

The adjustment is calculated as follows.

- First, staff will calculate the percent of the hospitals costs that will be spent on capital[1] (Hospital Pro Forma Capital Ratio) if the hospital received the full amount of its eligible funding. That is, the staff will take the hospital's current capital costs and add the amount of funding the hospital is eligible for after applying the efficiency scaling from Step 2B and divide the sum by the hospital's cost structure inclusive of the new capital request.
- Second, staff will calculate the percent of current capital costs for the hospital's peer group as a percent of revenue (Peer Group Capital Ratio). Staff will then deduct the current capital costs ratio from the average from the hospitals Pro Forma Capital Ratio and the Peer Group Capital Ratio. Finally, to denote the value as charges instead of costs, staff will multiply the prior step by the GBR.

[1]The sum of interest costs, amortized depreciation

Step 2B: Scale the Hospitals Eligible Funding based on its Capital ICC Score

The Staff will determine the hospitals relative rank on both the ICC and Medicare TCOC growth. Staff will equally weight the ICC and the Medicare TCOC growth rate by summing of the hospital's rank on each of the two scores. This Total Rank will be used to scale the amount of capital funding that the hospital can receive.

Staff will calculate a scaling factor based on the hospital's total ranking relative to other hospitals in the State through a two-step process.

- First, a hospital receives a base efficiency factor depending on the quintile in which the hospital falls. The most efficient quintile (lowest score) receive a base efficiency adjustment of 80 percent and the least efficient quintile receives a base efficiency adjustment of 0 percent.
- Second, the hospital receives an adjustment based on the variation in efficiency within its quintile.

The adjustment within the quintile is calculated by dividing 20 percent by the number of hospitals within the quintile and then multiplying by the hospitals within quintile rank. The adjustment within the quintile is necessary because the number of hospitals within each quintiles vary and because without such a calculation the policy can run afoul of adverse cliff effects. For example, there are 10 hospitals in the first quintile and so each rank is worth 2 percentage points; there are 9 hospitals in the second quintile so each rank is worth 2.2 percentage points. Without an adjustment within the quintile the 10th hospital in the quintile and the 1st hospital in the second quintile would have a difference of 20 percent for efficiency scaling as opposed to 0.2 percent. The following table summarizes the calculation:

Quintile	Base Adjustment	Within Quintile Adjustment
Q1	80%	+ (20% / # hospitals within quintile) x hospitals rank within quintile
Q2	60%	
Q3	40%	
Q4	20%	
Q5	00%	

Once the scaling factor has been calculated, it is multiplied by the amount of funding that the project is eligible for following capital efficiency scaling, as calculated in Step 2a. For example, the most efficient hospital in the third quintile would could receive up to 60 percent of the eligible amount of its capital project.

Table 1: Efficiency Adjustment by Hospital based on FY2020

Hospital	Efficiency Adjustment	Hospital	Efficiency Adjustment
Anne Arundel	100%	**MedStar Union Hospital**	73%
Atlantic General Hospital	98%	**Mercy Medical Center**	84%
Bon Secours Hospital	11%	**Meritus Medical Center**	91%
Calvert Memorial Hospital	42%	**Northwest Hospital Center**	24%
Carroll Hospital Center	36%	**Peninsula Regional**	64%
Doctors Community Hospital	67%	**Prince Georges**	62%
Fort Washington	73%	**Shady Grove Adventist**	32%
Frederick Memorial Hospital	78%	**Sinai Hospital**	40%
Garrett County Memorial	49%	**St. Agnes Hospital**	78%
GBMC	24%	**Suburban Hospital**	60%
Harford Memorial Hospital	89%	**Union Hospital of Cecil County**	9%
Holy Cross Hospital	82%	**UM Baltimore Washington**	89%
Howard County General	80%	**UM Charles Regional**	32%
Johns Hopkins Bayview	93%	**UM Medical Center**	18%
Johns Hopkins Hospital	96%	**UM Midtown Campus**	2%
Laurel Regional Hospital	73%	**UMROI**	13%
McCready Memorial Hospital	24%	**UM Chestertown**	18%
MedStar Franklin Square	44%	**UM Dorchester**	60%
MedStar Good Samaritan	4%	**UM Easton**	56%
MedStar Harbor Hospital	24%	**UM St Joseph**	20%
Montgomery Medical Center	7%	**Upper Chesapeake**	42%
MedStar Southern Maryland	53%	**Washington Adventist**	82%
MedStar St. Mary's Hospital	49%	**W. Maryland Regional**	51%

Step 3: Adjust for PAU and Excess Capacity

Staff recommend modifying the amount of capital funding the hospital can receive, as calculated by Step 2B, to account for potentially avoidable utilization and excess capacity. The dollar value of these two credits will be added or subtracted from the amount of capital spending calculated in Step 2B in determining the final amount that a hospital is eligible to receive.

The PAU adjustment reflects the hospitals "opportunity" to reduce unnecessary utilization. Historically, hospitals financed a portion of their capital project through volume growth. That strategy is not viable under the GBR. Instead hospitals are expected to reduce unnecessary utilization (e.g. PAU) and reinvest the savings into capital and population health activities. However, hospitals that do not have as much PAU do not have as much opportunity to save money by reducing PAU. Therefore, staff recommend providing them with a credit for their capital projects.

The excess capacity adjustment reflects the decline in volume that has occurred in the hospital. The GBR allows hospitals to retain revenue as volume declines. Hospitals are expected to reinvest that revenue in capital or population health activities. A hospital that has experienced volume declines should be able to finance a portion of its capital project by eliminating the fixed costs that are no longer necessary to support a higher volume. Therefore, staff recommend subtracting the excess capacity costs from the amount of funding that a hospital can receive for a new capital project.

Step 3A: Potentially Avoidable Utilization (PAU) Adjustment

PAU is a measure of 30 day readmissions with various exclusions and avoidable hospitalizations for ambulatory sensitive conditions, as measured by Agency for Healthcare Research and Quality Prevention Quality Indicators (PQIs). The PAU adjustment is intended to make financing capital projects easier for hospitals that cannot use new projects to induce new demand and grow volume but also lack the opportunity to reduce potentially avoidable utilization as an alternative. Staff recommends basing the PAU adjustment on the ratio of the hospital's percent of revenue that is PAU to the statewide average percent of PAU revenue. The denominator for this statistic is inpatient revenue and observation greater than 24 hours, as PAU is not assessed in outpatient care.

This statistic and proposed adjustment reflects the hospital's opportunity to finance capital through reductions in potentially avoidable utilization relative to other hospitals. For example, a hospital with only 50 percent of the statewide average of revenue coming from PAU would have to reduce their rate of PAU utilization by twice as much in order to finance the same share of a capital project. Therefore, these facilities should receive favorable treatment in this policy.

The PAU adjustment is calculated in three steps.

- First, staff will calculate the statewide mean (18.44 percent) and standard deviation (6.55 percent) of revenue that comes from PAU across all hospitals. Any hospital whose PAU share of revenue exceeds the mean, does not receive a credit. Any hospital whose PAU share of revenue is less than the mean, receives a credit but it is capped at one standard deviation, i.e. 6.55 percent.
- Second, staff will calculate the difference between the hospital's rate of PAU and the statewide average rate of PAU and give credit equal to that difference.
- Third, staff will multiply that value by the efficiency scaling factor in Step 2A and multiply by the 50 percent Variable Cost Factor.

Table 2: PAU Credit Given by Hospital

Hospital	PAU% / State Avg	PAU Credit	Hospital	PAU% / State Avg	PAU Credit
Anne Arundel	96%	$1,172,968	**MedStar Union Hospital**	110%	$0
Atlantic General Hospital	133%	$0	**Mercy Medical Center**	71%	$5,484,507
Bon Secours Hospital	164%	$0	**Meritus Medical Center**	117%	$0
Calvert Memorial Hospital	120%	$0	**Northwest Hospital Center**	159%	$0
Carroll Hospital Center	141%	$0	**Peninsula Regional**	103%	$0
Doctors Community Hospital	146%	$0	**Prince Georges**	105%	$0
Fort Washington	176%	$0	**Shady Grove Adventist**	85%	$1,260,398
Frederick Memorial Hospital	107%	$0	**Sinai Hospital**	90%	$1,562,551
Garrett County Memorial	112%	$0	**St. Agnes Hospital**	139%	$0
GBMC	92%	$425,974	**Suburban Hospital**	81%	$2,342,323
Harford Memorial Hospital	154%	$0	**Union Hospital of Cecil County**	133%	$0
Holy Cross Hospital	82%	$5,920,797	**UM Baltimore Washington**	124%	$0
Howard County General	103%	$0	**UM Charles Regional**	123%	$0
Johns Hopkins Bayview	115%	$0	**UM Medical Center**	64%	$6,959,709
Johns Hopkins Hospital	81%	$25,639,623	**UM Midtown Campus**	149%	$0
Laurel Regional Hospital	114%	$0	**UMROI**	1%	$327,125
McCready Memorial Hospital	223%	$0	**UM Chestertown**	104%	$0
MedStar Franklin Square	133%	$0	**UM Dorchester**	141%	$0
MedStar Good Samaritan	165%	$0	**UM Easton**	76%	$1,377,575
MedStar Harbor Hospital	131%	$0	**UM St Joseph**	68%	$1,536,990
Montgomery Medical Center	121%	$0	**Upper Chesapeake**	130%	$0
MedStar Southern Maryland	129%	$0	**Washington Adventist**	105%	$0
MedStar St. Mary's Hospital	138%	$0	**W. Maryland Regional**	105%	$0

Step 3B: Excess Capacity Adjustment

Staff recommends removing the fixed costs associated with volume declines from the amount of capital funding that the hospital can receive for two reasons. First, excess and empty beds should not be rebuilt. And second, the savings from eliminating those excess costs are retained at the hospital and could be repurposed to finance new capital projects. The excess capacity adjustment is calculated in two steps:

- First, staff will calculate the difference between the 2010 patient days plus the 2013 OP surgery visits with a length of stay greater than 1[2] and current patient days, OP surgery visits with a length of stay greater than 1, and observation stays with a length of stay greater than 1.
- Second, staff have estimated the statewide fixed cost per bed day to be $1,201 dollars. The excess capacity adjustment is equal to $1,201 times the reduction in patient days since 2010. However, between 2010 and 2014, the State funded volume growth/declines at 85 percent of the variable cost. Under current policy, volume growth/decline due to market shift or deregulation is funded at 50 percent of variable costs. Therefore, the hospitals' excess capacity adjustment will be credited 35 percent of variable cost for volume declines that occurred

[2] Data on OP surgery visits only became available in 2013.

between 2010 and 2014, since that money has already been removed. Future iterations of this policy will recalculate this value.

The dollar values of the excess capacity adjustment will be subtracted from the cost of whatever capital funding the hospital would otherwise be eligible to receive. No adjustment is given to a hospital whose volume has remained the same or grown.

Table 3: Excess Capacity Adjustment by Hospital

Hospital	Change from 2010	Excess Capacity Adj.	Hospital	Change from 2010	Excess Capacity Adj.
Anne Arundel	7652	$0	**MedStar Union Hospital**	-19341	-$23,236,327
Atlantic General Hospital	-2384	-$2,864,144	**Mercy Medical Center**	-12517	-$15,037,956
Bon Secours Hospital	-17420	-$20,928,433	**Meritus Medical Center**	-4057	-$4,874,090
Calvert Memorial Hospital	-5818	-$6,989,760	**Northwest Hospital Center**	-3917	-$4,705,894
Carroll Hospital Center	-8213	-$9,867,119	**Peninsula Regional**	-17516	-$21,043,767
Doctors Community Hospital	540	$0	**Prince Georges**	-8313	-$9,987,259
Fort Washington	-3043	-$3,655,868	**Shady Grove Adventist**	-20086	-$24,131,372
Frederick Memorial Hospital	-1421	-$1,707,193	**Sinai Hospital**	-17953	-$21,568,780
Garrett County Memorial	-307	-$368,831	**St. Agnes Hospital**	-14317	-$17,200,480
GBMC	-7678	-$9,224,369	**Suburban Hospital**	5986	$0
Harford Memorial Hospital	-2299	-$2,762,024	**Union Hospital of Cecil County**	-9771	-$11,738,904
Holy Cross Hospital	-1024	-$1,230,236	**UM Baltimore Washington**	-9525	-$11,443,359
Howard County General	3033	$0	**UM Charles Regional**	-4557	-$5,474,791
Johns Hopkins Bayview	-6370	-$7,652,934	**UM Medical Center**	11025	$0
Johns Hopkins Hospital	37174	$0	**UM Midtown Campus**	-14959	-$17,971,781
Laurel Regional Hospital	-5288	-$6,353,017	**UMROI**	-1103	-$1,325,147
McCready Memorial Hospital	-1290	-$1,549,809	**UM Chestertown**	-7037	-$8,454,270
MedStar Franklin Square	-2027	-$2,435,243	**UM Dorchester**	-3105	-$3,730,355
MedStar Good Samaritan	-25685	-$30,858,025	**UM Easton**	-3887	-$4,669,852
MedStar Harbor Hospital	-15431	-$18,538,843	**UM St Joseph**	-13805	-$16,585,362
Montgomery Medical Center	-10183	-$12,233,882	**Upper Chesapeake**	-1507	-$1,810,514
MedStar Southern Maryland	-10847	-$13,031,614	**Washington Adventist**	-24083	-$28,933,378
MedStar St. Mary's Hospital	2506	$0	**W. Maryland Regional**	-13010	-$15,630,247

Stakeholder Comments

Staff received six comment letters from stakeholders, e.g. Johns Hopkins Health System (JHHS), University of Maryland Medical System (UMMS), Adventist HealthCare, Greater Baltimore Washington Medical Center (GBMC), CareFirst, and the Maryland Hospital Association (MHA). All comments were supportive of a dedicated capital policy.

JHHS, Adventist, and CareFirst support the use of the scaling factor for the amount of capital funding based on efficiency scores, using the ICC and the TCOC scores. UMMS, GBMC, and the MHA commented that scaling the capital funding based on efficiency is too limited and would restrict access to rate support. Staff believe that it is appropriate to adjust the amount of capital funding based on efficiency. The ICC indicates that hospitals cost per case is relatively high, meaning that the hospitals has the opportunity to finance their capital project through improvements in internal cost efficiency. Several of the commenters also suggested moving to an attainment based TCOC measure. The staff is exploring doing so, but recommends proceeding with improvement for this policy.

JHHS, UMMS, Adventist, GBMC, and the MHA expressed concern that the 35 percent or $50 million threshold to receive capital funding was too restrictive because projects that were smaller than a major plant replacement would not be eligible to receive funding. Staff agree that the threshold was too restrictive for small hospitals since $50 million would be greater than 100 percent of the hospitals permanent revenue for certain small hospitals. Staff's final recommendation includes a scaled threshold based on the size of the hospital. However, staff does not recommend changing the threshold for hospitals above the median size (about $300 million). Money for capital is currently available through the hospital's GBR and the update factor. Money added to rates for major capital projects is double paying for those projects. Staff believes this is appropriate for major plant replacements, given the cash flow issues involved, but considers it fiscally prudent to exclude smaller capital projects from being eligible for rate increases on top of what is already provided through the GBR.

UMMS, Adventist, and GBMC, all expressed concern that the timing of capital intensity of the hospital's peer groups could effectively limit the amount of funding that the hospital could receive. Staff believe that the distribution of hospital costs within peer groups is relatively normal but do believe that the timing of a major capital project could change the peer groups capital intensity. The staff will monitor the timing of capital cycles within each peer group to assess the impact of adding new projects on other hospitals' eligibility for capital financing.

UMMS, Adventist, and GBMC, expressed concern with the calculation of the excess capacity adjustment. Until 2014, the State operated under an 85 percent variable cost factor (VCF), which means that volume declines between 2010 and 2014 have been partially defunded. Staff agrees with this concern and have recommended that a partial credit equal to 35 percent (the difference between the 85 percent VCF and the 50 percent VCF used to calculate fixed costs) be credited back to hospitals in the determination of the excess capacity costs.

Adventist expressed the concern that fixed costs cannot be rolled over to fund new capital projects because, by definition, those costs remain regardless of the quantity of goods and services that are provided. Staff agrees that building costs are fixed in the short-run but are not fixed when the hospital is constructing a new building. Therefore, staff consider it quite feasible that when replacing a building the hospital roll over some of their excess fixed costs.

The MHA expressed concern that the capital funding would be subtracted from the inflation portion of the update factor. CareFirst expressed support for doing so. The GBR already includes money for existing capital projects that remains in the hospital's budget after the project is fully depreciated and continues to receive the update factor. Additional money for capital is thus duplicative of that existing funding. However, staff believes that the current approach to the update factor – limiting the update factor to the lesser of GSP growth and national Medicare TCOC growth – is sufficient to constrain costs and therefore recommends that capital funding only be removed from the update factor if one of those two tests is jeopardized.

Recommendations

Staff recommend that rate support be limited to capital projects that exceed a threshold of 35 percent for hospitals that have permanent revenue of $300 million or greater. For smaller hospitals with permanent GBR revenue less than $300 million, the threshold will be scaled up to 50 percent of the

hospital's permanent revenue. Further, the amount of funding for which a hospital's capital project is eligible should be determined through the following three-step algorithm:

- Determine the Hospital's eligible funding based on the proposed project
- Apply a scaling factor based on efficiency
- Adjust for PAU and excess capacity

Staff further recommends that the amount determined by the algorithm be added to the hospitals permanent revenue beginning in the year in which a capital project comes online. In that year, staff will recommend that the amount of the capital project be subtracted from the inflation portion of the update factor, if the update factor inclusive of capital funding would cause Maryland to exceed the Medicare total cost of care guardrail tests or the growth in the gross state product (GSP).

Finally, if a hospital applies for a rate increase for a project after the conclusion of the Certificate of Need approval process, staff recommends that the amount of funding they receive should be equal to the lesser of the algorithm when the hospital submits a rate request and the year that the project was approved through the Certificate of Need process.

Maryland
Hospital Association

November 6, 2019

Katie Wunderlich
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Katie:

On behalf of Maryland's 61 member hospitals and health systems, the Maryland Hospital Association appreciates the opportunity to comment on the commission's proposed capital financing policy.

MHA supports a defined, predictable policy for capital funding
MHA appreciates HSCRC's efforts to preserve a cornerstone of the Maryland rate setting model and provide for capital funding in rates. Under the GBR fixed rate environment, the traditional mechanism of volume growth to fund capital costs does not exist. Therefore, it is even more critical in a fixed rate environment to have a policy that provides access to capital through the rate setting system.

The Project Cost Threshold Coupled with the Efficiency Measure is too Restrictive
The application of the efficiency measure and a high project cost threshold concerns Maryland hospitals, as the combination of these policy levers effectively limits capital funding to the replacement of inpatient towers for a handful of providers.

We appreciate the HSCRC staff's recommendation to set a project cost threshold to limit funding to large capital projects. Historically, the commission did not restrict hospitals from seeking rates for any capital project—only requiring them to receive Certificate of Need (CON) approval.

However, the proposal to limit funding to the greater of 35% of annual revenue or $50 million is too high—effectively only providing funds for extraordinary replacement projects. The average annual revenue for a Maryland hospital is $308 million. At 35%, a project cost of $100 million would not be considered. We ask that the commission consider a project cost threshold of 20% of annual GBR.

The application of hospital cost efficiency scaling further restricts funding. HSCRC previously applied an efficiency measure to determine the appropriate level of project funding. As applied, hospitals at the median would receive only 50% the requested funding.

Compounding this result is the underlying calculation of a hospital's capital share of total costs and average of capital costs across the peer group. Developed pre-GBR, this policy tool assumed that

50% of the incremental capital costs would be funded through volume growth; a funding mechanism that does not exist in a fixed rate environment.

The cumulative effect of the proposed project cost threshold and the efficiency calculation produces an extremely narrow path to access capital in rates and does not allow for adequate capital funding in the state.

Capital funding should be considered in the Annual Payment Update, but not automatically subtracted from the inflation portion of the update factor

We agree with staff that Maryland's hospitals require certainty in financing. MHA supports the recommendation to account for funding when the assets are placed in use.

Maryland's hospitals understand the concern that a sudden increase in capital projects and therefore funding in rates could unfavorably impact the state's annual total cost of care guardrail test and total cost of care savings rate test. Consistent with HSCRC's approach in the rate year 2020 update and like other policy impacts, capital must be considered as part of the annual statewide revenue growth relative to our guardrails. We concur that capital funding affects revenues available for all other hospitals but it should not be automatically offset against core tenants of the annual update. HSCRC considers hospital savings from the efficiency policy and other revenue reductions in the annual payment update. These policies should be accounted for in the annual update process before any consideration of a capital offset, as these savings may adequately cover the increase in rates. Maryland's collective performance against our targets—evaluated on an annual basis—may allow room for reasonable capital funding, particularly given the restrictive nature of the proposal.

Automatically subtracting the capital rate increase from the inflation portion of the update factor as proposed by staff does not consider total savings generated by hospitals and unnecessarily limits funding.

Thank you again for your careful consideration of these matters. We offer to work with staff to expeditiously address the concerns of our hospitals to preserve access to capital through rates. If you have any questions, please contact me at 410-561-2039.

Sincerely,

Katie Eckert
Vice President, Health Care Payment

cc: Nelson J. Sabatini, Chairman
Joseph Antos, Ph.D., Vice Chairman
Victoria W. Bayless
Stacia Cohen, RN
John M. Colmers
James N. Elliott, M.D.
Adam Kane
Allan Pack, Principal Deputy Director

Adventist HealthCare

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November 4, 2019

Katie Wunderlich
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Ref: Draft Recommendation for a Capital Funding Policy

Dear Ms. Wunderlich:

On behalf of Adventist HealthCare, Inc., thank you for the opportunity to comment on the ***Draft Recommendation for a Capital Financing Policy*** that was presented at the HSCRC public meeting on October 16, 2019. While we appreciate the efforts of HSCRC staff in drafting a policy that appears to address many considerations that must be made in light of the per-capita constraint system that we have been operating under since calendar year 2014, there are certain aspects of this policy for which we would like to provide comment. They are presented below in the same order in which they appear in the draft policy.

(1) HSCRC staff recommend that a rate update for capital needs be limited to projects whose value exceeds 35% of the hospital's annual GBR or $50 million, whichever is greater. We understand and support the desire to limit the number of capital funding applications to include large projects that could not otherwise be financed without rate support. However, we believe that the requirements reflected in the draft policy may be too restrictive and, therefore, warrant further consideration.

a. We believe that a hurdle rate equal to 35% of a hospital's annual GBR could have the unintended consequence of ignoring a hospital's capital needs that do not include building and relocating to a brand new facility. We recommend that the Commission consider reducing this funding hurdle to 20% of a hospital's GBR. This change would ensure that material capital needs would not be automatically disqualified because they don't meet such a high cost standard.
b. We believe that a percentage of permanent revenue (rather than a certain percentage of a hospital's GBR) should be used to determine the capital funding threshold. Allocated costs such as the Medicaid deficit assessment can be worth millions of dollars in a hospital's GBR – yet that does not represent money that it is able to keep and use for reinvestment. Instead, those moneys flow through the rate order and are expected to

be repaid to the agency for which those dollars are intended. Therefore, permanent revenue seems to be a more appropriate base to use when determining the threshold beyond which a capital project must exceed in order to be eligible for funding.

c. The draft policy includes a fixed $50 million cost threshold that must be exceeded before the Commission will even consider a hospital's capital funding request. There are six hospitals in the state that have a GBR in the $50 - $60 million range. For these hospitals, the fixed $50 million threshold is worth anywhere from 83% - 100% of the hospital's GBR. By including such a large fixed dollar amount as a threshold for these hospitals to clear, the draft policy becomes so restrictive that any one of them would have extreme difficulty in securing capital funding in rates. We believe the inclusion of a fixed dollar threshold should be removed to maintain equity among hospitals.

d. The inclusion of a minimum cost threshold could also have the unintended consequence of incentivizing a hospital to increase the size and scope of a project. For example, if a capital project does not exceed the greater of (1) 35% of the hospital's GBR or (2) $50 million, it could incentivize hospitals to expand the scope of its project plan so the adjusted cost estimate meets the minimum thresholds included in this policy.

(2) The draft capital policy requires the capital cost structure of a hospital to be compared to that of its peer group. It appears that the purpose of this adjustment is to ensure that hospitals that are already more capital intensive than their peers do not become "more capitalized" while those hospitals that have not purchased capital in some time have the opportunity to do so. This comparison assumes that the peer group capital ratio represents the appropriate level of capitalization for all members of the peer group, and that they should migrate towards some common mean. At any given point in time, hospitals within a peer group can be at different stages within their capital life cycle. This could result in an average capital intensity that is not necessarily appropriate for every hospital in the peer group. Additionally, we believe that Maryland has been under capitalized compared to the nation. Employing a methodology that compares to a peer group average that is already under capitalized will perpetuate this problem.

(3) In determining the level of funding a hospital is eligible to receive, staff will calculate a scaling factor based on a hospital's relative ranking in (a) Medicare Total Cost of Care (TCOC) growth and (b) the Inter-Hospital Cost Comparison. While it appears reasonable to adjust a hospital's capital funding level based on performance within these efficiency measures, we do not believe that the TCOC measure should be limited to an improvement measure only. The way this policy is currently written, it appears that a high cost hospital could receive a beneficial adjustment for reducing its TCOC – even if the final cost continues to be well above the statewide average. Conversely, a cost efficient hospital that may have experienced some growth in TCOC would be penalized in this policy – even if it is still very cost efficient relative to its peers. Similar to other Commission policies that provide hospitals with the ability to be evaluated on both improvement and attainment scores, we believe the same should hold true for this draft capital policy.

(4) HSCRC staff has calculated an excess capacity adjustment that is intended to remove the fixed costs associated with volume declines from the amount of capital funding that a hospital can receive. We perceive several issues with this aspect of the policy that warrant further consideration:

a. This adjustment seems to be based on the premise that hospitals are expected to divert fixed cost savings from volume declines to fund their capital projects. The very definition of fixed costs is that certain business costs are constant regardless of the quantities of goods or services produced. Therefore, we do not understand the need to offset a capital funding request with "savings" that cannot be realized because the underlying cost they reflect exist irrespective of changes in volume.

b. Notwithstanding the issue we have summarized in (3) a. above, we do not believe that an average fixed cost per bed day is appropriate either. Specifically, what if certain hospitals are either under-capitalized or are very efficient in controlling their fixed cost infrastructure. Even if these hospitals were able to translate volume reductions into fixed cost savings (which we do not believe is fully possible), the savings for these undercapitalized or efficient hospitals would be much less than the state-wide average used in this formula and therefore penalize an undercapitalized or efficient hospital further. Therefore, using a fixed cost per bed day that is reflective of the hospital's actual cost structure would be much more appropriate. Additionally, based on our review of the Med Surg rate that has been approved for the 46 hospitals in Maryland, 24 of them (52.2%) have a Med Surg rate that is less than this fixed cost per patient bed day that is used in the excess capacity calculation. We believe this further underscores our belief that using a fixed cost per bed day of $1,201 for the purpose of calculating excess capacity is not appropriate.

c. In determining the excess capacity adjustment, the largest component of a hospital's total change in volume appears to be the decrease in inpatient days between calendar year 2010 and the current period. We do not believe 2010 is the appropriate base period against which a reduction in volume should be measured. With the exception of a handful of hospitals that were on TPR for the time period 2010 through 2013, most Maryland hospitals did not become subject to a global revenue constraint system until the commencement of the All Payer Model on January 1, 2014. In fact, January 1, 2014 is when most hospitals entered into GBR agreements with the HSCRC. The GBR contracts that were agreed to by hospitals at that time already reflected volume changes that would have taken place between 2010 - 2013. To the extent that volumes for CY 2013 served as the basis for setting hospitals' GBR base, it seems to us that any excess capacity adjustment should consider volume changes from 2013 to current period rather than comparing 2010 volumes to the current period. By going back to 2010, the policy overstates the level of "expected" fixed costs savings that could have been generated by hospitals that experienced volume declines.

Another component of a hospital's total change in volume relates to observation stays where the unit of service is beyond 24 hours. While we agree that this should be included in the calculation of volume change, we do not believe that it should be limited to observation cases that exceed 24 hours. There are many cases in which an observation case may be less than 24 hours, yet those patients still occupy a bed for the duration of their stay. Therefore, to calculate the true amount of volume experienced by a hospital, we believe that total observation hours divided by 24 to calculate equivalent days is a much better (and more appropriate) measure of true volume change.

d. When hospitals entered into negotiations with the HSCRC to establish their initial GBR base for fiscal year 2014, volume reductions that were expected in future periods may have been built into the final GBR that was eventually awarded in that initial year of the All Payer Model. Therefore, in addition to using 2013 volumes as a basis for any excess capacity adjustment, the Commission should also consider any future volume declines that were already considered in determining the original GBR base for that hospital, and other ad hoc volume adjustments made by the HSCRC.

We appreciate the opportunity to be able to provide you with a summary of the concerns we have with respect to the ***Draft Recommendation for a Capital Financing Policy*** that was presented at the HSCRC public meeting on October 16, 2019. If you have any questions regarding what is included in this letter, please reach out to me for further explanation and/or discussion.

Sincerely,

James Lee
Executive VP and CFO
Adventist HealthCare, Inc.

UNIVERSITY of MARYLAND
MEDICAL SYSTEM

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November 7, 2019

Katie Wunderlich
Executive Director, Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Katie:

On behalf of the University of Maryland Medical System (UMMS), representing 15 acute care hospitals and health care facilities, we are submitting comments in response to the Health Services Cost Review Commission's (HSCRC) Draft Recommendation for the Capital Financing Policy. We appreciate the time spent by Commission Staff in developing and vetting this proposal with the industry.

We support the staff's proposal of the implementation of a standardized approach to funding the capital needs of hospitals across the state. Prior to Global Budget Revenue (GBR), the majority of large to mid-size capital projects were funded through volume growth. With the adoption of Maryland's Total Cost of Care Model, hospitals are incentivized to limit volume growth, thereby limiting the revenue growth available to fund capital projects. And, as hospital volumes decline, the cost savings associated with volume reductions must pay for many things, including:

- Community health initiatives
- Clinical program development
- Clinical Staff recruitment and retention
- Growing malpractice insurance claims

Hospitals agree, this cost savings and overall operating margin should be used to fund small to mid-size capital replacement. However, hospitals need access to rate funding for capital, and not just replacement facilities. Performance improvement and cost savings achieved through improved efficiencies and volume reductions cannot alone fund the ongoing critical capital needs of hospitals.

UMMS supports the technical points raised in MHA's comment letter and we believe that further exploration and refinement of the methodology is warranted in order to provide appropriate funding of capital needs to ensure Maryland's hospitals are able to provide the highest quality care in well maintained facilities with state-of-the-art technologies.

In particular, UMMS is concerned about a few key technical details as they are currently presented in the policy:

1. **Project Cost Threshold** – Currently the policy requires the cost of a Hospital's capital project to exceed 35% of the Hospital's approved GBR or $50 million, whichever is greater. This threshold is meant to rule out smaller projects and focus the policy on the most significant capital needs. However, we believe this threshold to be too high, making it too restrictive and not allowing for adequate funding of a Hospital's capital needs. This is especially true for hospitals at the very high end and the very low end of the GBR scale. As an example, 35% of the University of Maryland Medical Center's GBR is approximately $550 million. This is the minimum project cost that would meet this threshold for potential funding. On the flip side, 35% of Shore Medical Center at Chestertown is less than the $50 million minimum. Therefore any capital project at Chestertown would have to be at least $50 million in order to be considered for funding under this policy. As an example, a current UMMS project to renovate the operating rooms at St. Joseph Medical Center, which costs approximately $42 million, would not meet the 35%, or $50 million, threshold and therefore not be eligible for potential funding despite its significant capital cost.
2. **Capital Cost Intensity** – as written, a Hospital's eligible funding amount is limited by the average of its capital intensity and its peer group's capital intensity (capital costs as a percentage of total cost). This restriction effectively limits a Hospital's eligible funding amount to 50% of the capital cost associated with the new project, before Hospital Cost Efficiency, Excess Capacity and PAU adjustments are applied which then have the potential to further limit any potential funding amount. UMMS is concerned that the ultimate funding of capital requirements will be so limited by these adjustments that many capital projects will be unaffordable for Hospital's to undertake.

- **Efficiency Adjustment –** We believe the efficiency adjustment, as it is applied in the capital policy, is too punitive. The ICC results are scaled to calculate individual hospitals' total capital funding ranging from 0%-100%, meaning that ½ of all hospitals will only be eligible for <50% of the project's value. Further, hospitals that perform in the bottom quintile of the efficiency calculation can only receive a maximum of 20% of the project's value, effectively making it impossible to fund larger capital projects. This could be fixed by scaling the capital funding from 50%-100%, for example, so that the lowest performing hospital on the ICC can still theoretically receive 50% of the project cost.

3. **Excess Capacity Adjustment** - the draft policy proposes an excess capacity adjustment based on volume change from 2010 through 2017. The policy states that the savings from eliminating the excess costs (associated with declining volumes) are retained at the hospital and could be repurposed to finance new capital projects. However, HSCRC policy included an 85 percent variable cost factor until 2014 and then shifted to a 50 variable cost factor as part of the market shift calculation under the GBR policy. Therefore, only a percentage of the savings were retained over time and any consideration of excess capacity should account for the shift in policies over this time period.
4. **Timing of Funding** – the current policy applies rate funding when a Hospital's project is complete and the assets are in use, with no set aside of monies from the annual update. Instead, as it is proposed, capital funding would be subtracted from the inflation portion of the update factor. We do not agree with funding capital through a reduction in the update factor, which by default would mean all hospitals in Maryland would be paying for this funding. Instead, we believe HSCRC should fund capital through hospital savings from its Integrated Efficiency Policy and other revenue offsets.

We look forward to hearing further discussion on this topic at the November 2019 Commission meeting. If you have any questions, please do not hesitate to contact me.

Sincerely,

Alicia Cunningham

Senior Vice President, Corporate Finance & Revenue Advisory Services

Cc: Chairman Sabatini
HSCRC Commissioners
John Ashworth, UMMS CEO
Michelle Lee, UMMS CFO

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November 4, 2019

Katie Wunderlich
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Ms. Wunderlich,

On behalf of the Johns Hopkins Health System (JHHS), thank you for the opportunity to provide input on the draft recommendation for a Capital Funding Policy. JHHS generally supports the staff's recommendation for a Capital Funding Policy. The policy has been thoughtfully developed and provides a mechanism for predictable rate updates for new capital projects.

JHHS supports the principle that a threshold should be set for funding of capital projects in rates, however we feel that the threshold proposed in the recommendation may have an adverse impact on the ability to fund CON approved projects at some hospitals. The current recommendation of only funding projects whose value exceeds 35% of the hospital's annual GBR or $50 million, whichever is greater means that some hospitals would not qualify for rate adjustments for projects in excess of $500 million while the $50 million minimum would mean that some of the smaller hospitals would not qualify for projects that exceed 100% of their GBR revenues. The current, recently adopted, CON regulations establish a threshold for CON approved projects of the lesser of 25% of GBR revenues or $50 million. We believe that having policies that are consistent between CON approval for capital projects and HSCRC funding for those projects would make logical sense.

JHHS supports the staff recommendation to utilize the hospital's capital efficiency and the hospital's integrated cost per case and total cost of care efficiency. We believe that it is important to also consider not only a total cost of care growth but also take into consideration total cost of care attainment. Staff has indicated that they are considering such an adjustment. We would urge them to pursue such an adjustment.

JHHS appreciates the opportunity to comment on the staff recommendation. We also commend the staff for their thoughtful work on developing a policy that provides hospitals access to rates

for capital projects while taking into consideration the goals of the All-Payer Model and the Total Cost of Care Model.

Sincerely,

Ed Beranek
Vice President of Revenue Management and Reimbursement
Johns Hopkins Health System

cc: Nelson Sabatini, Chairman
Joseph Antos, Ph.D., Vice Chairman
Victoria W. Bayless
Stacia Cohen, RN
John M. Colmers
James Elliott, MD
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October 23, 2019

Nelson J. Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Sabatini:

The purpose of this letter is to provide CareFirst's comments on the HSCRC Staff's "Draft Recommendation for a Capital Financing Policy." CareFirst supports the Staff's draft recommendation and offer the following comments:

1. **Overall Structure** – This policy appropriately builds on the foundational and tested methodology utilized by the HSCRC's previous policy for allowing hospital rate relief for capital projects. It has successfully assisted hospitals at the "low" end of their capital cycle and simultaneously discouraged hospitals from pursuing excessively expensive capital projects.

2. **Threshold** – Requiring rate relief applications for capital to first meet the criteria for a major capital project of the greater of 35 percent of the hospital's annual GBR or $50 million will ensure that hospitals only seek rate relief for relatively large projects and prevent hospitals from requesting relief for routine capital or smaller projects, which would be administratively difficult for the HSCRC to handle. We believe this is an appropriate first step to encourage hospitals to make use of their current financial resources to fund smaller capital expenditures without HSCRC rate intervention, which would add unnecessary costs to the system.

3. **Three-step algorithm** – Once a hospital has met the threshold criteria to be considered for capital rate funding, Staff has recommended a reasonable algorithm to arrive at the appropriate amount of funding to be provided**.**

    a. *Determine the Hospital's eligible funding based on the proposed project* – we support capping the interest funding at 70% to incentivize hospitals to fund a significant portion of their projects independently;
    b. *Apply a scaling factor based on efficiency* – we support requiring hospitals to demonstrate that they have become cost efficient and contributed to the total cost of care reductions required by the model before asking for rate relief for capital projects. We understand there has been a delay in the approval of the Integrated Efficiency Policy. However, this policy has been presented in draft form, revised based on stakeholder comments and represents a solid overall approach at evaluating relative efficiency. We support the use and intent of the revised Efficiency Policy for use by the HSCRC to fund capital projects during the delay in its implementation; and
    c. *Adjust for PAU and excess capacity* – we support assessing hospital specific performance with respect to PAUs and excess capacity before determining the amount a hospital will receive in capital rate funding, since each of these factors represent key incentives inherent in the TCOC model and also act as sources of funding for projects without adding new costs to the system.

4. **Offset the Update Factor** – The annual Update Factor process is the key performance measurement against all Waiver Model savings targets. As such, it is critical to offset any unanticipated rate

changes that occur throughout the year to ensure we achieve these targets and Guardrail Limitations. Therefore, we strongly support the policy recommendation to subtract from the update factor any approved capital project funding that will go into rates during the upcoming year.

5. **Encourage fiscal responsibility and transparency** – We support the Staff's recommendation to use of the lower of the capital policy algorithm at the time of Certificate of Need approval or at the time of the rate request. This will incentivize hospitals to ask for relief when they know they'll need it, rather than strategically asking for relief at a time when they fare well on the efficiency calculation.

Thank you for this opportunity to comment on the Capital Funding Policy. We support this effort as it ultimately helps to encourage hospitals to become more efficient, reduce PAU, reduce TCOC, and fund routine capital expenditures without adding unnecessary costs to the system.

Sincerely,

Maria Harris Tildon

Cc: Joseph Antos, Ph.D., Vice Chairman
Victoria Bayless
Stacia Cohen
John Colmers
James N. Elliott, M.D.
Adam Kane
Katie Wunderlich, Executive Director

GBMC

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November 6, 2019

Katie Wunderlich
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Ms. Wunderlich,

On behalf of the Greater Baltimore Medical Center (GBMC), thank you for the opportunity to provide input on the HSCRC's draft recommendation for a Capital Financing Policy. GBMC supports the need and development of a capital policy that provides predictability and access to capital funding in a capped revenue system.

Capital Project Threshold & Efficiency Adjustment

The capital project threshold amount, as detailed in the draft recommendation, is set at the greater of 35 percent of a hospital's Global Budget Revenue (GBR) or $50 million. The proposed policy also states that projects not meeting the threshold would have to be self-funded through the GBR. GBMC agrees with Staff that the threshold should be set at a point where the policy funds major capital projects, not routine or annual capital. However, hospitals have differing degrees of GBR opportunity by which they can fund capital beyond their routine annual spend. Additionally, the inclusion of an efficiency adjustment further restricts hospitals' access to capital funding. GBMC recommends setting the threshold at the greater of 20 percent or $50 million. In a revenue constrained system where volume cannot and should not be depended upon to fund capital, hospitals have a much greater need to access rate funding support and a 35 percent threshold will greatly restrict such support.

Eligible Funding Calculation

The draft proposal compares the requesting hospital's current capital costs ratio to that of the peer group. Recognizing that hospitals are on different capital cycles and that peer group comparisons may not be stable due to information technology assets and implementations having short useful lives, Staff should consider the requesting hospital's projected capital cost ratio based on the time of project go-live. Allowing for a projected capital ratio to be evaluated and utilized would provide hospitals with timely rate funding information before proceeding with a debt issuance.

Katie Wunderlich
Response to Capital Financing Policy
November 6, 2019

Excess Capacity

The draft proposal measures patient day volume change from FY2010 to FY2018, in addition to Same Day Surgery and Observation patient volume changes from slightly different periods. On December 23, 2009, Staff issued a Labor and Delivery Relative Value Unit communication. In that communication, clarification was issued to the field as to when the admission/billing for an Obstetrical day could start; hospitals historically admitted active laboring patients prior to delivery. Effective January 1, 2010, hospitals were instructed to not charge Obstetrical patient days prior to delivery. To avoid issues related to the change in charging practice, GBMC suggests utilizing the GBR base period, FY2013, as the base period for measuring the Obstetrical rate center's volume change.

Additionally, one-day-stay patients in the FY2010 base period were admitted and discharged in less than 24 hours, and would have been recorded as one patient day. The draft proposal provides for one patient day credit for observation patients greater than 24 hours, but does not address the patients who were less than 24 hours in the historical base. For comparability due to the implementation of the observation rate center, GBMC suggests that the base period or current observation patients be adjusted for the less than 24 hour one-day-stay accounts.

Thank you for the opportunity to comment on the Capital Financing Policy. We look forward to our continued collaboration in developing policies that contribute to the success of the Total Cost of Care Model.

Sincerely,

Laurie R. Beyer, MBA, CPA
Executive Vice President / CFO

Cc: Dr. John Chessare, President & Chief Executive Officer, GBMC HealthCare
Nelson Sabatini, Chairman, HSCRC
Allan Pack, Principal Deputy Director, HSCRC

Nurse Support Program II (NSP II)

Outcomes Evaluation FY 2016–FY 2020 and

Final Recommendations for Future Funding

December 11, 2019

Health Services Cost Review Commission

4160 Patterson Avenue Baltimore, Maryland 21215

(410) 764-2605

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This document contains the final staff recommendations for the Nurse Support Program II.

Nurse Support Program II (NSP II) Outcomes Evaluation FY 2016-FY 2020 and Recommendations for Future Funding

Background

The registered nurse (RN) workforce is the single largest group of health professionals, with more than three million nationally and 54,000 employed in the State of Maryland (DLLR, 2018). Changes in the nursing workforce and profession invariably impact health care systems. The Maryland Health Services Cost Review Commission (HSCRC) recognized the importance of nursing to the health of the State when it created the first Nurse Education Support Program in 1986, followed by implementation of the first phase of the Nurse Support Program I (NSP I) in June 2001, to address the short and long-term issues of recruiting and retaining nurses in Maryland hospitals. NSP I has been funded over 19 years with the most recent program evaluation and renewal in 2017. The HSCRC established the Nurse Support Program II (NSP II) on May 4, 2005, to increase Maryland's academic capacity to educate nurses [2006, chs. 221, 222]. The NSP II, administered by the Maryland Higher Education Commission (MHEC) in collaboration with the HSCRC, has been funded for 15 years and is complementary to the NSP I, the hospital-based program. The NSP I and NSP II are each funded through pooled assessments totaling up to 0.1 percent of hospital regulated gross patient revenue for the NSP I noncompetitive hospital requests and the NSP II competitive institutional grants with faculty-focused statewide initiatives. In 2016, Senate Bill (SB) 108 was passed to remove the term "bedside" nurse from the statute to allow NSP I and II to focus on improving the pipeline of nurses with the skills necessary to keep pace with a rapidly changing health care delivery system.

NSP II is designed to increase nursing graduates and mitigate barriers to nursing education through institutional and faculty focused initiatives. The program employs an effective three-prong strategy to increase the number of nurses, improve quality of care, and reduce hospital costs. These goals are achieved by 1) growing the number of nursing lecture and clinical faculty, 2) supporting schools and departments of nursing in strengthening academic capacity and curriculum, and 3) providing support to enhance nursing enrollments and graduation for an adequate supply of nurses to meet the demands of Maryland's hospitals and health systems. NSP II has been funded over the past five years, including a carryover balance from FY 2015, with approximately $90 million for FY 2016 – FY 2020.

In 2012, the Nurse Support Program I and II initiatives were aligned with the Institute of Medicine (IOM) recommendations in its *Future of Nursing* report and included the following aims:

1. Ensuring nursing educational capacity for Nursing Pre-Licensure Enrollments and Graduates, including Associate Degree in Nursing, Bachelor of Science in Nursing (BSN), Master of Science Entry and Second Degree BSN Entry preparation for licensure

by the National Council Licensure Examination for Registered Nurses (NCLEX-RN) to determine safety of new graduate nurses to enter practice.

2. Advancing academic preparation of entry-level nurses and experienced nurses to meet the needs of hospitals and health systems for a higher proportion of registered nurses with a Baccalaureate (BSN) or higher degree in Nursing.
3. Increasing the number of nurses and nurse faculty with graduate education and doctoral degrees to prepare them as leaders, researchers, and educators in academic and clinical settings, and advanced practice nurses.
4. Building collaborations between nursing education and practice for improved nursing competency through seamless academic progression and lifelong learning to improve patient outcomes and satisfaction.
5. Developing statewide resources and models for clinical simulation, leadership, inter-professional education, alternative clinical practice sites, and clinical faculty preparation.
6. Ensuring a cadre of qualified faculty and clinical nursing instructors with efforts to provide graduate educational support, recruit new faculty, retain experienced educators, and increase the number of certified nurse faculty in the specialty practice of nursing education.
7. Advancing the practice of nursing in provision of primary services as nurse practitioners, nurse midwives, nurse anesthetists, and clinical nurse specialists.
8. Providing for the nursing workforce data infrastructure for future workforce analysis.

This investment has resulted in Maryland being recognized as a leader in advancing practice and educational initiatives for improved nurse competency and better patient outcomes. This report will update the Commission on the current state of nursing, the progress of the NSP II, and provide recommendations for the future of the program.

Major NSP II Achievements

This report contains the analysis of nursing program outcome data using the revised nursing and organizational metrics instituted in 2015 to assess progress in achieving these NSP II aims. Program achievements and areas for continued guidance and improvement are highlighted below and in the following sections of this report.

1. Expanded NSP II opportunities to 558 hospital-based nurses across seven programs.
2. Increased the first time pass rates for NCLEX-RN nursing licensure by 8.51 percent.
3. Increased the number of doctoral degree completions by 78 percent, exceeding the goal of 50 percent set by IOM.
4. Improved time to completion of Associate to Bachelors in Nursing (ATB) by 50 percent, with an estimated cost saving of approximately $13K per new nurse graduate.
5. Between FY 2018 and FY 2019, increased number of nurse faculty with Certified Nurse Educator credentials by 55 percent.

6. Provided graduate degree tuition support for 26 hospital-based professional development specialist nurse educators and 224 new nursing program instructors.
7. Expanded training for 343 nurse faculty and 51 hospital educators; increasing by 12 percent the number of nurses accessing clinical simulation lieu of clinical sites.
8. Increased by 60 percent the proportion of BSN-prepared nurses with the skills to meet hospital needs.
9. Provided focused leadership development for 48 nurse faculty and 89 hospital emerging and existing nurse leaders through a year-long leadership program.
10. Provided tuition support and course release time for 63 full time nurse faculty to complete the terminal doctoral degree, resulting in an 89 percent retention rate for teaching positions.
11. Recruited 162 new nurse faculty into full-time positions, with 93 percent retention rate.
12. Maryland Nursing Articulation Education Agreement (originally established in 1985) for seamless academic progression for Licensed Practical Nursing to Associate Degree Nursing to BSN was revised and updated in 2017.
13. Maryland Nursing Workforce Center was formally established and joined 34 other states in the National Forum of State Nursing Workforce Centers.

Maryland is a Leader in Nursing Education and Practice

The *U.S. News and World Report* (2019) recognized Maryland with two nursing graduate programs in the top 10 in the United States for *Best Nursing Schools*. Johns Hopkins University School of Nursing (JHUSON) was recognized for being #1 for Doctor of Nursing Practice and Master of Science in Nursing. The University of Maryland School of Nursing (UMSON) and JHUSON were also recognized repeatedly in the top 10 for Clinical Nurse Leader, Nurse Practitioners in Family Care, Adult Acute, Adult Primary Care and Psychiatric Mental Health; along with *Best Nursing Schools* in the areas of Nurse Anesthesia, Nursing Informatics, and Nursing Administration.

The Maryland Nurse Residency Collaborative (MNRC) was recognized as a leader under the auspices of the Maryland Organization of Nurse Leaders (MONL) in 2019 when all 40 hospitals and health systems in the state required a nurse residency program for all new graduate nurses. Maryland is the first state in the nation to meet this *Future of Nursing* (IOM, 2010) recommendation and goal of the American Academy of Nursing. All of Maryland's acute care hospitals now fund and offer a 12-month statewide standardized nurse residency program.

The National League for Nursing (NLN) recognized Maryland for statewide leadership through NSP II, at the direction of the Maryland Council of Deans and Directors of Nursing Programs, for focused efforts and incentives to increase the number of certified nurse educators (CNE®) across all nursing education programs. Recent figures indicate Maryland has twice the number of new CNEs completing the credentialing process as any other state.

Excellence in education and practice are the two primary overarching goals of the Nurse Support Program. Programs are directed at building educational capacity and strengthening nurse educators for an adequate supply of well-prepared nurses for the hospitals and health systems.

Nursing Workforce Projections

Nursing workforce shortage estimates vary widely. Reports range from the worst nursing shortage since the 1960's initiation of Medicare and Medicaid by 2025 (Buerhaus, et al., 2009); to regional RN shortages of about 500K across the country between 2016 and 2030, with the most intense shortfalls in open positions occurring in the South (about 250K) and West (about 240K) (Zhang, X, et al., 2018). Five years ago, a U.S. Health Resources and Services Administration (HRSA) report projected that Maryland would be the only state among its geographic neighbors to experience a shortfall of 12,000 RNs (HRSA, 2014) while another more recent report published two years ago predicted a surplus of 12,100 RNs in Maryland (HRSA, 2017). Although progress has been made, efforts need to be continued to ensure a strong pipeline of entry level nurses.

A leading national nursing workforce researcher, Dr. Peter Buerhaus, and his team of economists found a near balance in supply and demand for RNs nationally, but advised that there are many variables that impact these figures, including nursing career decisions of the youngest nurses; the uncertainty of regional forecasts as nurses move between regions; and the effects of RNs joining temporary staffing agencies (Buerhaus, et al., 2017). HRSA continues to explore systematic differences in state-based administrative data and analyze how each model handles entry to practice output. In fact, all researchers agree that "co-monitoring changes in RN entry is the single most important factor that affects each model and hence accuracy of its projections" (Auerbach, et al., 2017, pg. 294). Researchers are encouraging caution when using forecast models for policy and decision-making, as nursing shortages are highly sensitive to multiple variables and difficult to pinpoint beyond regional trends.

Many of the national data models utilize surveys, while state-level data is more granular; it includes the actual number of nurse graduates, the number of newly licensed nurses entering the profession, and changes in the educational skill level of the nursing workforce. The number of first-time NCLEX-RN testers may be a better reflection of the number of new nurses in Maryland, since RN entry to practice is the most important factor affecting projections of the nursing workforce supply (Figure 1). Testing candidates may be graduates of an Associate Degree in Nursing, Bachelor of Science in Nursing (BSN), second degree BSN, or entry-level Master of Science in Nursing program.

Over the past five years, from FY 2015 to FY 2019, the number of first-time testers has declined, possibly due to factors such as program changes, an improved economy, or the focus on increasing the BSN or higher entry-level nurse. However, the percent of first-time testers passing the licensure examination has improved. The Maryland Board of Nursing (MBON) scores for NCLEX-RN pass rates indicate the proportion of first-time testers who passed on the

first attempt increased by 8.51 percentage points for all MD programs, compared to 5.82 percentage point increase nationally (Table 1).

Figure 1. Maryland vs US for First-Time NCLEX-RN Candidates, FY 2015-FY 2019

Graduated Program		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
MD BSN and Master's Entry Programs	# Tested	1,277	1,202	1,124	1,034	1,172
	# Passed	994	994	956	916	1,018
MD ADN Programs	# Tested	1,658	1,557	1,457	1,316	1,375
	# Passed	1,355	1,291	1,252	1,145	1,245
Total for MD Programs	# Tested	2,935	2,759	2,581	2,350	2,339
	# Passed	2,349	2,285	2,208	2,061	2,071
Total for U.S. Programs	# Tested	159,528	161,156	159,419	157,001	168,277
	# Passed	131,666	135,276	137,446	137,865	148,688

Source: Maryland Board of Nursing, National Council State Boards of Nursing, and Pearson Vue, All Maryland RN 1st time candidates who graduated from a Maryland nursing program and tested in any U.S. jurisdiction.

In 2018, *American Journal of Medical Quality* article reevaluated a previous supply and demand methodology using more recent workforce data and ranked states on projected RN shortages in 2030. In the article, Maryland was ranked 32 out of 50, and the nursing workforce shortage projected for 2030 was 9,745 nurses (Zhang, X, et al., 2018). The State cited with the nation's best nursing supply vs. demand balance utilized three best practices: 1) funding a permanent nursing workforce center to study the state level dynamics, 2) expanding enrollments in nursing programs and, 3) providing incentives for newly licensed nurses who practice in facilities for more than two years after graduation. Of those three best practices listed, NSP II has achieved measures to support two areas: increased enrollments, and a nursing workforce center. NSP I provides funding support for the nurse residency program as an incentive for newly licensed nurses.

Over the past two years, the University System of Maryland (USM) Health Care Workforce Working Group convened subgroups to examine four areas of urgency in health care education: 1) nursing articulation and collaboration, 2) clinical partnerships and placements, 3) inter-professional education, and 4) simulation facilities. The NSP II program evaluation committee agreed that the program is aligned with the recommendations in the USM report, *Strengthening Maryland's Health Care Workforce*. To address concerns in the nursing articulation and collaboration area, the Maryland Nursing Education Articulation agreement was updated in a collaborative effort in 2017. The NSPII program address the concerns regarding inter-professional education and simulation resources, as both are provided to all nursing programs and hospital educators. The remaining area of concern is the shortage of clinical placements, particularly the increased numbers of out-of-state nursing programs utilizing Maryland's clinical sites, and changes in student's clinical training opportunities at hospitals.

Competitive Institutional Grant Program and Statewide Initiatives

The NSP II supports two types of programs: Competitive Institutional Grants Program and Statewide Initiatives. Fifteen community colleges and thirteen universities across all geographic regions and types of programs in Maryland were encouraged to participate in the NSP II-funded initiatives. A brief description of each type of program follows.

Competitive Institutional Grant Program

These 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 undergraduate and graduate nurses. Activities may include the establishment of new degree programs, curriculum enhancement and redesign, simulation and other productivity-enhancing instructional technologies. These grants also contribute to the creation of a more diverse nursing faculty and workforce as well as preparing graduate-level nurses to serve as lecturers and/or clinical faculty at Maryland's higher education institutions. All grant recipient project directors are required to disseminate their work through publications in peer-reviewed journals or presentations to fellow nurses in Maryland and nationally. NSP II presentations have been made to organizations such as the Maryland Nurses Association (MNA), MONL, Maryland Action Coalition (MDAC), MNRC, NSP II project director meetings, or other professional nursing conferences. Each year, program updates from grant recipients and publication citations are added to the Nurse Support Program website.

Statewide Initiatives Program

These initiatives include the New Nurse Faculty Fellowships (NNFF), the Nurse Educator Doctoral Grants for Practice and Dissertation Research (NEDG), the Hal and Jo Cohen Graduate Nursing Faculty Scholarship (GNF) and the Academic Nurse Educator Certification (ANEC). The NNFF provides funding for newly hired nursing faculty to support their research and teaching. The funds are used to assist faculty in acclimating to the academic culture, developing in their new role, and supporting their retention. Research suggests that lack of time and money are key barriers to doctoral degree completion. The NEDG address this barrier by providing funds to support current faculty who are enrolled in their final phase of doctoral study (completing their dissertation or capstone project to facilitate degree completion). NEDG has positively impacted the number of nurse faculty with terminal degrees. The GNF scholarship provides powerful incentives to pursue graduate-level education and teach in the classroom and/or clinical settings for nursing education programs, or within healthcare organizations as hospital educators or professional development specialists.

Program Evaluation Methodology

The NSP II completed a program evaluation in 2014 after the first 10 years of funding and was approved for an additional five years of funding through FY 2020. At the request of the HSCRC, MHEC and HSCRC staff initiated a comprehensive program review in January 2019.

Assistance was provided by an experienced NSP II Program Evaluation committee with representatives from all geographic regions and types of nursing programs. This group met over a nine month period culminating with strategic planning sessions in September and October that included the following organizations:

- Maryland Hospital Association,
- Maryland Action Coalition,
- Maryland Organization of Nurse Leaders,
- Maryland Nurse Residency Collaborative,
- Maryland Nurses Association,
- Maryland Council of Deans and Directors of Nursing Programs,
- Maryland Nursing Workforce Center,
- Maryland Board of Nursing,
- Statewide Academic - Hospital Practice Partnership Committee, and
- HSCRC NSP I Advisory Board

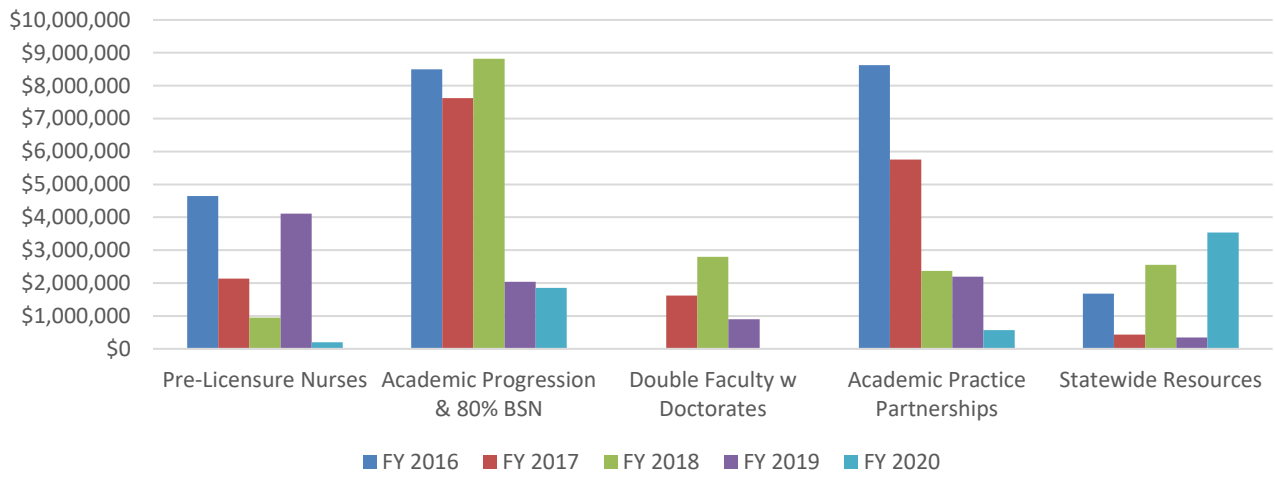
NSP II competitive institutional grant recipients were instrumental in the collection of project outcomes data and collaborated with nurse executive leaders on hospital-based measures. Data were collected and compiled for all NSP II funded projects for all years of activity for which data were available. Both quantitative and qualitative analyses were conducted, 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.

NSP II PROGRAM EVALUATION AND OUTCOMES 2016-2020

Competitive Institutional Grants Awards: by Geographic Location, Amount, and Project Type

Five rounds of competitive institutional grants were conducted since July 2015. A total of $74 million was awarded through a competitive review process for 106 multi-year projects. Thirteen community colleges and eleven universities received these funds. Grant recipients included schools or departments of nursing at public universities, including the State's historically black institutions, independent colleges, universities and community colleges. The distribution of awards was geographically diverse: Western Maryland (3), Eastern Shore (3), Northern Maryland (3), and Southern Maryland (1). The remaining institutions are located in the central region of the State and Baltimore City. Figure 2 displays the amount funded over the last five fiscal years by project type.

Figure 2: NSP II Competitive Institutional Grants by Initiatives Awarded FY 2016 - 2020



Source: NSP II Competitive Institutional Grant Project Budgets, 2019

The funds were released to recipients in installments over the life of the grant, contingent upon adequate yearly progress. Of the 106 projects funded since FY 2016, 47 have concluded, allowing for a detailed analysis of the strategies used by the most successful awardees. Fifty-nine (59) awards remain open, some with annual payments extending into FY 2022 (with funds accrued through FY 2020). While these projects have not yet concluded, annual outcomes to-date are included in the data analysis.

Competitive Institutional Grants: Progress by Initiative

Competitive institutional grants were awarded for projects addressing the following initiatives:

1) Ensuring nursing educational capacity for nursing pre-licensure enrollments and graduates,
2) Advancing academic preparation of entry-level nurses and existing nurses to meet the needs of hospitals and health systems (80 percent BSN),
3) Doubling the number of nurses and nurse faculty with doctoral degrees,
4) Academic/practice partnerships, and
5) Developing statewide resources and models for clinical simulation, leadership, inter-professional education, alternative clinical practice sites, and clinical faculty preparation.

Progress on each initiative are presented in the paragraphs below.

Initiative #1: Pre-Licensure Nursing Graduates

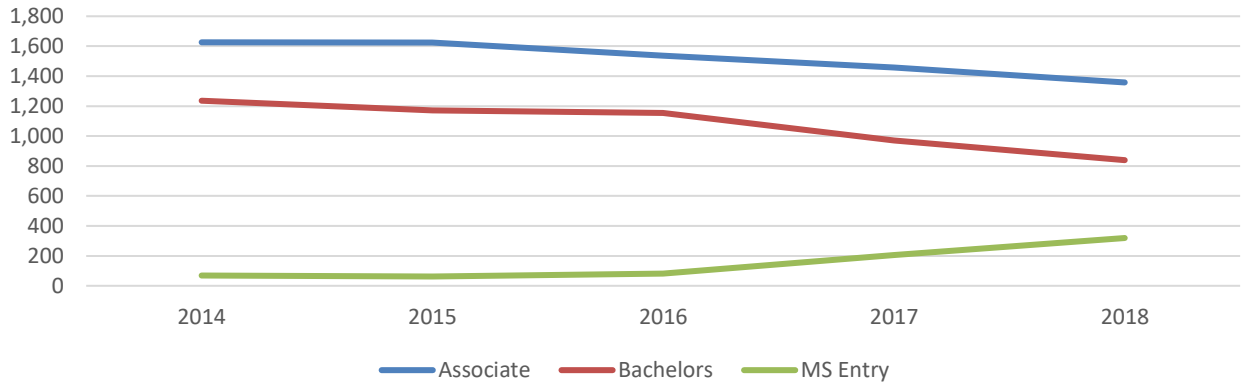
Over the last five years, a little over $12 million have been funded to support pre-licensure nursing education. Maryland's nursing graduate data demonstrates an increase in the overall

education of the nursing workforce, which is consistent with national trends. Declines in enrollments and graduations from Associate Degree Programs may reflect alignment with IOM initiatives and changing hiring practices of hospitals and healthcare organizations.

However, enrollments in BSN and MS Entry nursing programs have been steadily rising. There are several factors behind this movement in RN education: 1) hospitals are aware of better patient outcomes associated with BSN or higher prepared RNs; 2) economic incentives reward hospitals for improved quality and outcomes; 3) requirements to have a higher proportion of BSN-educated RNs for the Magnet Recognition Program®, and 4) recommendation by the Institute of Medicine (2010) that 80 percent of nurses be BSN-prepared by 2020 (Buerhaus, et al., 2017).

New pre-licensure programs, called Master of Science (MS) Entry, address the needs for well-prepared professional nurses who can advance more quickly into leadership roles and advanced practice. There are currently two MS entry programs, with another in the planning stages. The second MS Entry program replaced an undergraduate BSN program. With full transition from undergraduate BSN to MS Entry, the pre-licensure graduate data will continue to increase (Figure 3).

Figure 3: Maryland Pre-licensure Nurse Graduates, FY 2014 -2018



Source: Maryland Higher Education Commission, Enrollments and Graduates for all pre-licensure programs-Associate, Baccalaureate of Science and Master's Entry in Nursing Degrees

Initiative #2: Academic Progression through Associate to Bachelors (ATB) and Graduate Education

Alternative academic progression models have been among the top-funded ($28.8 million) competitive institutional grant projects. In the Associate to Bachelor's (ATB) model, a student nurse enrolled at a community college can concurrently enroll in a university, allowing completion of both an Associate and BSN degree within three years. This minimizes educational costs and time to degree completion. Integrating nursing curricula for community college and university programs without redundancy is a major challenge. Since 2015, 12 nursing programs

have received approximately $14 million for a variety of competitive institutional grants to implement the ATB partnership concurrent enrollment model, dual enrollment, or alternate routes to the BSN with good results.

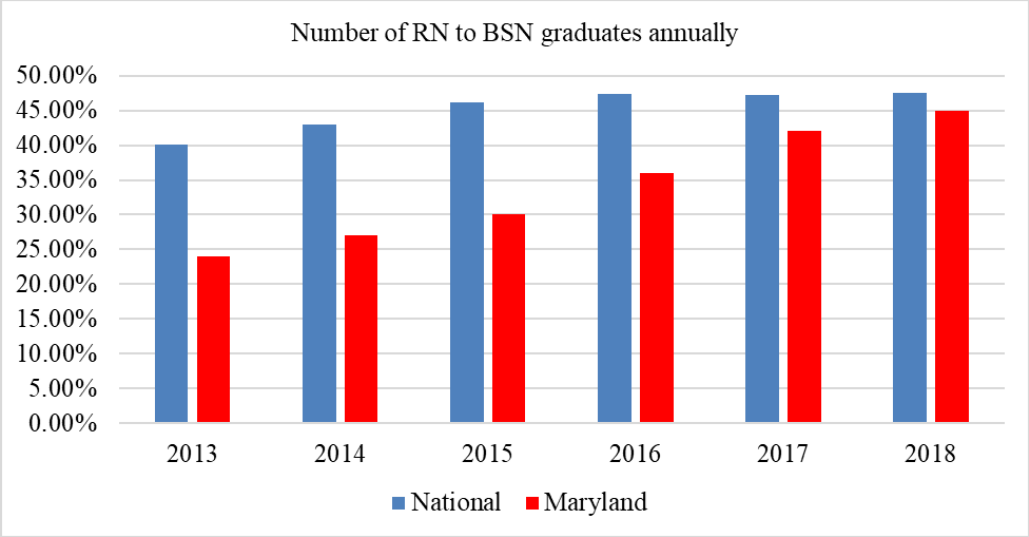
Across Maryland, universities and community colleges are working together through funded projects to promote the BSN with Associate to Bachelor's (ATB) agreements for seamless academic progression. A concerted effort was necessary to ensure access to BSN education through targeted strategies, streamlined financial aid processes, and a unified message with hospital leaders that newly licensed nurses should make every effort to complete the BSN within 3-5 years of employment at a Maryland hospital. In 2017, MHEC with the Maryland Council of Deans and Directors of Nursing Programs (MCDDNP), revised and updated the Maryland Nursing Articulation Education Agreement (1985) for seamless academic progression for Licensed Practical Nursing to Associate Degree Nursing to BSN.

NSP II staff worked with the Maryland Longitudinal Data System (MLDS) at MHEC to measure ATB completions and determine time and cost savings to the individual nursing student. Early data are encouraging. Approximately one in five pre-licensure nurses graduate from community college with Associate Degree in Nursing and completes the BSN within one year. Using the ATB model has shown a 50 percent improvement in the time to completion of the Associate to Bachelor degree and an approximate cost saving in tuition of $13,000 per student.

The seamless transition is expected to result in cost savings to newly licensed registered nurses and the hospital where they work; fewer courses will be needed to complete the BSN, thereby reducing the amount of tuition reimbursement. Cost savings are much higher for ATB students enrolled in a private university partnering with a community college, compared with attending the private university's traditional BSN program. This cost saving is transferred to hospitals in reduced tuition expenses for newly hired nurses. Along with cost savings, the ATB model is providing much needed access to BSN programs for those qualified applicants who were not accepted to traditional BSN programs for lack of space. Statewide dissemination of best practices in the ATB Model is continuing through ongoing ATB Coordinator meetings.

Maryland has made significant progress toward increasing the proportion of nurses with a BSN working in hospitals and healthcare organizations to 80 percent (Figure 4). The Campaign for Action Maps, funded through the AARP and Robert Wood Johnson Foundations, used American Community Survey data to display national trends in BSN-prepared nurses. Maryland's average was about 60 percent and is among 12 states with over 60 percent BSN prepared nurses, outpacing the national average (55.9 percent) and neighboring states Virginia, West Virginia, and Pennsylvania (Courville & Green, 2019).

Figure 4: Comparison of Number of RN to BSN Graduates Annually for Maryland and U.S.



Sources: Maryland Higher Education Commission, Maryland Council of Deans and Directors of Nursing Programs, Campaign for Action, American Association of Colleges of Nursing

Along with this promising trend, hospitals are reiterating this message with their hiring practices. In a survey of Maryland hospital nursing leaders (MCSRC, 9/10/19), most Maryland hospitals (54 percent) require the newly hired nurse to be enrolled in a BSN program prior to or within 6-12 months of starting work and complete it within three years. Another 21 percent are developing similar policies, and 25 percent do not have a policy on BSN completion.

Research on healthcare quality also indicate that BSN-prepared nurses improve patient outcomes. A recent study involving five states (including New Jersey and Pennsylvania) found that for each 10 percent increase in a hospital's proportion of BSN prepared nurses, there was a 24 percent increase in the odds of surviving a cardiac arrest to discharge with good cerebral performance (Harrison, et al., 2019). The findings indicated that a higher level of surveillance, quicker recognition of a deteriorating condition, and intervention with life-saving measures were important indicators to minimizing potential neurologic damage (Harrison, et al., 2019).

The American Nurses Credentialing Center's Magnet Recognition Program is acknowledged as the premier international recognition of organizations that were able to attract and retain nurses, keeping nurse vacancy and turnover rates low, and improving patient outcomes. Magnet® designation validates the highest-level nursing standards within the hospital (Graystone, 2018). Preliminary research has shown improved patient experiences in Magnet® designated hospitals compared to non- Magnet. The Magnet® designation is also associated with hospitals that can attract and retain high-quality nurses who are more satisfied and committed to their work environments (McCaughey, et al., 2018). In 2019, eight (8) hospitals in Maryland have successfully achieved Magnet® and one has achieved Pathway to Excellence® designation with funding from the NSP I. Of those hospitals, four newly achieved Magnet® or Pathway to

Excellence® designation and three were re-designated. Seventeen hospitals are pursuing either Magnet® or Pathway to Excellence® designation. The Pathway to Excellence® designation was achieved by UM Upper Chesapeake Health Medical Center. The ANCC Magnet® designated hospitals are listed below:

- Anne Arundel Medical Center,
- MedStar Franklin Square Medical Center,
- Mercy Medical Center,
- Meritus Medical Center,
- Suburban Hospital,
- The Johns Hopkins Hospital,
- University of Maryland (UM) Medical Center, and
- UM Shore Regional Health.

An examination of the U.S. Agency for Healthcare Assessment of Healthcare Providers and Systems (HCAHPS) scores found overall hospital ratings were significantly higher in Maryland hospitals with Magnet or Pathway designation. In addition, the Maryland Hospital Acquired Conditions Potentially Preventable Complications (PPC) differences were statistically significant (Figure 5 and 6).

Figure 5: Magnet® vs Non-Magnet vs Journey to Magnet Hospitals: HCAHPS, CY 2017

			ANOVA Tests			*Post Hoc Tests*		
HCAHPS	**Total (n=46)**	**Magnet (n=9)**	**Non-Magnet (n=26)**	**Journey (n=11)**	**p-value**	**Magnet vs. Non-Magnet**	**Magnet vs. Journey**	**Non-Magnet vs. Journey**
Cleanliness of Hospital Environment	68.4 (6.7)	69.9 (5.8)	68.3 (7.6)	67.5 (5.3)	0.724	0.8391	1.2611	0.4221
Communication with Nurses	76.3 (5.3)	79.3 (2.4)	75.7 (5.8)	75.2 (5.2)	0.149	2.5027	2.8237	0.3211
Communication with Doctors	77.6 (3.7)	79.3 (2.3)	77 (4.3)	77.5 (2.7)	0.284	2.1925	1.795	0.3975
Responsiveness of Hospital Staff	61.4 (6.3)	63.9 (4.5)	61.8 (6.8)	58.5 (5.6)	0.151	1.2204	3.0765	1.8561
Communication about Medicines	60.3 (5.2)	63.4 (3.1)	59.8 (5.7)	58.8 (4.3)	0.102	2.5968	3.2688	0.672
Discharge Information	86.5 (3.1)	86.9 (1.2)	86.6 (3.1)	85.8 (4.2)	0.72	0.3505	1.2031	0.8525
Transition of Care	48.8 (4.3)	51.2 (3.8)	48.7 (4.2)	46.9 (4.2)	0.076	2.1747	**3.7075***	1.5328
Overall Rating of this Hospital	66.7 (6.7)	71.4 (5.8)	66.2 (5.7)	64 (8)	**0.037**	2.916	**4.1331***	1.2172
Quietness of Hospital Environment	56.2 (6.6)	57.7 (7.2)	55 (6.8)	57.9 (5.3)	0.356	1.4551	0.1304	1.5855
Willingness to Recommend this Hospital	65.2 (12.7)	71.8 (8.1)	63.6 (14.6)	63.5 (9.8)	0.224	2.3012	2.3355	0.0343

*Note: * indicates p-value <.05; Tukey's HSD tests were reported in post hoc tests*
Source: HSCRC HCAHPS data with SPSS by M. E. Mills, 9/10/19

Figure 6: Magnet® vs Non-Magnet vs Journey to Magnet Hospitals: PPC, FY 2017 & 2018

					ANOVA Tests	*Post Hoc Tests*		
PPC	**Total (n=48)**	**Magnet (n=9)**	**Non-Magnet (n=22)**	**Journey (n=17)**	**p-value**	**Magnet vs. Non-Magnet**	**Magnet vs. Journey**	**Non-Magnet vs. Journey**
Total Observed PPC in 2017	18.5 (14.7)	29.6 (24.1)	14.5 (8.8)	17.8 (12.2)	0.030	4.0597*	3.154	0.9057
Total Case-mix Adjusted Rate in 2017	5.1 (6.6)	3 (0.6)	4.8 (5.1)	6.5 (9.5)	0.425	1.0335	1.9945	0.9611
Total Observed PPC in 2018	15 (12.1)	23.8 (16)	11.1 (8.9)	15.4 (11.5)	0.026	4.1492*	2.7652	1.384
Total Case-mix Adjusted Rate in 2018	4.6 (5.9)	3.1 (1.8)	3.5 (2.9)	6.9 (9.1)	0.136	0.2294	2.458	2.2286

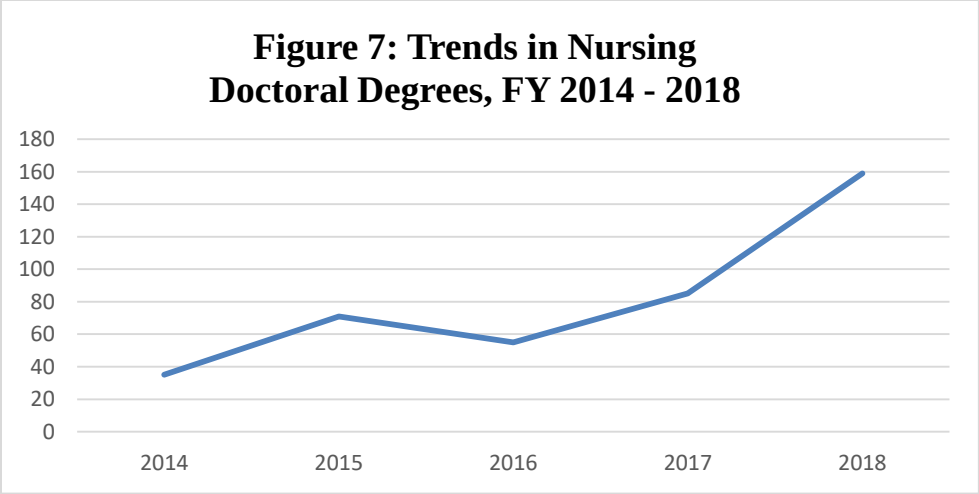
*Note: * indicates p-value <.05; Tukey's HSD tests were reported in post hoc tests*
Source: HSCRC PPC data with SPSS by M. E. Mills, 9/10/19

Initiative #3: Doubling the Number of Nurses and Nurse Faculty with Doctoral Degrees

NSP II funded $5.3 million for projects focused on doubling the number of nurses with doctoral degrees. The planning committee for the National Academy of Medicine (formerly IOM) convened a public session on March 22, 2019, for the upcoming study, *The Future of Nursing 2020-2030*. Researchers reported that the national goal set in 2010 to double the number of nurses with a doctoral degree had been met. Maryland data supports this increase in doctoral degrees for both Doctor of Philosophy in Nursing (Ph.D.) and Doctor of Nursing Practice (DNP). The DNP curriculum focuses on the preparation of nurses for advanced practice roles, while the Ph.D. is a research-focused degree. The number of nursing doctoral degrees (Ph.D. and DNP) awarded by Maryland schools has grown exponentially in the last five years to a high of 159 in 2018. Demands for those with doctoral degrees in both academic and practice settings will continue to rise. Although doctoral degree enrollments are at an all-time high, there is variation between the types. Consistent with national trends, there is high interest in the practice-focused DNP, and declining interest in the research-focused Ph.D. (AACN, 2019).

A study by Fang and Bednash (2017) found that 56.8 percent of DNP students were already full-time or part-time faculty members. Nurse faculty with dual clinical and academic appointments as advanced practice registered nurses (APRNs) maintain clinical credentials and provide primary care while preparing the next generation of new pre-licensure nurses or serving as preceptors for new APRNs at hospitals and clinical sites.

NSP II met and exceeded the goal of doubling the number of doctoral degree completions from 35 Ph.D. or DNP graduates in 2014 to 159 Ph.D. or DNP graduates in 2018, a 78 percent increase (Figure 7).



Source: Trends in Doctoral: PhD and DNP Graduates through 2018, Maryland Higher Education Commission, Enrollments and Graduate Data

Initiative #4: Academic and Practice Partnerships

The second largest portion ($19.5 million) of NSP II competitive grant funding was awarded to programs for Initiative #4. NSP II programs under this initiative were intended to meet the needs of hospital practice nurses, as well as nurses in academic settings, and include:

- Academic-Practice Partnership Model for graduate degree completion by clinical staff nurses,
- Nurse Leadership Institute (NLI),
- Maryland Clinical Simulation Resource Consortium (MCSRC),
- Eastern Shore Faculty Academy and Mentoring Initiative (ES-FAMI),
- Advanced Practice Nurse Preceptor (APRN) modules, and
- Inter-professional Education (IPE) hospital bedside rounds modules

Descriptions of these programs are described below.

Academic -Practice Partnership Model. A total of 558 hospital registered nurses participated across seven NSP II academic-practice partnership projects. This movement aligns with the recommendations of a study commissioned by the AACN, which examined the potential for enhanced partnerships between academic nursing and academic health centers (AACN, 2016). These new programs were created to provide opportunities across settings for academic nurse faculty and clinical practice nurses to work more closely together. These programs are open to all hospitals, health systems, and schools of nursing through an annual nomination process. Nurses from academia and practice were nominated by health systems at 39 (out of 46) hospitals and 24 (out of 28) nursing programs (Figure 8). At present, nurse leaders in academia and hospital practice are collaborating to develop a set of universal student requirements accepted by all organizations for student clinical site rotation. The intention is to reduce duplication in

time and effort by both the hospital education and academic coordinators. Twenty-six nurses in Professional Development Specialist positions at hospitals across the State have received full tuition and fees at an in-state nursing graduate degree program with the opportunity to complete their service obligation in their current educator role at the employing hospital.

Figure 8: Hospital Nurse Participants across Academic Practice Programs

Hospital Region	Acute Care Beds	Total Hospital RN Participants
Western Maryland	729	16
Montgomery County	1,249	19
Southern Maryland	951	16
Central Maryland	2,243	151
Baltimore City	3,609	262
Eastern Shore	574	90
Maryland Total	9,355	558

Source: Maryland Health Care Commission Hospital Acute Beds and NSP II Annual Reports Outcomes Evaluation

NSP II recognized the importance of the academic-practice partnership programs early on through an NSP II funded competitive grant program that expanded from six hospitals to 18 partner hospitals over the multiple year grants. This working relationship is a model for expanding the roles of Clinical Instructors, Faculty and Preceptor resources. The academic-practice partnership model funded at the University of Maryland, School of Nursing includes 18 hospitals located across all five regions of Maryland. Collaboration between the nursing program, Chief Nurse Officer and Nurse Education Coordinators at each partner hospital provided the structure for 235 staff nurses in a combination of RN-BSN, RN-MS and MSN programs for preparation as hospital-based clinical instructors, preceptors and mentors. The program prepares the students for a culture of learning and career advancement in leadership, as well as quality and safety of patient care at the partner hospitals. NSP II proposed two new statewide programs in 2015 to serve nurses in both academic and practice settings across the state. Nurse faculty with expertise in the areas of leadership and clinical simulation led these initiatives based on the *Future of Nursing* recommendations.

Nurse Leadership Institute (NLI). The NLI was formed to promote innovative opportunities to meet the Future of Nursing's recommendation for nurses to lead changes in health delivery and drive patient care solutions. The concept was expanded beyond academic leaders to hospital nurse managers and executives in 2015. To date, 48 nurse faculty and 89 hospital emerging and existing nurse leaders completed a year-long leadership program. Through mentorship, reflective exercises, and a leadership project, nurses develop the skills to lead change and advance health.

Maryland Clinical Simulation Resource Consortium (MCSRC). The MCSRC increases the quality and quantity of clinical simulation used in nursing education. The on-site Train-the-Trainer sessions for faculty and hospital-based nurses are coordinated with an expert panel guiding simulation equipment resources allocated to all programs across the state based on nationally recognized benchmarking measures. To date, 394 Simulation Education Leaders (SEL) and Advanced Simulation Education Leaders (ASEL) participated in the three-day sessions with 343 nurse faculty and 51 hospital educators. Faculty achieved levels of preparation from Simulation Education Leaders (SEL 1-3) to the more Advanced Simulation Education Leaders (ASEL). Nine ASEL educators completed the Society for Simulation in Healthcare's Certified Healthcare Simulation Educator (CHSE) credential demonstrating excellence and expertise in multi-modal simulation methodologies including task trainers, high and low-fidelity patient simulators, virtual reality, screen-based simulators, and standardized patients. Utilizing technology and tools, the goals of simulation are threefold: 1) to improve student nurse performance by providing experience working with highly technical equipment in a virtual environment prior to actual clinical experience in a patient care setting; 2) to promote competent care by ensuring comprehensive practice in critical thinking and clinical judgement; and 3) to substitute the number of clinical hours required in active patient care settings, thereby easing the shortage of clinical access opportunities. On average, clinical simulation was used to replace approximately 12 percent of total clinical practice time, with many schools having increased the percent of simulation used in place of clinical hours as they acquired simulation resources and experience in utilizing this educational technology.

Eastern Shore Faculty Academy and Mentoring Initiative (ES-FAMI). The ES-FAMI increases the preparation and availability of clinical instructors to teach in nursing programs by providing a foundation in learning theory and assessment. Established on the Eastern Shore in 2011 as a collaboration between Salisbury University, Chesapeake College, and Wor-Wic Community College, the ES-FAMI has expanded to central and western Maryland to prepare a pool of clinical faculty across the state. The program is delivered online, face-to-face, and in simulated teaching experiences.

Inter-professional Education Resources (IPE). Collaborative practice has been identified as a solution to current challenges of health care, including improving patient safety, quality and outcomes of care; minimizing/decreasing cost; and improving the patient experience. Most accrediting bodies of health professions today require learners to be prepared for IPE practice, yet barriers often exist for teaching multiple disciplines together in IPE settings. The Johns Hopkins University School of Nursing program addresses these barriers through simulations. The Core Competencies for IPE Collaborative Practice, which include 1) shared values/ethics, 2) roles and responsibilities, 3) communication, and 4) teamwork with bedside rounds, provided the

framework for developing four simulations, with actors playing roles to deliver the IPE simulations via video vignettes.

Initiative #5: Developing Statewide Resources

The intent of Initiative #5 is to provide resources for potentially successful projects or concepts that were embedded in the Future of Nursing report that would be available for all nurses in both academic and practice environments. The funding support for Initiative #5 was $8.6 million and provided resources for accreditation, instructional technology, and preparation of clinical instructors, preceptors, and mentoring nursing faculty in multiple in-state settings. In addition, a nurse residency toolkit as developed to provide guidance for all programs to enhance newly licensed nurses' academic progression. Some of the more widely available opportunities are described below.

Nurse Managed Wellness Center for Student Clinical Opportunities (NMWC). The NMWC at Allegany College of Maryland in Western Maryland provides nursing students with opportunities to improve their essential skills and competencies for transitioning to the role of the nurse. In anticipation of decreased inpatient clinical pediatric opportunities, students work with the local Head Start to provide pediatric assessments, including vision, hearing, developmental and physical screenings. Providing the template for the experiences (objectives, learning activity, and evaluation tools), in addition to an opportunity to see it in action (on-site or webinar) makes this a replicable model with the preceptor clinical training. The intent is to reduce the stress on hospital clinical sites and increase enrollments based on creating alternate clinical site options.

Lead Nursing Forward Educator Career Portal (LNF). Salisbury University School of Nursing (SUSON), in collaboration with UMSON, developed a free web resource that connects interested educators with clinical instructor, preceptor, part-time adjunct, and full time faculty opportunities across hospitals and nursing programs. The site (leadnursingforward.org) provides information for nurses and career explorers to learn more about the educator role, different pathways to becoming an educator, and continuing their education. The site also promotes the nurse educator career with photos and videos featuring current nurse educators across Maryland. Through the portal, users can register a profile and also gain access to postings for events such as seminars, job fairs, and conferences.

Maryland Nursing Workforce Center (MNWC). The MNWC was established in July 2018 and became an officially recognized Center at the University of Maryland, Baltimore in November, 2018. The following May, the MNWC was accepted into membership in the National Forum of State Nursing Workforce Centers. The MNWC is intended to improve collaboration among stakeholders and enhance data infrastructure as recommended by the *Future of Nursing* (2010) report and reinforced at the National Academies of Medicine *Future of Nursing 2020-2030* public sessions in 2019. The

MNWC Advisory Committee determined that the top priority is to secure accurate, and timely nursing workforce data from the Maryland Board of Nursing. The MNWC filed a Public Information Act request in March of 2019 to gain access to the data. Unfortunately, this information has not been provided at the time of this report and state-level data regarding the nursing workforce remains incomplete. MNWC will analyze and report on the nurse workforce data with stakeholders once it's received.

Statewide Initiatives Awards: by Program

There were four funding cycles for the nurse faculty focused programs, totaling $16 million. As a requirement of the programs, recipients commit to becoming nursing faculty upon completion of their graduate education; advancing their careers through earning doctoral degrees; joining an institution as a new faculty member; or demonstrating expertise in the specialty practice of nursing education through national certification. Across the State, nurse faculty were awarded $5 million for fellowships, grants and professional development between FY 2016 and FY 2019. Approximately $11 million over the same period was awarded to 250 nurses who enrolled in the graduate degree programs, a requirement for becoming a faculty or hospital-based educator. A description of the outcomes for each program follows.

New Nursing Faculty Fellowships (NNFF). These fellowships assist Maryland nursing programs with recruiting and retaining newly hired faculty by providing funding to pay student loans, attend and present at professional conferences, conduct research, publish work in peer-reviewed journals, and other professional development activities. Each fellowship is funded for three years. Since 2015, 162 new faculty members have been recruited through this program and received a total of $3 million. The retention rate for faculty for the last 3 years is 93 percent; clear evidence of the program's value.

Nurse Educator Doctoral Grants for Practice and Dissertation Research (NEDG). This program provides grants to current nursing faculty (typically instructors or assistant professors) enrolled in doctoral study, who are completing their final scholarly work through a dissertation (Ph.D. or Doctor of Education, Ed.D) or a capstone/scholarly project (DNP). Faculty who have recently completed a doctoral degree are also eligible for this award. Funds may be used to offset research, tuition, student loans, course release time, and other educational costs related to expediting degree completion. Since July 2015, there have been 63 awards totaling $1.6 million. Of these awards, 28 faculty were receiving a Ph.D. (22 PhDs in Nursing and 6 PhDs in other related fields), 28 were receiving a DNP and 7 were completing an Ed.D. This represents approximately 10 percent of the total full-time faculty employed in nursing degree programs, based on NSP II outcomes data. Upon degree completion, recipients are required to provide the abstracts and citations of their dissertation, capstone project paper, and any other published work or scholarly project. Many doctoral projects focused on educational issues in nursing that inform best practices in both academia and clinical practice.

Examples include simulation, faculty shortage, teaching modalities, medication errors, mentoring models, civility, and student retention. Maryland Deans and Directors indicate that 9 out of 10 nursing faculty who received the NEDG award remained employed in good standing; an indication of the program's effectiveness in advancing the number of nursing faculty with doctoral degrees and retaining highly qualified faculty.

Hal and Jo Cohen Graduate Nurse Faculty Scholarship (GNF). This program supports registered nurses in completion of their Master's and Doctoral degrees, post-graduate teaching certificate, and coursework to become nurse faculty. The scholarship is for full tuition and fees for Maryland residents to go to a Maryland program, with a service obligation to teach in an in-state nursing program or hospital education department. Recipients who are unable to meet the service obligation must repay the GNF through a bond repayment plan. Since July 2015, approximately 250 recipients have been awarded $11.2 million in scholarships. Most were pursuing Master's Degrees, a pre-requisite for doctoral level study and a minimum requirement of the Maryland Board of Nursing for nursing faculty. Since the GNF's inception in 2007, over 175 recipients have completed their service obligation; 244 are working as Maryland nursing faculty or hospital-based nurse educators in fulfillment of the service obligation; and 68 recent graduates are in an approved deferment or seeking teaching positions at a school or hospital. The remaining students are enrolled in Master's and Doctoral level degree programs. In 2015, based on feedback from Chief Nursing Officers at Maryland hospitals, the guidelines and service commitment for the GNF were revised to include hospital-based nurse educators to attract nursing professional development specialists. At least 26 hospital nurse educators have received GNF funds for tuition and are completing their service at their hospital's education departments at The Johns Hopkins Hospital, Greater Baltimore Medical Center, Howard County General Hospital, Johns Hopkins Bayview Medical Center, University of Maryland St. Joseph Medical Center, Sinai Hospital, and Mercy Medical Center.

Academic Nurse Educator Certification (ANEC) award The ANEC provides recognition and professional development support for full-time nurse faculty across the state who achieved the National League for Nursing's Certified Nurse Educator (CNE) credential or renewed the CNE they already held as required every five years. The CNE certification is a mark of excellence and expertise in the specialty practice of nursing education. A total of 57 faculty received $285,000 across 12 community colleges and 9 universities. To assist faculty in preparing for the CNE examination, NSP II partnered with the NLN to host CNE Workshops taught by Dr. Diane Billings, a national leader in faculty development. Workshop attendees are expected to take the CNE examination within a year. The goal is to double the number of full-time nurse faculty with the CNE credential, a mark of excellence in teaching, pedagogy, curriculum design, and student learning. At the inception of the program, there were 65 certified nurse educators. Since

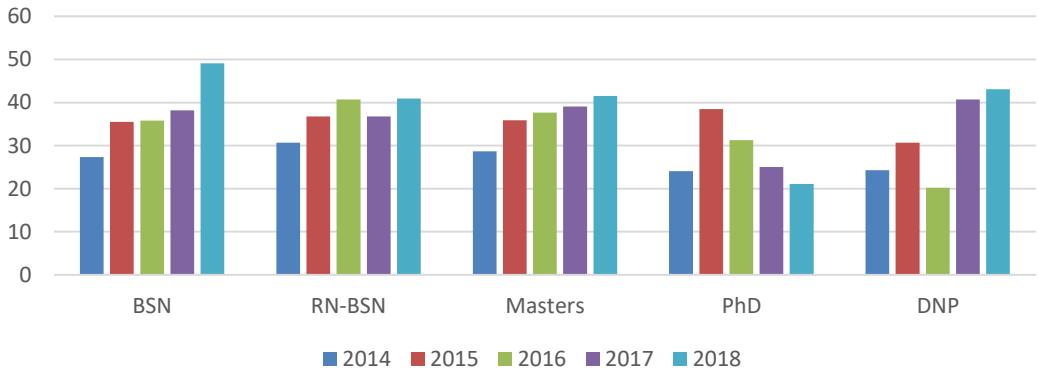
2017, 36 additional full-time nurse faculty were awarded the CNE and 21 full-time faculty completed the requirements to renew the CNE credential. This demonstrated an increase of 55 percent newly credentialed CNEs.

Diversity of the Maryland Nursing Workforce

In accordance with the Education Article § 11-405, Annotated Code of Maryland, the Nurse Support Program Assistance Fund statute states, "the guidelines established under subsection (e) of this section shall provide that a portion of the competitive grants and statewide grants be used to attract and retain minorities to nursing and nurse faculty careers in Maryland." The NSP II program has impacted the diversity in the nursing workforce in several ways. Over the past five years, NSP II has awarded $3.6 million in competitive grants to support diverse students at Historically Black Colleges and Universities, including Bowie State University, Coppin State University, and Morgan State University. The programs were designed to increase student retention, graduation rates, and licensure first-time pass rates.

Based on diversity data provided by the Maryland Longitudinal Data System, 73 percent of recipients of the Hal and Jo Cohen Graduate Nurse Faculty Scholarship program were underrepresented racial and ethnic minorities. Additionally, a report prepared in 2019 for Maryland by the AACN Research and Data Services indicated that the percentage of racial or ethnic minority nursing graduates in Maryland has increased or held steady across all degree programs. Forty-nine percent of Maryland nurse graduates at BSN programs and a little over 40 percent of RN-BSN, Master's and DNP graduates were racial or ethnic minorities in 2018 (Figure 9).

Figure 9: Percentage of Underrepresented Racial and Ethnic Minority Nursing Graduates in Maryland

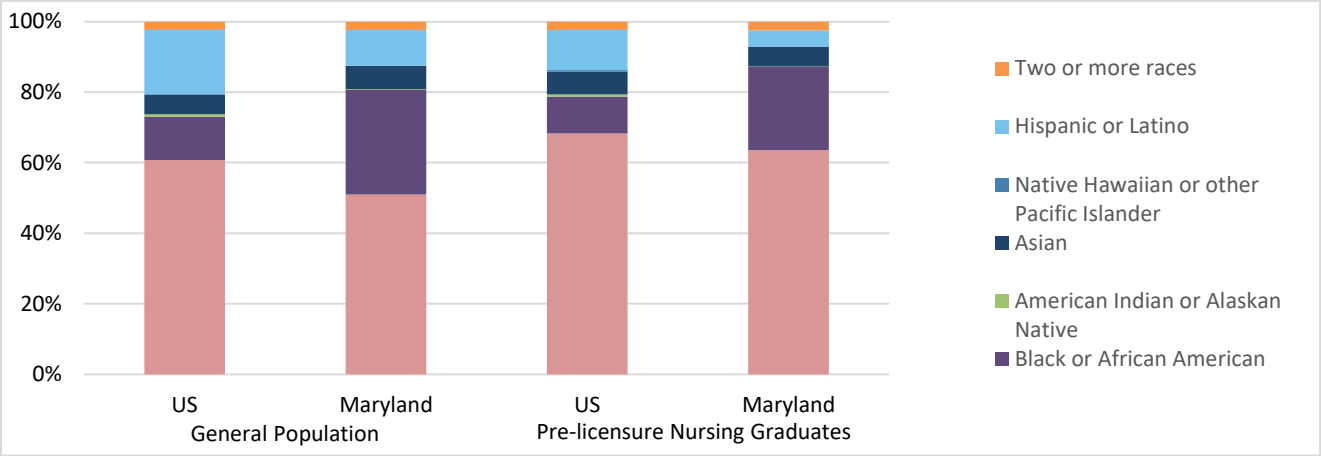


Source: American Association of Colleges of Nursing, Research and Data Services, 2019

The diversity among pre-licensure graduates from all entry-level nursing programs is consistent with the State and national population demographics. This demonstrates that progress is being made to make Maryland's nursing workforce more closely reflect the population they

serve (Figure 10). The National League for Nursing's *Biennial Survey of Nursing Schools Academic Year 2017-2018* indicates an increase in enrollment for underrepresented populations, from 27 percent in 2016 to 31 percent in 2018; the highest increases were among African American and Hispanic students.

Figure 10: Comparison of the diversity of pre-licensure RNs in Maryland and US



Source: Campaign for Action, Maryland's RN Graduates Reflect State's Diversity, 2019

The State of Nursing and Future Issues

There are significant challenges facing the nursing workforce (Buerhaus, et al., 2017). First, is the aging RN workforce and projected retirements. According to a 2018 National Council of State Boards of Nursing and the Forum of State Nursing Workforce Centers report, nearly 51 percent of the RN workforce is 50 years of age or older. One million RNs will retire by 2030 and with their departure, the patient care settings face a significant loss of knowledge and expertise that will be felt for years to come.

Second, aging baby boomers will continue to increase the demand for health care over longer life expectancies. According to the U.S. Census Bureau, the nation's population is estimated to grow by more than 10 percent by 2032, with those over age 65 increasing by 48 percent. Consistent with this trend, Medicare enrollments are projected to grow to 80 Million beneficiaries by 2030.

Third, physician shortages will create the need for more advanced practice nurses to provide primary and rural care within their full scope of practice. There is a projected shortage of between 46,900 and 121,900 physicians by 2032, which includes both primary care (between 21,100 and 55,200) and specialty care (between 24,800 and 65,800). Among specialists such as pathologists, neurologists, radiologists, and psychiatrists, the data projects a shortage of between 1,900 and 12,100 medical specialists, 14,300 and 23,400 surgical specialists, and 20,600 and 39,100 other specialists. One-third of all currently active doctors will be older than 65 in the next

decade. There is potential for nurse practitioners prepared in primary care, psychiatric and pediatric specialties that can help ease this shortage, especially in rural areas.

Fourth, we are entering a new era of health reform where hospitals face financial incentives to be accountable for the quality and the total cost of care. This will increase care management activities to avoid readmissions and costly unnecessary use of the emergency departments. RNs with experience in care management, public health, and partnership building will be needed. In addition to these overarching national concerns, there are several other pressing issues of concern in Maryland.

Maryland's nursing programs have responded to industry changes in hospitals and health systems. The Maryland Hospital Association (MHA) concurs with the American Hospital Association (AHA, 2019) citing the aging population, higher complexity of care, improved care coordination, integration of behavioral healthcare with physical healthcare, and improved methods of delivery of care will jointly impact workforce dynamics, access to care, and the clinical work environment. The MHA is in the process of prioritizing the nursing workforce, along with their focus on the health care work environment and violence in the workplace.

Lack of Qualified Nursing Faculty Leads to Limits on Enrollment

Despite this progress, nursing schools continue to turn away qualified students due to shortages in faculty. According to the AACN's *Special Survey on Vacant Faculty Positions* (2018), 1,715 faculty vacancies were identified, an eight (8) percent faculty vacancy rate. In the AACN's *2018-2019 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*, nursing schools across the nation turned away approximately 75,029 qualified applicants to baccalaureate and graduate degree programs in 2018, due to insufficient numbers of faculty, classroom space, clinical sites, clinical preceptors, and shrinking budgets (AACN, 2017 a, 2017 b). Compounding the faculty shortage is the "gray tsunami;" the average faculty member is between 51 and 62 years old and more than a third are expected to retire by 2025 (Fang & Kesten, 2017). Annually, Maryland is expected to have 60 full-time faculty vacancies. Despite resources to recruit and retain faculty, the most recent reports indicate 40 full-time vacancies. Each vacancy potentially decreases the capacity to enroll ten additional students. This comes at a time when the number of nurses retiring or leaving the workforce is expected to double over the decade the next decade to 80,000 per year, and reduced capacity is not going to address the problem.

Advancing the Practice of Nursing

According to the American Association of Medical Colleges (2019), there is a shortfall of primary and specialty care physicians. Advanced Practice Registered Nurses (APRNs) are positioned to help meet the demand for these types of healthcare providers. The U.S. Bureau of Labor Statistics (BLS) Occupational Outlook Handbook (OOH) predicts that every state in the U.S. will see an increase in nurse practitioner (NP) position openings, forecasting a 36 percent

increase in the need for NPs between 2016 and 2026 (BLS OOH, 2019). The need for NPs in Maryland is estimated to increase by 31 percent over the same period. This remarkable growth in the workforce will continue for a number of years with current rates of nurse practitioner training (BLS OOH, 2019). Current projections indicate a shortage of 122,000 physician providers by 2032. This is a growing concern, especially in the area of primary care and for medically underserved areas and populations (AAMC, 2019).

RN Vacancy Rates

The RN vacancy rate is trending up across the nation but is holding fairly steady in Maryland. The hospital nurse vacancy rates for Maryland (averaging about eight (8) percent over the last four years) is comparable with 28 percent of other U.S. hospitals, higher than 46 percent of other U.S. hospitals, and lower than 25 percent of other U.S. hospitals. In 2015, sixty percent (60%) of hospitals reported a vacancy rate below 7.5 percent. By 2018, the rate declined to 46 percent. This downward shift, along with rising RN recruitment difficulty (close to 3 months to hire an RN), is a clear indication that the RN labor shortage has arrived (NSU, 2019) (Figure 11).

Figure 11: Comparison of RN Vacancy Rates: US vs Maryland Hospitals

	2015	2016	2017	2018
US RN Vacancy Rates: *Less than 7.5%*	60%	52%	50%	46%
US RN Vacancy Rates: *Between 7.5% to 9.9%*	16%	16%	27%	28%
US RN Vacancy Rates: *Greater than 10%*	24%	33%	23%	25%
Maryland RN Vacancy Rates	**8%**	**7%**	**9%**	**8%**

Source: U.S. Source: NSU Nursing Solutions Survey of 42 States (including MD), 2019 National Healthcare Retention and RN Staffing Report, MD Source: HSCRC NSP I Annual Report Data

In the U.S. Bureau of Labor Statistics (BLS) Employment Projections (2016-2026), RNs are listed among the top occupations for job growth through 2026, with an expected 15 percent increase. In addition, BLS expects the workforce to need over 200,000 new RNs each year to fill newly created positions and replace retiring nurses. The last five years of the NSP II funding has positioned the state well to move with the changes in the profession and maintain the pipeline for new entry-level nurses, as well as, the faculty required to prepare the next generation of nurses.

Use of Agency Nurses

Another indicator that vacancy rates in Maryland are on the rise is the data on agency nurse usage. A recent interview with a Chief Nurse Officer at a Maryland hospital revealed they used a centralized nurse staffing agency for the hospital system that brokers for approximately 100 additional agencies. There are different rates for per diem, local, travel, incentive, and critical needs, which escalate costs respectively. The hourly rate can range from $69 to almost $100. (VP/CNO communication, 8/29/19). To compensate for nurse vacancies, hospitals turned to costly strategies such as overtime, agency staff, and travel nurses. These strategies also had the

potential to negatively affect quality, safety, patient experience, and both physician and hospital employee job satisfaction.

When comparing the cost difference between employed RNs versus travel RNs, the amount is staggering. For every 20 travel RNs eliminated, a hospital can save on average, $1.4 million. For 46 hospitals, the annual cost for agency nurse usage statewide is between $129 and $138 million (Figure 12). Continuing the NSP II investment to prepare more nurses should help maintain a stable workforce and assist hospitals in controlling costs while ensuring quality care.

Figure 12: Maryland Hospital's Agency Nurse Cost, FY 2015 – FY 2018

	FY 2015	FY 2016	FY 2017	FY 2018
Agency RN Costs	$129,011,910	$105,825,500	$137,716,996	$129,988,888
Total Number of Hospitals Reporting	47	46	45	46
Average Cost per Hospital	$2,744,934	$2,300,554	$3,060,378	$2,825,845

Source: HSCRC, NSP I Maryland Hospital Annual Survey

Staff Recommendations for the NSP II Program Going Forward

Considering the variability in nursing workforce projections and the shifts in entry-to-practice programs (from Associate Degree to BSN, Second Degree BSN, and Master's Entry in Nursing), leading researchers recommend the importance of monitoring the actual number of newly licensed nurses who are entering practice each year. As reported previously in this report, applicants are being denied entry to pre-licensure programs, citing insufficient numbers of faculty, clinical sites, classroom space, and clinical preceptors. Schools are hindered by difficulties recruiting experienced faculty. The NSP II program is an important component of the recruitment and retention efforts in Maryland. The nursing pipeline is needed more than ever to more Maryland into the future of healthcare.

The following is the staff recommendations for continuing the NSP II program and implementing improvements to the program.

Recommendation 1: Renew NSP II funding for Five Years, FY 2021 through FY 2025

The NSP I was renewed in 2017 to support ongoing education for staff nurses and nurse residencies across all hospitals with the goal of increasing nursing quality placing further pressure on nursing education programs. The program has succeeded in meeting this goal; however there are areas that can be improved to expand the pipeline further. Therefore, MHEC and HSCRC jointly recommend the renewal of the NSP II funding, up to 0.1% of hospital regulated gross patient revenue for the next five years, FY 2021 through FY 2025, with the following additional recommendations.

Recommendation 2: Establish a Workgroup to Recommend Updates to Statewide Initiatives

MHEC will establish a workgroup to recommend revisions to all faculty-focused programs, which are part of the Statewide Initiatives. The workgroup will review the eligibility

requirements for the GNF to align with the needs of nursing programs. As part of the evaluation, the Maryland Council of Deans and Directors recommended focusing on existing faculty retention measures through new or existing programs, increasing the limits on the NNFF and NEDG programs, as well as, addressing the barriers to course release time and eligible expenditures. In addition, they recommend developing a faculty mentoring program to support the GNF and full-time faculty across all 28 nursing programs to improve faculty retention in education settings.

Recommendation 3: Continue Established Competitive Institutional Grants Initiatives

Leaders for the Maryland Council of Deans and Directors, Maryland Nurses Association, Maryland Action Coalition, Maryland Organization of Nurse Leaders and Maryland Nurse Residency Consortium reviewed and approved the continuation of the following initiatives developed in 2015 by the NSP II Competitive Institutional Grants Workgroup:

- Focus on goals to increase the numbers of pre-licensure nurses,
- Increase the proportion of BSN prepared to 80 percent,
- Double the number of faculty with doctoral degrees,
- Strengthen the data infrastructure for the nursing workforce,
- Ensure lifelong learning,
- Double the number of faculty with certified nurse educator credentials
- Provide resources across state nursing programs to support leadership, clinical simulation, inter-professional education, recruitment and retention of new faculty,
- Preparation of clinical instructors
- Faculty mentoring, and
- Opening more individual nurse-level opportunities to recruit more clinical hospital partners.

The Statewide Academic-Hospital Practice Committee agreed with the approved initiatives and submitted additional priorities for clinical models, preceptors and sites.

Recommendation 4: Form NSP I and NSP II Advisory Board to Address Common Issues Between Academia and Practice

There is broad consensus that nurse leaders at the hospitals and academic nursing programs will need to work closely together on solutions to the shortage of clinical practice sites and restricted access on what nursing students are allowed to practice in the clinical settings (due to size and acuity of the units, patient safety, and hospital requirements). Staff recommend researching the impact of out of state nursing programs on clinical sites to develop a joint statewide agreement between hospitals and nursing programs. Educators will need to create additional clinical opportunities to practice other skills such as, documentation in electronic health records, medication administration, Pyxis access, and other procedures that are no longer

part of the hospital experience for nursing students. In order to streamline the onboarding of students across all hospitals (reducing time and cost to all stakeholders), staff recommend developing universal requirements that can be implemented across all facilities. Staff shall convene a small NSP I and NSP II advisory board to engage leaders, determine strategies, and focus on mutual goals of both programs for possible solutions.

Recommendation 5: Improve Infrastructure for Nursing Workforce Data

Maryland continues to struggle with access to State-level nursing workforce data. Due to insufficient analytic capacity, the Maryland Board of Nursing (MBON) is unable to efficiently provide comprehensive and timely results response to public information act (PIA) requests. Collaboration with the Maryland Board of Nursing, Maryland Nursing Workforce Center, Maryland Nurses Association, Maryland Hospital Association, Maryland Longitudinal Data System, MHEC, and HSCRC to streamline data sharing between state agencies is recommended. Legislation may be considered to ensure that the data required for monitoring the nursing workforce supply and demand is validated, readily accessible, and publicly available. The HSCRC and MHEC staff recommend that NSP II support the MBON in procuring the necessary data processing systems and work with the agencies and organizations listed above to improve the workforce data infrastructure to better inform future recommendations.

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October 29, 2019

Mr. Nelson J. Sabatini, Chairman
Health Services Cost Review Chairman
4160 Patterson Avenue
Baltimore, MD 21215

Dr. Mr. Sabatini,

I am writing to offer my support of and to encourage the reauthorization of NSP II funds. The University of Maryland, School of Nursing in partnership with several Maryland hospitals, including Meritus Medical Center have used these funds to work towards the goal of advancing nursing practice.

Here at Meritus we have welcomed representatives from the University of Maryland frequently to talk with our staff about returning to school. They have been able to share important information about the programs that are offered through University of Maryland and assist potential students with reviewing transcripts and discussing financial resources.

We are motivated to ensure that our employees have the information that they need when making the decision to return to school. We have set goals around increasing our BSN rate and greatly appreciate our partnership with the University of Maryland, specifically through the NSP II support.

Sincerely,

Melanie M. Heuston, DNP, RN, NEA-BC
Vice President and Chief Nursing Officer

MARYLAND ACTION COALITION
Creating a Healthier Maryland
FUTURE OF NURSING™ CAMPAIGN FOR ACTION

September 30, 2019

Nelson J. Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Mr. Sabatini:

We are writing today to offer our full support for the reauthorization of the funding for the Nurse Support Program II (NSPII). As part of the National Center to Champion Nursing in America, the Maryland Action Coalition was formed in response to the Institute of Medicine's 2011 report on *The Future of Nursing: Leading Change, Advancing Health*. The report laid out a series of recommendations for a well-educated nursing workforce to meet the growing demands for health care.

The availability of the NSPII funding for Maryland's educational programs has been critical for the collective efforts to grow enrollment in entry-level and advanced practice nursing programs. The funding has also removed educational barriers for nurses who enter the profession through an Associate Degree program and then go on to complete their Baccalaureate degree. It has also allowed nursing programs to expand their graduate offerings to provide access to care. Most recently, NSPII funds were secured to establish Maryland's Nursing Workforce Center which will track and provide access to workforce data and better inform an understanding of the supply and demand for nurses in Maryland. We are grateful for the NSPII funds that have been available to date, and we look forward to the continuation of NSPII funding for another five (5) years. Please do not hesitate to contact us at kirschling@umaryland.edu and ptravis2@jhmi.edu if additional information is needed.

Sincerely,

Jane Marie Kirschling

Jane Kirschling, PhD, RN, FAAN
Dean and Professor
University of Maryland School of Nursing
Co-Chair Maryland Action Coalition

Patricia Travis

Patricia Travis, PhD, RN
Co-Chair, Maryland Action Coalition

University of Maryland School of Nursing
655 West Lombard Street, 505 Q, Baltimore, MD 21201

Contact
410-706-7858

Web
campaignforaction.org/state/maryland

October 30, 2019

Nelson J Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, MD 21215

Dear Dr. Sabatini,

This letter is to express the Maryland Nurses Association's (MNA) support for the continuation of the Nurse Support Program II (NSP II). Since the program's inception, the Health Services Cost Review Commission's efforts to support nursing and nursing education have resulted in a stronger health care work force for the citizens of Maryland. As MNA President, I have had the opportunity to participate in National forums on nursing education, and Maryland's unique collaboration between education and practice is envied by many. Funding from NSP II has increased not only the capacity of nursing education programs in Maryland, but the quality of the practice of Registered Nursing.

I can testify firsthand to the benefits of NSP II funding for nursing education programs. I have witnessed the increase in nursing simulation, which provides clinical/simulation experience for nursing students in pre-licensure and graduate programs, and Interprofessional Education (IPE) initiatives, which provide much needed collaborative training among health care professionals. As a nursing faculty member, I was personally assisted with funding to complete my doctoral education, which has enhanced my ability as a researcher and educator for students.

Registered Nursing shortages are currently projected in Maryland. Maryland Nursing Association is the voice for nursing advocacy in the State, and our support for the continuation of NSP II funding for nursing education is a priority. It is my hope that the Health Services Cost Review Commission will acknowledge the benefits of this program and continue to support nursing education in Maryland.

Sincerely,

Mary Kay DeMarco, PhD, RN, CNE
President, Maryland Nurses Association

JOHNS HOPKINS
UNIVERSITY

October 23, 2019

Nelson J. Sabatini
Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, Maryland 21215

Dear Chairman Sabatini:

I write to you regarding the NSP II Program Evaluation that has taken place over the past 5 years. I understand that in November, the HSCRC will receive the draft NSP II Program Evaluation and Outcomes report along with future recommendations. I am writing to provide the strongest possible support for the continuation of funding for nursing educational capacity and nurse faculty focused programs.

The Johns Hopkins University School of Nursing (JHSON) supports the NSP II's goals of reducing the nursing faculty shortage and increasing the number of nurses statewide by increasing nursing school capacity for students. Through the support of NSP II, JHSON has made strides to increase the number of nursing faculty, improve the transition of advanced practice nurses into care, support interprofessional learning events for students at the master's and doctoral level, and establish a Certified Registered Nurse Anesthetist (CRNA) program at Johns Hopkins. These projects led by Johns Hopkins nursing faculty have all contributed to NSP II's goal of increasing the number of nursing faculty and bedside nurses. Additionally, JHSON supports NSP II's adoption of IOM recommendations that promote life-long education for nurses and preparing nurses to be leaders of change in the health care industry.

Supporting Doctoral Education to Increase the Number of Nursing Faculty
Through the Nursing Faculty for the Future project, JHSON has increased the number of PhD-prepared nursing faculty, particularly those from racial or ethnic minority backgrounds, by providing fellows with leadership and teaching skills development and the capacity to build both didactic and online courses through a structured curriculum. To date, eight fellows have completed this program and are eligible to take the Certified Nurse Educator (CNE) exam with five of these fellows currently in the process of registering for the CNE exam.

Increasing the Nursing Workforce by Improved Educational Capacity
The NSP II program has contributed substantially to the establishment of the Certified Registered Nurse Anesthetist (CRNA) program at JHSON through generous financial support which has supported faculty salaries, the hiring of a consultant, and the accreditation fees needed to launch this program. The establishment of a CRNA program at JHSON helps fill an increasing demand for CRNA's and broadens the school's contribution to the education of advanced practice nurses.

Office of the President
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Supporting Continued Education and Leadership of Nurses

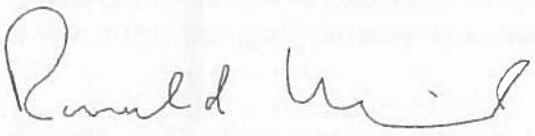
As the number of advanced practice nurses grows, so does the need for educational and residency programs that facilitate their transition into advanced practice care.

- The Supporting Nursing Advanced Practice Transitions program (SNAPT) has used NSP II support to form a partnership with Johns Hopkins Community Physicians to offer a 12-month residency program for new nurse practitioners. SNAPT has been able to develop tools and modules for continuing education and has prepared preceptors who are essential to the nurse residency program. SNAPT seeks to broaden its impact by partnering with more primary care offices in the state of Maryland and presenting their work at the Sigma International Conference in May 2020.
- NSP II has assisted the Post-Master's Pediatric Acute Care Nurse Practitioner program in working with some of our hospital partners to prepare currently employed pediatric primary care NPs to sit for the acute care pediatric certification exam due to the change in certifying agency requirements.
- Finally, NSP II has facilitated the creation of four online interprofessional education (IPE) modules used at JHUSON and by schools across the state of Maryland. In particular, these IPE modules have been adopted by nurse residency programs at twelve hospitals, giving new nurses the skills they need to work on an interdisciplinary health care team.

The NSP II's support of these projects has improved nursing education tremendously through the training of nurse educators, nurse residency programs for new advanced practice nurses, and the creation of a CRNA program that will support the growing demand for doctoral-prepared CRNAs in the healthcare workforce. The NSP II funding improves the quality of nursing education and care in the state of Maryland, benefitting the health systems and patients they serve. The Johns Hopkins University School of Nursing is grateful for the opportunity to further grow the leadership of nurses through the support of NSP II.

Thank you again for your important support of nursing education in Maryland.

Sincerely,



Ronald J. Daniels
President

FROSTBURG STATE UNIVERSITY

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October 15, 2019

Mr. Nelson J. Sabatini
Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear: Mr. Sabatini

On behalf of Frostburg State University, please accept my highest recommendation for the continuation of the Nurse Support Program II (NSP II).

NSP II grant funding has been critical to the development, expansion, and success of nursing offerings at Frostburg State University. The following is only a brief overview of the positive outcomes made possible by NSP grant awards:

- Development and expansion of an RN-BSN program, including dual enrollment and collaborative articulations with community colleges throughout the state of Maryland. These funds supported the hiring of dedicated staff and faculty to coordinate, advise, and secure community health practicum sites for over 400 students.
- The development and expansion of Master's of Science in Nursing concentrations in Leadership and Management, Nursing Education, Primary Care Family Nurse Practitioner, and Primary Care Psychiatric and Mental Health Nurse Practitioner would not have been possible without NSP II. These funds supported the hiring of faculty to direct and coordinate the program and develop the curriculum as well as staff to secure clinical placements in primary care settings and assist with the design and delivery of the program.

NSP II offers outstanding opportunities for increased capacity in nursing education at all levels and a commitment to serving the state health needs of the state of Maryland's citizens. As such, I strongly recommend NSP II and its continuation.

Sincerely,

Heather A. Gable, DNP, RN, LNHA, CNE, NEA-BC

Chair, Associate Professor

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October 30, 2019

Nelson J Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, MD 21215

Dear Chairman Sabatini,

Today I write to you to request your support for the continuation of funding for the NSP II program for an additional 5 years.

I have served as the Project Director for two NSP II grants benefiting the Community College of Baltimore County's (CCBC's) nursing students. The Associate to Bachelor's (ATB) Nursing Degree Option, made possible by NSP II funding, has allowed over six hundred of CCBC's associate degree students to be dually enrolled with one of our four partner universities (Frostburg State University, Notre Dame of Maryland University, Stevenson University or Towson University) since its inception.

This innovative ATB partnership program, created initially by CCBC and Towson University, is helping to prepare a greater number of Bachelor's prepared nurses in a time and cost efficient manner. The ATB Model has been replicated all over the state of Maryland, giving diverse community college students increased access to a BSN education. Creating a more highly educated and diverse nursing workforce is key to improving healthcare quality and safety in Maryland.

As Project Director, I have attended meetings regularly with others receiving NSP II funds who report on their initiatives. The impact these projects have made on the nursing education community in Maryland has been extraordinary.

I thank you for the NSP II funding that has supported nursing education initiatives in the past and I hope you will support future funding for NSP II.

Sincerely,

Karen Wons, MS, RN, CNE

Karen Wons, MS, RN, CNE
Associate Professor, Nursing
Project Director, Associate to Bachelor's Nursing Degree Option
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UNIVERSITY SYSTEM of MARYLAND

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OFFICE OF THE CHANCELLOR

October 18, 2019

Nelson J. Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Mr. Sabatini:

I am writing today to offer the University System of Maryland's (USM) full support for reauthorization of the Nurse Support Program II (NSPII) funding. USM's nursing programs, offered by Bowie State University, Coppin State University, Frostburg State University, Salisbury University, Towson University, and University of Maryland, Baltimore, have all received NSPII funding during the current five-year cycle. This funding has been instrumental in allowing each of these institutions to strengthen their nursing programs, to assure clinical faculty have the necessary knowledge and skills, and to initiate new programmatic offerings in response to Maryland's healthcare workforce needs. Without NSPII funding, the overwhelming majority of these efforts would most likely not have happened.

With NSPII support, an example of an initiative from each of USM's nursing programs is highlighted below:

- Establishment of a Nursing Student Success Center at Bowie State (grant awarded in FY '16) in order to improve retention and graduation rates of BSN students and also their first time NCLEX-RN pass rates.

- Establishment of Leading Educational Academic Retention of Nursing Program (LEARN) at Coppin State University (FY '16) with a focus on pre-admission advisement and intensive academic support services.

- Design and implementation of a Family Nurse Practitioner and Psychiatric/Mental Health Nurse Practitioner program at Frostburg State University (FY '16 and '18) in order to meet the primary health care and behavioral health care needs of Western Maryland.

- Building on the NSPII supported Eastern Shore Faculty Academy and Mentoring Initiatives (ES-FAMI), Salisbury University received funding in FY '20 to develop and pilot advanced *Quality Matters*™ compliant curriculum to expand the number of RNs prepared for clinical teaching roles.
- Design and implementation of an entry-level Master's of Science in nursing degree program (Towson University FY '20) for students who already have a bachelor's degree and want to pursue a career in nursing.

- Design and implementation of the University of Maryland, Baltimore Doctor of Nursing Practice Family Nurse Practitioner program at the Universities at Shady Grove (FY '17) in order to meet the primary health care needs of Western Maryland and Montgomery County.

The USM's nursing programs are deeply committed to preparing well-educated nurses to meet the growing and evolving health care needs in Maryland. Reauthorization of NSPII funding is crucial since it allows the nursing programs to respond to the needs of the residents of Maryland and the health care industry. Thank you for your thoughtful consideration and we look forward to the continuation of NSPII funding for another five years.

Sincerely,

Robert L. Caret

Robert L. Caret, PhD
Chancellor

UNIVERSITY of MARYLAND
BALTIMORE

JAY A. PERMAN, MD
President

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October 18, 2019

Nelson J. Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Sabatini,

I am writing today to offer the University of Maryland, Baltimore's full support for reauthorization of funding for the Nurse Support Program II (NSP II). The University of Maryland School of Nursing, the largest nursing school in Maryland, has directly benefited from NSP II funding over the past five years and has been able to address significant nursing workforce needs and issues that otherwise would not have been able to be addressed. This funding resource is invaluable for all of Maryland's nursing programs, including public and private institutions, as well as community colleges, that collectively offer the Associate Degree in Nursing, entry-level baccalaureate degrees in nursing, and graduate-level programs in nursing. All of which are essential to ensuring that Maryland has the diverse nursing workforce needed to care for individuals and communities throughout the State.

Through NSP II support, the University of Maryland School of Nursing has been able to undertake a broad array of initiatives, examples of which are highlighted below:

- In collaboration with Baltimore City Community College, actively engage with the Pathways in Technology Early College High School (P-TECH) at Dunbar High School (FY '19).
- Expand nurse education in substance use and addiction (FY '20).
- Develop curriculum to advance nurses' knowledge of care coordination and case management (FY '17).
- Offer the Doctor of Nursing Practice (DNP) Family Nurse Practitioner (FNP) program at a second location, the Universities at Shady Grove in Rockville, Maryland (FY '17).
- Develop and offer a post-doctoral Psychiatric Mental Health Nurse Practitioner Certificate (FY '17).

— SANDRA R. BERMAN —
SCHOOL OF NURSING and HEALTH PROFESSIONS
STEVENSON
UNIVERSITY

November 6, 2019

Nelson J Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, MD 21215

Dear Mr. Sabatini:

This letter is in strong support of the continuation of funding for the Nurse Support II Program for another five year period. The commitment of the Health Services Cost Review Commission (HSCRC) to nursing and nursing education is vital. It is recognized by the nursing education community as an essential component of the continued growth of nursing education in Maryland. Specifically, Nurse Support Program II grants have enabled Stevenson University to increase the enrollment in both the undergraduate and graduate nursing programs. NSP II grants have funded personnel, training, and equipment that have fostered growth and continual improvement in Stevenson's nursing programs.

If you have questions or need additional information, I would be happy to speak with you. I may be reached at 443-394-9818 or by email at jfeustle@stevenson.edu

Sincerely,

Judith A. Feustle

Judith A. Feustle, ScD, RN
Associate Dean, Nursing and
Chief Nurse Administrator

CECIL COLLEGE Cecil College | One Seahawk Drive | North East, MD 21901 | www.cecil.edu

Nelson J Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, MD 21215

Dear Chairman Sabatini,

I am writing on behalf of our nursing program to ask for your support of continuation of funding for the nursing educational capacity and nurse faculty focused programs in our state. Through this funding, we have been able to provide additional training and resources for our nursing students. This program has helped to fund projects that have increased enrollment of our graduates into baccalaureate programs, an Institute of Medicine mandate for safety and quality in healthcare.

The funds have also supported faculty by improving their knowledge and expertise through simulation training programs due to the increase shortage in available clinical sites. The funds have supported our student retention plan and helped us to retain qualified faculty, a factor that also improves student retention.

We are projected to have a severe shortage in the nursing workforce in the near future and the NSPII program provides valuable resources that can help minimize the effect of the shortage in our state.

I support the continuation of funding for NSP II for an additional 5 years and I am providing this letter of support for your serious consideration.

Sincerely,

Dr. Nancy Norman-Marzella, MSN, NP, RN
Dean of Health and Human Sciences
Director of Nursing

HARFORD
COMMUNITY COLLEGE

November 7, 2019

Nelson J Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, MD 21215

Dear Chairman Sabatini:

Please accept this letter in support of the continuation of funding for NSP II for an additional 5 years. The NSP II funding for nursing education has had a powerful impact on the quality of nursing education in Maryland as well as adding to the number of nursing graduates in Maryland, which directly impacts the quality of health care in Maryland.

Harford Community College has been a recipient of NSP II funding for the last 5 years. Harford Community College has received grant funding specifically to increase nursing pre-licensure enrollments and graduates as well as develop initiatives to advance the education of nursing students from associate to bachelor degrees. The funding has had a significant impact on the quality of the nursing program in multiple ways. It has helped provide simulation equipment equal to what is used in the best health care education program in the nation. The funding has also been used to help provide professional development for nursing faculty to advance in the use of simulation to further develop clinical judgement and problem solving in the clinical setting. It has also provided professional development to help nursing faculty achieve excellence in teaching. These funds have also helped recruit and hire nursing faculty in order to grow and expand the nursing program. The success of the grant initiatives has been shared at national conferences.

In summary, I have shared the specific benefits NSP II funding has had on nursing education at Harford Community College which has positively impacted health care in Harford County. This is being replicated throughout all of the counties of Maryland as well as Baltimore City. The NSP II funds have placed Maryland above many states in supporting quality nursing education to the benefit of improving the quality of health care in the State. I thank you for the support of past years and hope this support will continue.

Sincerely,

Laura Cianelli Preston

Laura Cianelli Preston
Dean of Nursing and Allied Health Professions

401 Thomas Run Road
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Let Curiosity

JOHNS HOPKINS
SCHOOL of NURSING

November 7, 2019

Nelson J Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, MD 21215

RE: Support of continued NSPII funding for nursing education in Maryland

Dear Chairman Sabatini:

I am writing to respectfully request continued funding for the Nurse Support II (NSPII) funding by the Maryland HSCRC. As Dean of Johns Hopkins School of Nursing, the NSPII funds have provided the support for our faculty to develop programs to educate nurses for the state of Maryland. Sixty percent of our new graduates from our pre-licensure program go on to work in Maryland as Registered Nurses (RNs) after graduation. The NSPII funds have also assisted us in preparing nurse practitioner preceptors in practice to mentor nurse practitioner students who will fill the gap between a growing elderly population and the availability of primary and acute care providers who specialize in geriatric care.

Under the exceptional leadership of Dr. Peggy Daw, the leader of NSPII Grants Management, the NSPII grant funding has led to shared educational materials and conferences that have advanced the development of academic programs and faculty at multiple schools of nursing across the state of Maryland.

At Johns Hopkins School of Nursing, our primary mission is to create nursing leaders for the future including future faculty members. We have been pleased and honored to collaborate with our faculty colleagues at the University Of Maryland School of Nursing and other schools on initiatives to increase the number of faculty in Maryland. For the past two years, we have co-sponsored a conference to prepare Master's prepared nurses to select and apply to doctoral education programs in Maryland which upon graduation, will qualify them to be appointed as a nurse faculty member. NSPII funding has supported this effort to address the shortage of nursing faculty members in Maryland. I thank the MD Health Services Cost Review Commission for their consideration of continued NSPII funding.

Sincerely,

Patricia M. Davidson, PhD, MEd, RN, FAAN
Dean and Professor

Office of the Dean

525 North Wolfe Street Room 501 Baltimore, MD 21205 410-955-7544 Fax 410-955-4890 www.nursing.jhu.edu

Salisbury UNIVERSITY

November 8, 2019

To the Health Services Cost Review Commission:

I am writing to in support of the Draft Recommendations for Future Funding for the Nurse Support Program II (NSP II) program. As a nursing professor at Salisbury University and previous grant recipient, I can attest to the impact that the NSP II program has had in our region and across the State.

For example, NSP II grants have supported Salisbury University 's efforts to address the nursing workforce shortage through the Eastern Shore Faculty Academy and Mentorship Initiative. This program recruits expert nurses from hospitals to become part-time clinical faculty to teach for Maryland's nursing programs. With over 150 graduates and offerings on the Eastern Shore, in Central and Western Maryland, this program, nursing programs now have a pool of qualified clinical faculty to support increased student enrollments.

Another NSP II funded initiative, LeadNursingForward.org, is a collaboration between Salisbury University and University of Maryland, Baltimore Schools of Nursing. This web site was developed to be a one-stop web resource for information on becoming a nurse and nurse educator, pursuing advanced education to become a nurse educator, and financial resources. A searchable Career Portal allows Maryland schools of nursing, hospitals and healthcare organizations to post open positions and educational events. Job seekers can search by position title, geographic location, and organization. LeadNursingForward.org

Both projects, LeadNursingForward.org and the Faculty Academy and Mentorship Initiative have received international recognition as high impact programs.

One final example of the far-reaching effects of the NSP II program, is the funding it provided to begin Salisbury University's Doctor of Nursing Practice (DNP) program. With two-entry points, one for those who already hold a master's degree in nursing and one for those with a bachelor's degree in nursing, the DNP program has helped Maryland double the number of individuals holding a doctoral degree. Among the 18 graduates since 2015 are family nurse practitioners, nurse leaders, and nurse faculty. Salisbury's DNP program is one of only two in the State offering a post-bachelor's entry option. This is a vitally important curriculum to encourage entry into advanced education at an earlier age and to provide a seamless transition to a doctoral degree.

These are just a few examples of how the NSP II program has helped address critical nursing and nurse educator workforce shortages to improve the quality of healthcare available to the citizens of Maryland. I highly recommend continued funding so that we can continue to address these healthcare challenges together.

Sincerely,

Lisa A. Seldomridge

Lisa A. Seldomridge, PhD, RN, CNE
Professor of Nursing
Director, Henson Medical Simulation Center
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November 7, 2019

Dr. Nelson J.Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Dr. Sabatini,

I am writing to provide a letter of support from the Salisbury University School of Nursing for the MHEC NSP II program continuation of funding for the nursing educational capacity and nurse faculty focused programs.

These programs have provided the means to support our nursing faculty achieve their terminal doctoral degrees, which is critical in the education of our future nurses within the State of Maryland. These funds have also supported the dissemination of research and doctoral projects from the faculties doctoral studies to support the evidence-based structure of the nursing profession. Without these funds, it would have been extremely difficult to assist these vital professionals the means to pursue their advanced degrees.

In addition, the NSP II funds have supported grant activities that have provided fantastic outcomes both for our university and throughout the State of Maryland. We have increased the numbers of qualified adjunct faculties and increased the availability for our students to receive top-notch educational standardized patient and simulation activities through the support of the NSP II funding.

In summary, I could go on and on with the contributions that we, the Salisbury University School of Nursing, have been able to make through the support of the NSP II funds. I sincerely hope that these funds remain available to continue ours and others programs to provide the highest quality faculty and nursing programs for the citizens of Maryland. This program enables us to provide superior nursing educations for our students and provides for faculty to

achieve their highest professional endeavors. These outcomes would not be possible without the support of the NSP II funds.

Again, please accept this letter of support for the NSP II funding. If you have any questions or need further information, please do not hesitate to ask.

Sincerely,

Jeffrey Willey, PhD, RN, CNS, CLNC, CNE
Director and Associate Professor
School of Nursing
Salisbury University
jawilley@salisbury.edu
410-543-6344

HAGERSTOWN COMMUNITY COLLEGE

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November 8, 2019

Mr. Nelson J. Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215
November 8, 2019

Dear Mr. Sabatini:

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

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

Also through one of the NSP grants, we were able to establish a Simulation network throughout the state through which we helped the other community colleges in Maryland to increase simulation in their nursing programs. In addition, through the NSP grants, we were able to purchase simulators and other simulation equipment which helped to enhance our own simulation program at HCC.

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

Sincerely,

Karen Hammond RN, MSN

Karen Hammond
Director of Nursing
Hagerstown Community College

HOOD COLLEGE
FREDERICK, MARYLAND

DEPARTMENT OF NURSING

November 7, 2019

Nelson J Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Ave
Baltimore, MD 21215

Dear Mr. Sabatini,

I am writing in support of continued funding for the NSP II Program. The NSP II grant that Hood College received, which is still in progress, has afforded us a substantial opportunity to bring baccalaureate nursing education to this area of Maryland, which helps to ease the nursing shortage. Baccalaureate prepared nurses are essential to the health of our communities, and are prepared to work in multiple settings, with many graduates working in medically underserved areas of Maryland and neighboring states and the District of Columbia.

In the short time the BSN pre-licensure program has been operating at Hood College, we have graduated two classes of students, one with 8 and the last in May 2019 of 20. Our enrollment has continued to grow and we continue to have more applicants than we can accommodate. This fall we admitted 40 students, and still turned away many. Funding from this grant has allowed us to hire doctorally prepared faculty, provide ongoing faculty support and education, and increase our enrollments to meet the needs of the surrounding communities and state. Without these funds, our program would not be able to grow to meet the ongoing need for nurses.

As a Maryland nurse and leader in nursing education, I fully endorse the continued funding of the NSP II grant to meet the health care needs of our state through providing quality nursing education.

Sincerely,

Linda J Kennedy

Linda J. Kennedy, PhD, RN, CNE
Chair, Nursing Program
Hood College

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Maryland
Hospital Association

December 2, 2019

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

Dear Mr. Ibarra:

On behalf of Maryland's 61 member hospitals and health systems, the Maryland Hospital Association appreciates the opportunity to comment on HSCRC staff's report on the Nurse Support Program II (NSP II) Outcomes Evaluation FY 2016 – FY 2020 and Draft Recommendations for Future Funding.

Addressing and preventing nursing shortages is a top priority for Maryland's hospitals. As you know, the NSP II program was established in 2005 as a complement to the Nurse Support Program I. Both programs are funded through an assessment on hospital regulated gross patient revenue. Maryland's hospitals support the goals of the NSP programs and applaud the achievements of NSP II outlined in HSCRC's report.

MHA fully supports HSCRC staff's recommendations to:

- Renew NSP II funding for five years, FY 2021 through FY 2025
- Establish a work group to recommend updates to statewide initiatives
- Continue established competitive institutional grants initiatives
- Form NSP I and NSP II advisory board to address common issues between academia and practice

MHA supports the intent of the recommendation to improve the infrastructure for nursing workforce data, but we are concerned about using NSP II funds for a Board of Nursing responsibility. Improving data efficiency of the Health Professional Boards has been consistently highlighted as an issue by the Department of Legislative Services during the budget process[1],

[1] Maryland General Assembly, Fiscal Year 2018, 2019, 2020 Operating Budget Documents,
http://mgaleg.maryland.gov/Pubs/BudgetFiscal/2018fy-budget-docs-operating-M00B0104-DHMH-Health-Professional-Boards-and-Commission.pdf
http://mgaleg.maryland.gov/Pubs/BudgetFiscal/2019fy-budget-docs-operating-M00B0104-MDH-Health-Professional-Boards-and-Commissions.pdf
http://mgaleg.maryland.gov/Pubs/BudgetFiscal/2020fy-budget-docs-operating-m00b0104-mdh-health-professional-boards-and-commissions.pdf

however the Health Professional Boards, to date, have not chosen to utilize board resources to address the issue.

The Maryland Department of Information Technology prioritizes the development, procurement, and implementation of enterprise systems in state government. These are systems and software packages that can be used by multiple entities that administer similar functions. As such, the fiscal year 2020 budget includes more than $375,000 to support the development and planning of a new integrated IT system for the Board of Nursing, the Board of Pharmacy, the Board of Dental Examiners, Board of Professional Counselors and Therapists, and the Board of Morticians and Funeral Directors—with the Board of Nursing as the lead entity. Data reporting capabilities should be included in the scope of that project, and the cost of the project should be shared by the five participating boards.

Maryland's hospitals are proud supporters of the NSP II program and fully support the first four recommendations in the commission staff's report. MHA respectfully requests the commission's consideration of the fifth recommendation considering the state's established efforts to reach the same goal using funding from participating state health occupation boards.

We appreciate the commission's consideration of our feedback. Should you have any questions, please call me at 410-379-6200.

Sincerely,

Erin M. Dorrien

Erin Dorrien
Director, Policy
Maryland Hospital Association

Final Recommendation for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs

December 11, 2019

Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

FAX: (410) 358-6217

This document contains the final staff recommendations for updating the Maximum Guardrail Policy

Contents

LIST OF ABBREVIATIONS

CMS	Centers for Medicare & Medicaid Services
CY	Calendar year
FFY	Federal fiscal year
FY/RY	State fiscal year/Rate year (July-June), which signifies the timeframe in which the rewards and/or penalties would be assessed. State rate year and fiscal year are used interchangeably.
HSCRC	Health Services Cost Review Commission
MHAC	Maryland Hospital-Acquired Conditions Program
PAU	Potentially avoidable utilization
PQI	Prevention quality indicator
QBR	Quality-based reimbursement
RRIP	Readmissions Reduction Incentive Program
VBP	Value-based purchasing

INTRODUCTION

The Maryland Health Services Cost Review Commission's (HSCRC's or Commission's) performance-based payment methodologies are important policy tools that provide strong incentives for hospitals to improve their quality performance over time. These performance-based payment programs hold amounts of hospital revenue at-risk directly related to specified performance benchmarks. Because of its long-standing Medicare waiver for its all-payer hospital rate-setting system, special considerations were given to Maryland, including exemption from the federal Medicare quality-based programs. Instead, the HSCRC implements various Maryland-specific quality-based payment programs, which are discussed in further detail in the background section of this report.

Maryland entered into an All-Payer Model Agreement with the Centers for Medicare & Medicaid Services (CMS) on January 1, 2014 and entered into a Total Cost of Care Model Agreement on January 1, 2019. One of the requirements under both agreements is that the proportion of hospital revenue that is held at-risk under Maryland's quality-based payment programs must be greater than or equal to the proportion that is held at-risk under national Medicare quality programs. Given Maryland's programs are fundamentally different from the nation in how revenue adjustments are determined (e.g., most Maryland programs have prospective incremental revenue adjustment scales with both rewards and penalties), the at-risk is measured both as potential risk (i.e., highest maximum penalty per program) and realized risk (absolute average of adjustments per program).

The purpose of this report is to make a recommendation for the maximum amount one hospital can be penalized during a rate year, otherwise known as the maximum revenue guardrail. The recommendations for the maximum penalties and rewards for each quality program are set forth in the individual policies rather than in an aggregate at-risk policy. In prior iterations of this policy, staff has recommended an overall guardrail amount based on the same calculation, i.e. percent at-risk under Medicare multiplied by the percent of Maryland revenue attributable to inpatient services. Moving forward staff proposes to use this formula unless otherwise directed, thereby eliminating the need for an annual policy recommendation. Staff will continue to provide Commissioners the calculated maximum penalty guardrail each fiscal year in a formal report. This final policy has been updated to provide the RY 2021 maximum guardrail and serves as this year's formal report.

BACKGROUND

1. Federal Quality Programs

In developing the recommendation for the maximum revenue guardrail, the staff first analyzed the aggregate revenue at-risk for Maryland's quality-based payment programs compared to the amount at-risk for the following national Medicare quality programs:

- The Medicare Hospital Readmissions Reduction Program (HRRP), which reduces payments to inpatient prospective payment system hospitals with readmissions in

excess of peer group.[1]

- The Medicare Hospital-Acquired Condition Reduction Program (HACRP), which ranks hospitals according to performance on a list of hospital-acquired conditions and reduces Medicare payments to the hospitals in the lowest performing quartile.[2]
- The Medicare Value Based Purchasing (VBP) Program, which adjusts hospitals' payments based on their performance on the following four hospital quality domains: clinical care, patient experience of care, safety, and efficiency.[3]

2. Maryland's Quality-Based Programs

As discussed in the introduction section of this report, Maryland is exempt from the federal Medicare hospital quality programs. Instead, Maryland implements the following quality-based payment programs:

- The Quality Based Reimbursement (QBR) program employs measures in several domains, including clinical care, patient experience, and safety. Starting in FY 2019, the QBR program revenue adjustments were linked to a preset scale instead of relatively ranking hospitals, which was designed to provide hospitals with more predictable revenue adjustments. For additional discussion on the QBR program, please refer to the RY 2021 QBR policy posted to the HSCRC website.

- The Maryland Hospital Acquired Conditions (MHAC) program measures hospital performance using 3M's potentially preventable complications. HSCRC calculates observed-to-expected ratios for each complication and compares them with statewide benchmarks and thresholds. As with the QBR program, the MHAC program uses a pre-set scale to provide hospitals with the ability to prospectively estimate revenue adjustments. For additional discussion on the MHAC program, please refer to the RY 2021 MHAC Policy posted to the HSCRC website.

- The Readmission Reduction Incentive Program (RRIP) establishes a readmissions reduction target, an attainment target, and a scale for rewards/penalties for hospitals. The statewide minimum improvement target is established to ensure the Medicare readmission rate remains below the national Medicare readmission rate. For additional discussion on the RRIP program, please refer to the RY 2021 Readmission policy posted to the HSCRC website.

- The Potentially Avoidable Utilization (PAU) Savings Program reduces each hospital's approved revenues prospectively based on performance associated with avoidable

[1] For more information on the Medicare Hospital Readmissions Reduction Program, see https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction- Program.html.

[2] For more information on the Medicare Hospital-Acquired Condition Reduction program, see https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction- Program.html.

[3] For information on the Medicare VBP program, see https://www.medicare.gov/hospitalcompare/Data/hospital- vbp.html.

admissions and readmissions. This adjustment is tied to hospital inpatient revenues prospectively as part of the annual update factor. For additional discussion on PAU Savings, please refer to the RY 2020 Update Factor posted to the HSCRC website.

ASSESSMENT

In order to develop the maximum revenue at-risk guardrail for quality programs, HSCRC staff considered CMS relevant policies, conducted analyses, and solicited input from the Performance Measurement Workgroup.[4]

Maximum Revenue at-risk Hospital Guardrail

As the HSCRC increases the maximum revenue adjustments statewide, the potential for a particular hospital to receive significant revenue reductions has raised concerns that such penalties may generate unmanageable financial risk. Similar to the risk corridors in other VBP programs, a maximum penalty guardrail may be necessary to mitigate the detrimental financial impact of unforeseen large adjustments in Maryland programs. Given the increases in risk levels in other programs, a hospital-specific guardrail will provide better protection than a statewide limit. Moving forward staff propose using the inpatient Medicare aggregate amount at-risk total as the benchmark to calculate the hospital maximum penalty guardrail (i.e., percent at-risk under Medicare multiplied by the percent of Maryland revenue attributable to inpatient services). This maximum revenue guardrail will apply to QBR, MHAC, RRIP, and net PAU Savings. The maximum guardrail calculation will not include the Medicare Performance Adjustment (MPA), as this is payer specific adjustment and if the MPA adjustment caused a hospital to exceed the quality guardrail that capping of revenue adjustment could reduce adjustments for other payers. Furthermore, to date no hospital penalties have reached the maximum revenue guardrail, and the MPA when expressed as a percent of all-payer revenue is relatively small. For reference, in RY 2020 the quality guardrail was 3.40 percent of total hospital revenue and the highest negative revenue adjustment was a 2.00 percent total revenue reduction or 2.47 percent of inpatient revenue (with the MPA this hospital maintains the highest reduction at 2.03 percent of total revenue). See Appendix B for hospital-specific net revenue adjustments across quality programs included in the maximum guardrail calculation. For RY2021, the maximum guardrail will be set at 3.42 percent of total hospital revenue. This calculation is based on FY 2019 estimates for percent of inpatient services.

[4] For more information on the Performance Measurement Workgroup, see https://hscrc.maryland.gov/Pages/hscrc-workgroup-performance-measurement.aspx

STAKEHOLDER COMMENTS AND RESPONSES

HSCRC staff received comment letters from both the Maryland Hospital Association and CareFirst BlueCross BlueShield expressing support for setting the max guardrail formula using the formula outlined in the recommendation. Further, CareFirst expressed support for the recommendation to not include the MPA in the calculation of the max guardrail.

Staff Response:

Staff appreciates the Maryland Hospital Association and CareFirst BlueCross BlueShield's support of the policy for setting the formula for calculating the max guardrail moving forward. Additionally, we appreciate the understanding surrounding the rationale for why we have not decided to include the MPA within the max guardrail calculation.

RECOMMENDATION

1. For RY 2021 and beyond, the maximum penalty guardrail should be set using the following formula:

   Percent of Medicare revenue at-risk for quality multiplied by the percent of Maryland revenue attributable to inpatient services[5]

2. Each fiscal year staff will provide the Commissioners in a formal report the calculated maximum penalty guardrail based on the calculation described above. For RY 2021, the maximum guardrail value will be set at 3.42 percent.

[5] The percent inpatient is determined based on data from historical time period

Appendix A. Comparison of the Aggregate Revenue At-Risk for Maryland and Medicare Quality Programs

After discussions with CMS, HSCRC staff performed analyses of both "potential" and "realized" revenue at-risk. Potential revenue at-risk refers to the maximum amount of revenue that is at-risk in the measurement year. Realized risk refers to the actual amounts imposed by the programs. The comparison with the national amounts is calculated on a cumulative basis. Exhibit 1 compares the potential amount of revenue at-risk in Maryland with the amount at-risk in the national programs. The difference between the national Medicare and Maryland all-payer annual amounts are summed after each year's experience to compare the annual difference.

The top half of Exhibit 1 displays the percentage of potential inpatient revenue at-risk in Maryland for all payers for each of Maryland's quality-based payment programs for RYs 2014 through 2021. The bottom half of the figure displays the percentage of potential national Medicare inpatient revenue at-risk for quality-based payment programs for FFYs 2014 through 2021. These potential at-risk numbers are the absolute values of the maximum penalty or reward.

Exhibit 1. Potential Revenue at-risk for Quality-Based Payment Programs, Maryland Compared with the National Medicare Programs, 2014-2021

Maryland - Potential Inpatient Revenue at Risk absolute values

% of MD All-Payer Inpatient Revenue	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018	RY 2019	RY 2020	RY 2021
MHAC	2.0%	3.0%	4.0%	3.0%	3.0%	2.00%	2.00%	2.00%
RRIP			0.5%	2.0%	2.0%	2.00%	2.00%	2.00%
QBR	0.5%	0.5%	1.0%	2.0%	2.0%	2.00%	2.00%	2.00%
Subtotal	**2.5%**	**3.5%**	**5.5%**	**7.0%**	**7.0%**	**6.0%**	**6.0%**	**6.0%**
PAU Savings	0.41%	0.49%	0.46%	3.69%	1.42%	1.29%	1.13%	*1.13%*
Medicare Performance Adjustment							0.24%	*0.48%*
MD Aggregate Maximum At Risk	**2.91%**	**3.99%**	**6.0%**	**10.7%**	**8.4%**	**7.3%**	**7.4%**	**7.6%**

PAU Savings and MPA are estimated for RY 2021

National - Potential Inpatient Revenue at Risk absolute values

% of National Medicare Inpatient Revenue	FFY 2014	FFY 2015	FFY2016	FFY2017	FFY2018	FFY2019	FFY2020	FFY2021
HAC		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Readmissions	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
VBP	1.3%	1.5%	1.8%	2.0%	2.0%	2.0%	2.0%	2.0%
Medicare Aggregate Maximum At Risk	**3.25%**	**5.5%**	**5.8%**	**6.0%**	**6.0%**	**6.0%**	**6.0%**	**6.0%**
Annual MD-US Difference	**-0.34%**	**-1.51%**	**0.21%**	**4.69%**	**2.42%**	**1.29%**	**1.37%**	**1.61%**

Exhibit 2. Realized Revenue at-risk for Quality-Based Payment Programs, Maryland Compared with the National Medicare Programs, 2014-2020

Maryland - Realized Inpatient Revenue at Risk

% of MD All-Payer Inpatient Revenue	RY 2014	RY 2015	RY 2016	RY 2017	RY 2018	RY 2019	RY 2020
MHAC	0.22%	0.11%	0.18%	0.40%	0.50%	0.25%	0.33%
RRIP			0.15%	0.57%	0.61%	0.58%	0.67%
QBR	0.11%	0.14%	0.30%	0.26%	0.59%	0.64%	0.6034%
Subtotal	0.34%	0.25%	0.63%	1.23%	1.70%	1.47%	1.60%
PAU Savings	0.29%	0.34%	0.30%	1.63%	0.57%	0.61%	0.62%
Medicare Performance Adjustment*							0.18%
MD Aggregate Maximum At Risk	**0.62%**	**0.59%**	**0.93%**	**2.86%**	**2.26%**	**2.08%**	**2.40%**

*Laurel's RY 2020 MPA is not included in the Aggregate at Risk calculations due to transition to FMF

National - Realized Inpatient Revenue at Risk absolute values

% of National Medicare Inpatient Reven	FFY	FFY	FFY2016	FFY2017*	FFY2018*	FFY2019*	FFY2020*
HAC (penalty only)		0.22%	0.23%	0.24%	0.24%	0.25%	*0.25%*
Readmits (penalty only)	0.28%	0.52%	0.51%	0.61%	0.56%	0.57%	*0.57%*
VBP	0.20%	0.24%	0.40%	0.51%	0.53%	0.51%	*0.51%*
Medicare Aggregate Maximum At Risk	**0.47%**	**0.97%**	**1.14%**	**1.36%**	**1.33%**	**1.34%**	***1.34%***
Annual MD-US Difference	**0.15%**	**-0.38%**	**-0.20%**	**1.50%**	**0.93%**	**0.74%**	***1.06%***

*HSCRC estimated CMS numbers based on publicly available files and this is subject to change. FFY 2020 uses FFY 2019 estimates.

In summary, staff estimate that Maryland outperformed the national programs in the potential and realized aggregate payment amounts for RY 2020. Maryland hospitals continued to improve their performance in reducing complications and readmissions. However, further reductions in revenue associated with PAU will be important for financial success under the Total Cost of Care model. Staff will continue to discuss the appropriate amounts for performance-based payment programs with the workgroups and other stakeholders.

Appendix B. Consolidated Net Revenue Adjustments for All Quality-Based Payment Programs for Rate Year 2020, by Hospital

Hospital ID	Hospital Name	RY2019 Total Permanent Revenue	MHAC % Inpatient	MHAC $	RRIP % Inpatient	RRIP $	QBR % Inpatient RY2020	QBR $ RY2020	PAU Savings % Inpatient	PAU Savings $ (net)	Net Dollar Impact	Total Impact % Total Revenue
		A									B	C=B/A
210064	LEVINDALE	$59,867,175	0.29%	$166,142	1.00%	$575,107			-0.19%	-$107,761	$633,488	1.06%
210058	UMROI	$120,383,835	0.44%	$321,557	1.00%	$723,503			0.00%	$0	$1,045,060	0.87%
210030	CHESTERTOWN	$53,535,766	0.27%	$47,627	1.00%	$178,599	0.62%	$110,732	-0.57%	-$101,718	$235,240	0.44%
210061	ATLANTIC	$107,225,177	0.38%	$139,521	1.00%	$369,319	0.54%	$199,432	-0.78%	-$289,508	$418,764	0.39%
210005	FREDERICK	$345,157,181	0.33%	$775,553	1.00%	$2,326,658	-0.23%	-$535,131	-0.55%	-$1,277,082	$1,289,998	0.37%
210051	DOCTORS	$247,543,706	0.62%	$877,920	1.00%	$1,410,943	-0.16%	-$225,751	-0.82%	-$1,163,455	$899,657	0.36%
210010	DORCHESTER	$46,645,024	0.62%	$140,957	1.00%	$226,538	-0.37%	-$83,819	-0.74%	-$167,922	$115,754	0.25%
210037	EASTON	$214,261,973	0.29%	$298,945	1.00%	$1,034,811	-0.43%	-$444,969	-0.41%	-$428,524	$460,263	0.21%
210035	CHARLES REGIONAL	$153,867,989	0.38%	$290,625	0.41%	$315,413	0.07%	$53,851	-0.70%	-$538,538	$121,351	0.08%
210063	UM ST. JOSEPH	$375,488,512	0.20%	$446,800	0.06%	$134,040	0.27%	$603,180	-0.40%	-$901,172	$282,848	0.08%
210043	BWMC	$432,711,982	0.11%	$278,019	0.87%	$2,176,891	-0.33%	-$825,717	-0.67%	-$1,687,577	-$58,384	-0.01%
210008	MERCY	$536,545,951	0.16%	$352,321	0.63%	$1,426,900	-0.46%	-$1,041,863	-0.47%	-$1,073,092	-$335,734	-0.06%
210040	NORTHWEST	$262,648,422	0.38%	$524,053	1.00%	$1,387,199	-0.71%	-$984,911	-0.81%	-$1,129,388	-$203,047	-0.08%
210057	SHADY GROVE	$436,099,746	0.00%	$0	0.90%	$2,265,734	-0.60%	-$1,510,489	-0.47%	-$1,177,469	-$422,224	-0.10%
210039	CALVERT	$146,163,780	0.40%	$268,448	-0.80%	-$536,896	0.86%	$577,163	-0.68%	-$453,108	-$144,393	-0.10%
210013	BON SECOURS	$112,784,456	0.22%	$143,030	1.00%	$643,633	-0.63%	-$405,489	-0.84%	-$541,365	-$160,191	-0.14%
210028	ST. MARY	$185,289,624	0.58%	$457,259	0.29%	$229,509	-0.41%	-$324,478	-0.80%	-$629,985	-$267,695	-0.14%
210012	SINAI	$764,180,996	0.13%	$533,090	1.00%	$3,998,177	-0.98%	-$3,918,213	-0.46%	-$1,834,034	-$1,220,980	-0.16%
210006	HARFORD	$104,913,929	0.44%	$240,805	-0.13%	-$70,436	0.28%	$151,707	-0.91%	-$493,095	-$171,019	-0.16%
210060	FT. WASH.	$50,264,400	0.78%	$154,703	1.00%	$198,904	-1.16%	-$230,728	-1.06%	-$211,110	-$88,231	-0.18%
210027	W. Maryland	$325,414,055	0.16%	$263,608	0.37%	$627,009	-0.46%	-$779,525	-0.56%	-$943,701	-$832,609	-0.26%
210044	GBMC	$460,191,024	-0.18%	-$422,733	0.46%	$1,093,822	-0.36%	-$856,034	-0.46%	-$1,104,458	-$1,289,403	-0.28%

Final Recommendations for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs

Hospital ID	Hospital Name	RY2019 Total Permanent Revenue	MHAC % Inpatient	MHAC $	RRIP % Inpatient	RRIP $	QBR % Inpatient RY2020	QBR $ RY2020	PAU Savings % Inpatient	PAU Savings $ (net)	Net Dollar Impact	Total Impact % Total Revenue
		A									B	C=B/A
210018	MONTGOMERY GENERAL	$176,329,979	0.49%	$414,195	0.12%	$101,666	-0.51%	-$432,080	-0.71%	-$599,522	-$515,741	-0.29%
210023	ANNE ARUNDEL	$617,272,369	0.56%	$1,636,358	-0.42%	-$1,237,087	-0.25%	-$736,361	-0.50%	-$1,481,454	-$1,818,544	-0.29%
210045	MCCREADY	$14,249,481			-0.75%	-$17,024			-1.13%	-$25,649	-$42,673	-0.30%
210009	JOHNS HOPKINS	$2,422,312,771	0.33%	$4,855,625	0.07%	$1,019,681	-0.57%	-$8,303,118	-0.37%	-$5,329,088	-$7,756,900	-0.32%
210038	UMMC MIDTOWN	$223,331,473	0.44%	$493,960	0.20%	$222,282	-0.53%	-$589,047	-0.78%	-$870,993	-$743,798	-0.33%
210016	WASHINGTON ADVENTIST	$275,917,609	0.18%	$291,906	0.17%	$279,135	-0.35%	-$574,690	-0.59%	-$965,712	-$969,361	-0.35%
210049	UPPER CHESAPEAKE	$311,867,570	0.49%	$629,132	-0.61%	-$784,985	0.14%	$180,161	-0.87%	-$1,122,723	-$1,098,415	-0.35%
210048	HOWARD	$299,669,481	0.33%	$609,570	-0.30%	-$548,613	-0.20%	-$365,742	-0.54%	-$988,909	-$1,293,694	-0.43%
210017	GARRETT	$60,636,352	0.80%	$189,715	-0.91%	-$215,801	-0.66%	-$156,515	-0.61%	-$145,527	-$328,128	-0.54%
210029	HOPKINS BAYVIEW	$671,715,144	0.40%	$1,466,431	-0.10%	-$366,608	-0.91%	-$3,336,129	-0.59%	-$2,149,488	-$4,385,794	-0.65%
210015	FRANKLIN SQUARE	$545,849,179	-0.13%	-$409,198	-0.80%	-$2,455,188	0.38%	$1,166,214	-0.73%	-$2,237,982	-$3,936,154	-0.72%
210062	S. MARYLAND	$270,197,319	-0.49%	-$792,430	0.77%	$1,248,076	-0.81%	-$1,312,912	-0.68%	-$1,107,809	-$1,965,075	-0.73%
210011	ST. AGNES	$414,960,504	0.16%	$371,401	0.08%	$191,006	-0.84%	-$2,005,565	-0.73%	-$1,742,834	-$3,185,992	-0.77%
210033	CARROLL	$227,083,963	0.22%	$311,760	-0.48%	-$673,401	-0.24%	-$336,700	-0.76%	-$1,067,295	-$1,765,636	-0.78%
210024	UNION MEMORIAL	$414,187,673	0.00%	$0	0.66%	$1,604,834	-1.39%	-$3,379,878	-0.61%	-$1,491,076	-$3,266,120	-0.79%
210002	UMMS	$1,728,168,161	0.27%	$3,209,797	-0.03%	-$361,102	-1.09%	-$13,120,045	-0.30%	-$3,629,153	-$13,900,503	-0.80%
210065	HOLY CROSS GERMANTOWN	$103,680,716	0.67%	$393,749	-0.81%	-$478,405	-0.82%	-$484,311	-0.58%	-$342,146	-$911,113	-0.88%
210019	PENINSULA	$440,472,737	-0.04%	-$110,768	-0.86%	-$2,143,363	-0.24%	-$598,148	-0.55%	-$1,365,465	-$4,217,744	-0.96%

Final Recommendations for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs

Hospital ID	Hospital Name	RY2019 Total Permanent Revenue	MHAC % Inpatient	MHAC $	RRIP % Inpatient	RRIP $	QBR % Inpatient RY2020	QBR $ RY2020	PAU Savings % Inpatient	PAU Savings $ (net)	Net Dollar Impact	Total Impact % Total Revenue
		A									B	C=B/A
210022	SUBURBAN	$323,715,549	0.38%	$789,383	-0.44%	-$919,399	-1.13%	-$2,361,183	-0.43%	-$906,404	-$3,397,603	-1.05%
210056	GOOD SAM	$258,484,446	0.00%	$0	-0.39%	-$572,916	-0.68%	-$998,931	-0.83%	-$1,214,877	-$2,786,724	-1.08%
210032	UNION OF CECIL	$160,537,054	0.40%	$261,708	-1.64%	-$1,073,001	-0.65%	-$425,275	-0.76%	-$497,665	-$1,734,233	-1.08%
210004	HOLY CROSS	$500,698,497	0.67%	$2,370,725	-1.17%	-$4,160,622	-1.03%	-$3,662,770	-0.39%	-$1,401,956	-$6,854,623	-1.37%
210001	MERITUS	$362,368,543	-0.27%	-$585,471	-0.41%	-$900,162	-1.06%	-$2,327,249	-0.58%	-$1,268,290	-$5,081,172	-1.40%
210034	HARBOR	$187,602,544	0.00%	$0	-1.69%	-$1,865,625	-0.61%	-$673,391	-0.73%	-$806,691	-$3,345,707	-1.78%
210003	PG	$348,438,485	0.00%	$0	-0.47%	-$1,329,767	-1.53%	-$4,328,817	-0.47%	-$1,324,066	-$6,982,650	-2.00%
State	**Statewide**	**$16,900,932,303**	**0.23%**	**$22,695,798**	**0.05%**	**$5,298,988**	**-0.61%**	**-$59,633,534**	**-0.52%**	**-$50,336,836**	**-$81,975,584**	**-0.49%**

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November 19, 2019

Nelson J. Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Sabatini:

I write to provide CareFirst's comments on the HSCRC Staff's "Draft Recommendation for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs."

CareFirst supports the Staff's draft recommendation, which provides hospital protection against catastrophic performance on all policies in one performance year. We believe this approach is appropriate. Inclusion of performance on Quality Based Reimbursement, Maryland Hospital Acquired Conditions, Readmissions Reduction Incentive Program, and net Potentially Avoidable Utilization Savings is justified, as they are all all-payer programs regarding hospital quality. We support the HSCRC's exclusion of the Medicare Performance Adjustment from this policy recommendation, largely because it is payer-specific, does not specifically relate to quality metrics, and has an immaterial impact when considered in the context of total all-payer revenue at-risk.

Thank you for this opportunity to comment on the Maximum Revenue Guardrail for Maryland Hospital Quality Programs. We support the goals of this program and believe the current policies considered in the calculation are most appropriate.

Sincerely,

Maria Harris Tildon

Cc: Joseph Antos, Ph.D., Vice Chairman
Victoria Bayless
Stacia Cohen
John Colmers
James N. Elliott, M.D.
Adam Kane
Katie Wunderlich, Executive Director

Maryland
Hospital Association

November 22, 2019

Alyson Schuster, Ph.D.
Deputy Director, Quality Methodologies
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Dr. Schuster:

On behalf of the Maryland Hospital Association's 61 member hospitals and health systems, we appreciate the opportunity to comment on the Health Services Cost Review Commission's (HSCRC's) *Draft Recommendations for the Maximum Revenue Guardrail for Maryland Hospital Quality Programs.*

We agree with the commission's recommendations and appreciate staff's efforts to protect against unforeseen financial adjustments in Maryland's pay-for-performance programs.

We appreciate the commission's consideration of our feedback. We look forward to continuing to work with the commission on the maximum revenue guardrail for Maryland Hospital Quality Programs. Should you have any questions, please call me at 410-540-5087.

Sincerely,

Traci La Valle
Senior Vice President, Quality & Health Improvement

cc: Nelson J. Sabatini, Chairman
Joseph Antos, Ph.D., Vice Chairman
Victoria W. Bayless
Stacia Cohen, RN
John M. Colmers
James N. Elliott, M.D.
Adam Kane

Final Recommendations for Updating the Quality-Based Reimbursement Program for Rate Year 2022

December 11, 2019

Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215
(410) 764-2605
FAX: (410) 358-6217

This document contains the final staff recommendations for updating the Quality Based Reimbursement Program for RY 2022.

Table of Contents

List of Abbreviations

CDC	Centers for Disease Control & Prevention
CAUTI	Catheter-associated urinary tract infection
CDIFF	Clostridium Difficile infection
CLABSI	Central Line-Associated Blood Stream Infection
CMS	Centers for Medicare &e Medicaid Services
DRG	Diagnosis-Related Group
ED	Emergency Department
FFY	Federal Fiscal Year
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HSCRC	Health Services Cost Review Commission
IQR	Inpatient Quality Reporting
MRSA	Methicillin-Resistant Staphylococcus Aureus
NHSN	National Health Safety Network
PQI	Prevention Quality Indicators
QBR	Quality-Based Reimbursement
RY	Maryland HSCRC Rate Year (Coincides with State Fiscal Year (SFY) July-Jun; signifies the timeframe in which the rewards and/or penalties would be assessed)
SIR	Standardized Infection Ratio
SSI	Surgical Site Infection
THA/TKA	Total Hip and Knee Arthroplasty Risk Standardized Complication Rate
VBP	Value-Based Purchasing

EXECUTIVE SUMMARY

This document puts forth the RY 2022 Quality-Based Reimbursement (QBR) final policy recommendations that include maintaining the RY 2021 quality domains, scoring approach, and pre-set revenue adjustment scale. This final recommendation also proposes minimal changes to the program measures, as outlined below.

Final Recommendations for RY 2022 QBR Program

1. Implement the following measure updates:
    A. Remove the ED-2b measure commensurate with its removal from the CMS Inpatient Quality Reporting (IQR) program.
    B. Through the work of the QBR Redesign Sub Group, consider options for re-adopting ED Wait Time measures into the program for the RY 2023 policy and beyond.
2. Continue Domain Weighting as follows for determining hospitals' overall performance scores: Person and Community Engagement - 50 percent, Safety (NHSN measures) - 35 percent, Clinical Care - 15 percent.
3. Maintain the pre-set scale (0-80 percent with cut-point at 41 percent), and continue to hold 2 percent of inpatient revenue at-risk (rewards and penalties) for the QBR program.

INTRODUCTION

Since 2014, Maryland hospitals have been funded under Population-Based Revenue, a fixed annual revenue cap that is adjusted for inflation, quality performance, reductions in potentially avoidable utilization, market shifts, and demographic growth. Under the Population-Based Revenue system, hospitals are incentivized to transition services to the most appropriate setting within the continuum of care, and may keep savings that they achieve via improved quality of care (e.g., reduced avoidable utilization, readmissions, hospital-acquired infections). It is important that the Commission ensure that any incentives to constrain hospital expenditures do not result in declining quality of care. Thus, the Maryland Health Services Cost Review Commission's (HSCRC's or Commission's) Quality programs reward quality improvements that reinforce the incentives of the Population-Based Revenue system, while guarding against unintended consequences and penalizing poor performance.

The HSCRC's Quality Based Reimbursement (QBR) program is one of several pay-for-performance initiatives that provide incentives for hospitals to improve patient care and value over time. Under the current Total Cost of Care (TCOC) Model Agreement between Maryland and the Centers for Medicare & Medicaid Services (CMS), Maryland's QBR program has no stated performance requirements. However, the Commission has prioritized aligning the QBR program with the federal Value Based Purchasing (VBP) program, and has attempted to encourage improvement in areas where Maryland has exhibited poor performance relative to the nation.

Under the TCOC Model, the State must request exemptions from the CMS Hospital Acquired Conditions (HAC) program, Hospital Readmission Reduction program (HRRP), and Hospital Value-Based Purchasing (HVBP) program based on annual reports to CMS that demonstrate that Maryland's program results continue to be aggressive and progressive, i.e. meeting or surpassing those of the nation. HSCRC submitted a report this year with its exemption request and received notification from CMS on August 29, 2019 that the exemptions were granted for Federal Fiscal Year 2020.[1] With Maryland's continued exemption from the federal VBP program, the State (via the HSCRC) can continue to generate autonomous, quality-based measurement and payment initiatives that set consistent all-payer quality incentives.[2] .

The QBR program measures and domains are similar to those of the VBP program, but there are a few differences. Most notably, QBR does not include an Efficiency domain, as efficiency is more directly measured in other HSCRC methodologies, including, the Potentially Avoidable Utilization program, the Medicare Performance Adjustment, and the Integrated Efficiency policy. Another key difference is that the HSCRC has put higher weight on the Person and Community Engagement and Safety domains to encourage improvement on measures of patient experience.

[1] The notification of exemption may be found in Appendix I

[2] For more information on the VBP Exemption (granted annually by CMMI), please see Appendix I.

Generally though the HSCRC tries to align the QBR program to measures of national import, and where feasible the Commission incorporates more comprehensive measurement relative to the VBP program,[3] most notably an all-cause, inpatient Maryland mortality measure versus VBP's condition-specific 30-day mortality measures.[4]

Finally, it is important to note that Maryland has begun the work to update performance standards and targets in HSCRC's portfolio of quality and value-based payment programs with the onset of the Total Cost of Care (TCOC) Model Agreement with CMS. Per directives from HSCRC Commissioners,[5] staff worked with stakeholders last year to revise two of the Commission's Quality programs, the Maryland Hospital Acquired Conditions program and the Potentially Avoidable Utilization program.[6] This year, staff is working with stakeholders to redesign the Readmissions Reduction Incentive Program for RY 2022 (Performance Period - CY 2020). The QBR program will include minor updates this year, but will largely remain similar to prior iterations of the policy, as it is slated for redesign for next year. For more information on suggested areas of analysis for the future QBR redesign, please see "QBR Future Updates" or follow along with our work over the coming calendar year.

This report provides final recommendations for updates to Maryland's QBR program for Rate Year (RY) 2022, with minimal updates from RY 2021.

BACKGROUND

The Affordable Care Act established the hospital Medicare Value-Based Purchasing (VBP) program,[7] which requires CMS to reward hospitals with incentive payments for the quality of care provided to Medicare beneficiaries. Figure 1 below compares the RY 2021 QBR measures--with changes noted from RY 2020— and domain weights to those used in the CMS VBP program.

[3] For more information on the VBP program, see https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing.html, last accessed 10/28/19.
[4] During the coming year, staff will work with contractor support to continue developing an all-cause, all-condition 30-day mortality measure applicable to all payers, expanding further the QBR mortality measure's potential to incentivize better outcomes outside the hospital walls.
[5] In the fall of 2017, HSCRC Commissioners and staff support conducted several strategic planning sessions to outline priorities and guiding principles for the upcoming Total Cost of Care Model. Based on these sessions, the HSCRC developed a Critical Action Plan that delineates timelines for review and possible reform of financial and quality methodologies, as well as other staff operations.
[6] Maryland has implemented an efficiency measure in the Population-Based Revenue system, based on a calculation of potentially avoidable utilization (PAU), but it has not made efficiency part of its core quality programs as a domain because the revenue system itself incentivizes improved efficiency. PAU is currently defined as the costs of readmissions and a subset of admissions defined by the Agency for Healthcare Research and Quality Prevention Quality Indicators (PQIs).
[7] Details of CMS VBP measures may be found at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html.

Figure 1. RY 2021 QBR Measures with Changes from RY 2020, Domain Weights Compared with CMS VBP Program

	Maryland QBR Domain Weights and Measures	CMS VBP Domain Weights and Measures
Clinical Care	15 percent -2 measures: all cause inpatient Mortality, THA/TKA complications measure (newly adopted RY 2021)	25 percent -5 measures: 4 condition-specific Mortality, THA/TKA complications measure
Person and Community Engagement	50 percent- 9 measures: 8 HCAHPS measures; ED-2b wait time measure (ED-1b removed after RY 2020)	25 percent- 8 HCAHPS measures (no ED Wait Time measures)
Safety	35 percent -5 measures: CDC NHSN HAI	25 percent 5 measures: CDC NHSN HAI
Efficiency	N/A	25 percent-Medicare Spending Per Beneficiary measure

With the selected measures from above, the QBR program assesses hospital performance on an all-payer basis. Performance standards are based on the national average (threshold) and the top performance values (benchmark) for all measures, with the exception of HSCRC calculated in-hospital mortality rate, which uses State data to calculate performance standards. Thus, a score of 0 percent means that performance on all measures is below the national average or not improved, while a score of 100 percent means performance on all measures is at or better than the top 5 percent best performing hospitals. This scoring methodology is the same as the national VBP program. However, unlike the VBP program that then relatively ranks all hospitals, the QBR program uses a preset scale to determine each hospitals revenue adjustment.

In the RY 2019 QBR recommendation, the Commission approved using a preset scale based on national performance to ensure that QBR revenue adjustments are linked to Maryland hospital performance relative to the nation. Prior to RY 2019, Maryland hospitals were evaluated by national thresholds and benchmarks, but their scores were then scaled in accordance with Maryland performance, resulting in Maryland hospitals receiving financial rewards despite falling behind the nation in performance. Consequently, the scale is now 0 to 80 percent regardless of the score of the highest performing hospital in the State, and the cut-point at which a hospital earns rewards in RY 2021 is 41 percent. This reward and penalty cut-point was based on an analysis of FFY16-FFY18 National Value-Based Purchasing scores, which indicated the average national score using Maryland domain weights (i.e., without the Efficiency domain) was around 41 percent (range 39.9 to 42.7).

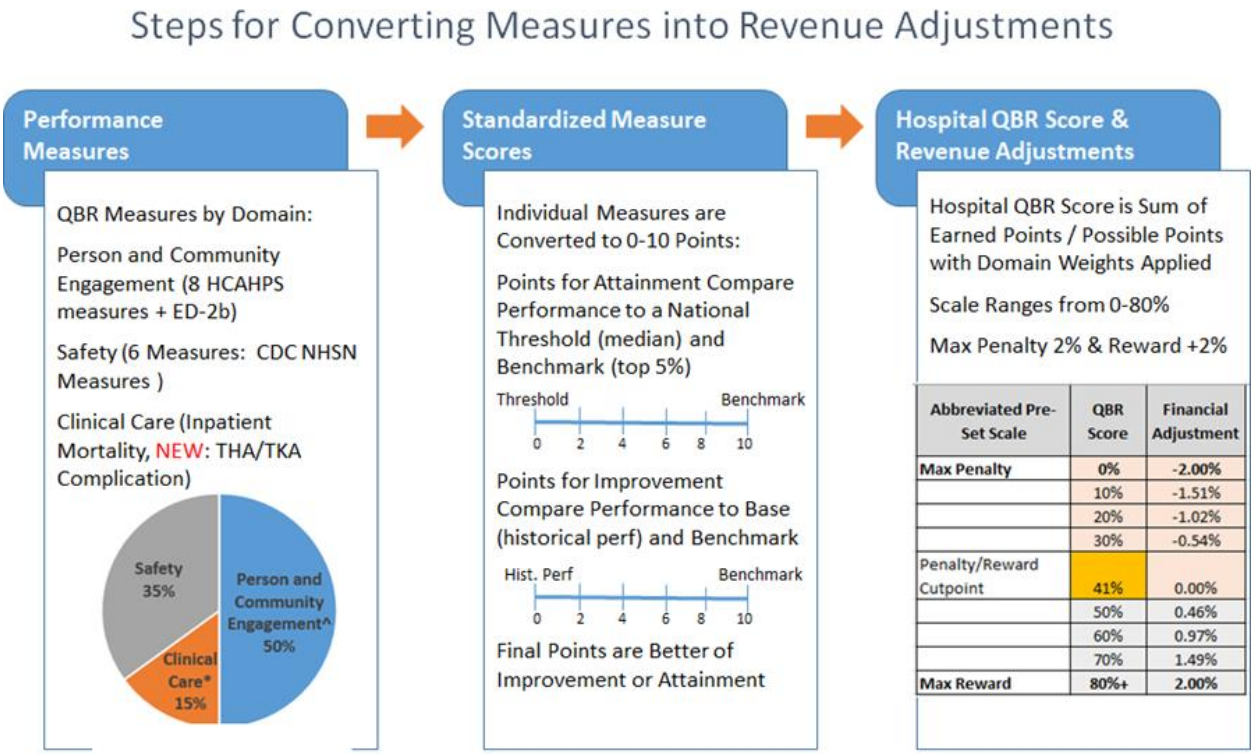
As a recap, the methodology for calculating hospital QBR scores and associated inpatient revenue adjustments has remained essentially unchanged since RY 2019, and involves:

1) assessing performance on each measure in the domain;
2) standardizing measure scores relative to performance standards;
3) calculating the total points a hospital earned divided by the total possible points for each domain;

4) finalizing the total hospital QBR score (0-100 percent) by weighting the domains based on the overall percentage or importance the Commission has placed on each domain; and
5) converting the total hospital QBR scores into revenue adjustments using the preset scale that ranges from 0 to 80 percent.

The methodology is illustrated in Figure 2 below.

Figure 2. Process for Calculating RY 2021 QBR Scores



Appendix II contains further background and technical details about the QBR and VBP programs.

ASSESSMENT

The purpose of this section is to present an assessment, using the most current data available, of Maryland's performance on measures used in QBR as well as other measures where national comparisons are available. The assessment, together with the deliberations of the Performance Measurement Workgroup (PMWG), serve as the basis for the recommendations for the RY 2022 QBR program. In addition, staff has modeled the QBR revenue adjustments with the recommended changes.

Maryland Performance by QBR Domain

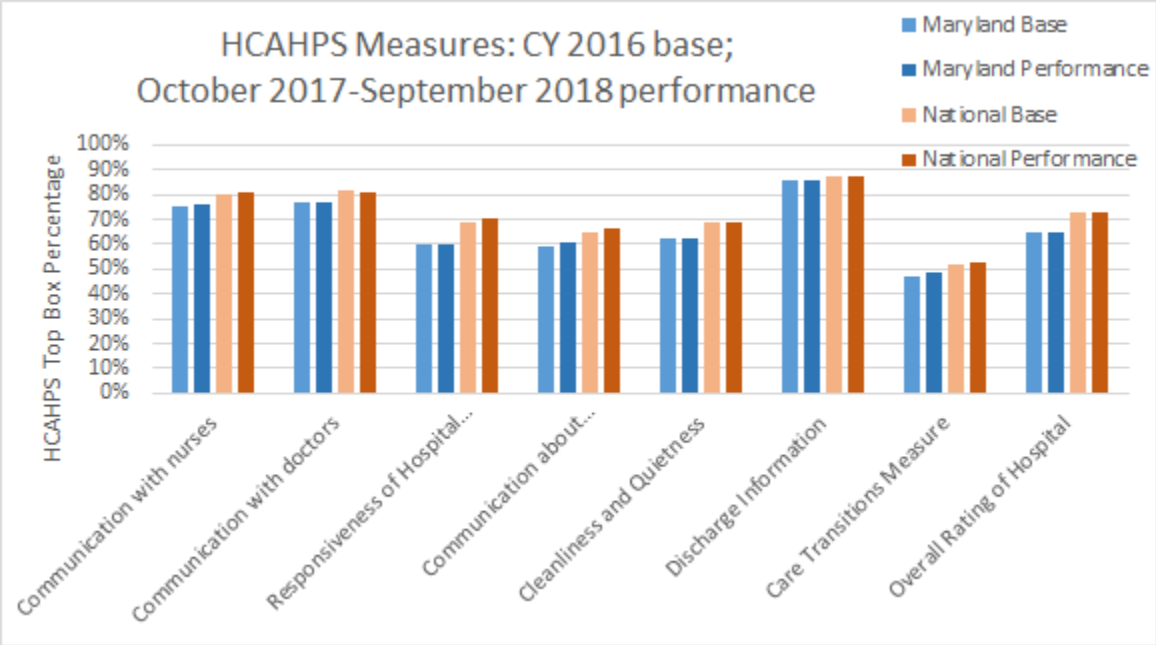
Person and Community Engagement Domain

During RY 2020, the **Person and Community Engagement** domain measured performance using the HCAHPS patient survey, as well as two emergency department wait time measures for admitted patients. The addition of the emergency department wait time measures was an example of Maryland's quality programs differing from the nation to target an area of concern.

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

Figure 3 below provides a graphic representation of the HCAHPS measure results for the RY 2020 base and performance periods for Maryland compared to the Nation, revealing that Maryland continues to lag behind the Nation, but both the Nation and Maryland are improving at similar rates overall.

Figure 3. HCAHPS Results: Maryland Compared to the Nation for RY 2020



For each HCAHPS measure, the changes over time from the base to the performance period for Maryland and the Nation, and the gaps in performance between Maryland and the Nation, are provided below.

- **Communication with nurses**- Maryland and the Nation both improved by 1 percent, and the gap remained the same with Maryland -5 percent below (worse than) the Nation.
- **Communication with doctors**- Maryland remained the same, while the Nation decreased by 1 percent, and the gap lessened for Maryland from -5 percent to -4 percent below the Nation.

- **Responsiveness of hospital staff-** Maryland remained the same while the Nation improved by 1 percent, and the gap widened for Maryland from -9 percent to -10 percent below the Nation.
- **Communication about medicine** Maryland improved by 1 percent and the Nation remained the same, and the gap decreased for Maryland from -6 percent to -5 percent below the Nation.
- **Cleanliness and quietness-** Maryland and the Nation remained the same, and the gap remained the same for Maryland at -6 percent below the Nation.
- **Discharge information-** Maryland and the Nation remained the same, and the gap remained the same for Maryland at -1 percent below the Nation.
- **Care transition measure-** Maryland improved by 2 percent and the Nation improved by 1 percent, and the gap decreased for Maryland from -5 percent to -4 percent below the Nation.
- **Overall rating of hospital-** Maryland and the Nation remained the same, and the gap remained the same for Maryland at -8 percent below the Nation.

While the statewide data suggests that Maryland continues to lag behind the Nation on HCAHPS measures, there is variability in performance across individual hospitals, with some performing better than the national average on each measure. Furthermore, while the statewide improvements were modest, there were individual hospitals with significant improvements on each measure (Appendix III). Nevertheless, staff remains concerned about overall statewide performance relative to the Nation and will continue to consider additional incentive structures to improve performance as part of the QBR redesign.

An additional concern raised by hospitals is the potential impact of the HCAHPS patient mix adjustment changes between the base and performance periods at the federal level This adjustment, which accounts for the probability of a patient's positive response on a survey relative to other sets of patients, e.g. 55-64 year olds versus individuals over 85, should ideally be consistent in the base and performance periods. However, CMS has advised staff that these changes occur on an ongoing basis and are not considered materially significant for the VBP program. Further, staff believes that the changes in any given year may slightly benefit or disadvantage each hospital on their respective QBR scores, but recognizes that the use of the prospective preset scale may make this issue more of a concern in Maryland. [8] Therefore, staff proposes again to work with QBR redesign subgroup to be convened in CY 2020 and the PMWG to evaluate the impact, if any, of the patient mix adjustment changes for RYs 2019 through 2021, but does not believe retrospective revenue adjustments are warranted at this time. Staff may re-visit this position with the Commission should analysis determine the patient mix adjustment changes are materially significant.

[8]The Patient-Mix Adjustment document for the July 2019 Public Report period can be found at: : https://hcahpsonline.org/globalassets/hcahps/mode-patient-mix-adjustment/july_2019_mode--patient-mix-adj_pma.pdf.
The HCAHPS PMA model was updated to add Question 28, patient's self-reported overall mental or emotional health, beginning with July 1, 2018 discharges. The new PMA variable is called Self-Rated Mental Health. In addition, the label for overall health has been changed to "Self-Rated Overall Health."
Self-Rated Mental Health follows the same linear parameterization as Self-Rated Overall Health: patient responses are coded as 1 ("Excellent") through 5 ("Poor"). The patient-mix adjustment model will thus include both Self-Rated Overall Health and Self-Rated Mental Health.

Emergency Department Wait Times

Emergency Department wait time measures have been publicly reported nationally on Hospital Compare since 2012 for patients admitted (ED-1b and ED-2b), and since 2014 for patients treated and released (OP-18b). The measure definitions are provided below in Figure 4. Based upon Maryland's sustained poor performance on these ED throughput measures, the Commission voted to include the two ED Wait Time measures for admitted patients as part of the QBR program for RY 2020.[9] As CMS has discontinued mandatory data collection for ED-1b after CY 2018, this measure was removed from QBR for the RY 2021 policy; further, the ED-2b measure will be removed from CMS mandatory data submission requirements after CY 2019, necessitating its removal from the RY 2022 QBR program.

Figure 4. CMS ED Wait Time Measures

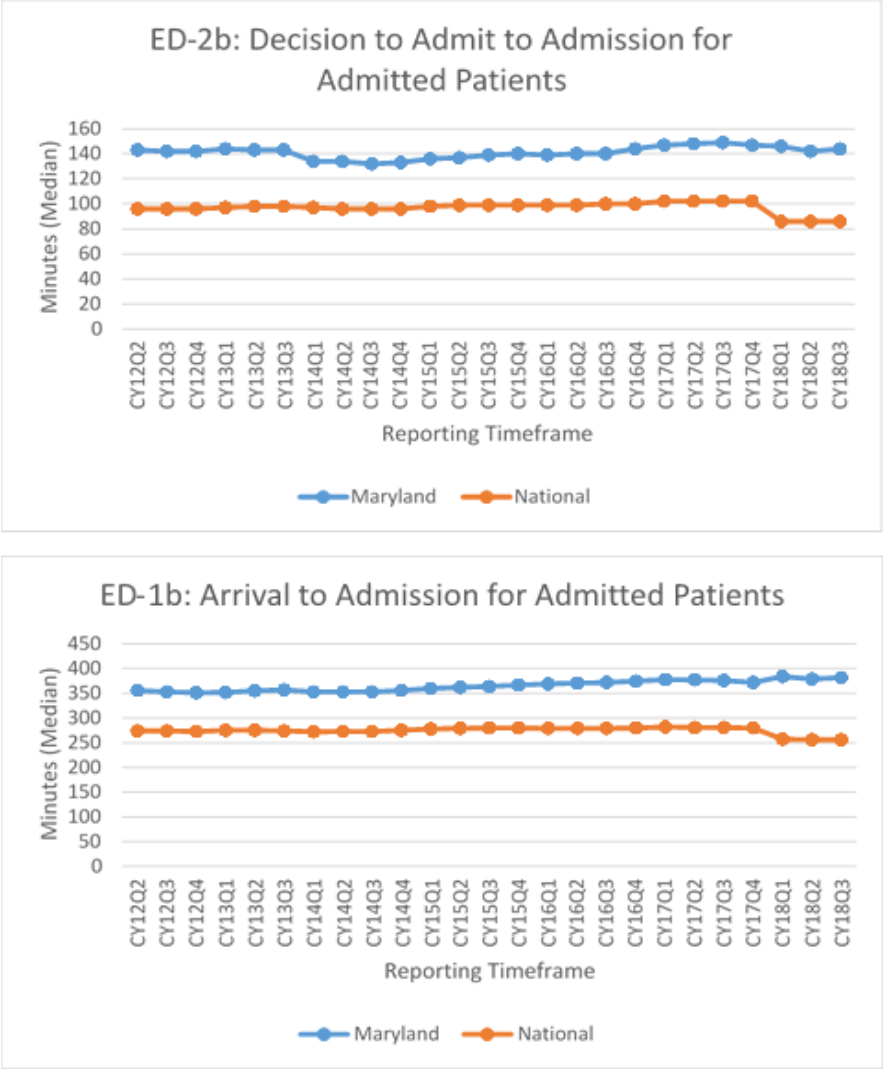
Measure ID	Measure Title
ED-1b	Median time from emergency department arrival to emergency department departure for admitted emergency department patients
ED-2b	Admit decision time to emergency department departure time for admitted patient
OP-18b*	Emergency department arrival time to departure time for discharged patients.

*OP-18 was not included in the RY 2021 Program. OP-18b strata includes non-psychiatric patients and OP-18c strata includes psychiatric patients.

Staff notes that the data trends to date do not reveal any positive impact since adding the measures to the QBR program. Based upon analysis of the RY 2020 QBR performance period (October 2017 through September 2018), Maryland continues to perform poorly on the ED Wait Time measures compared to the nation, as illustrated in Figure 5 below. At the hospital level, the most recent data show approximately 86 percent of Maryland hospitals perform worse than the national median in ED Wait Times, as compared to 85.7 percent of hospitals performing worse on ED-1b and 78.6 percent performing worse on ED-2b when these measures were first put in pay for performance programs two years ago.

[9] 91 percent of Maryland hospitals perform worse than the nation in ED-1b, 77 percent perform worse than the nation in ED-2b, and 91 percent perform worse on OB-18b. The median wait times are adjusted based upon ED volume. These results are similar to the 85 percent average reported in RY2021 policy.

Figure 5. Maryland Statewide ED Wait Time Trends for Admitted Patients Compared to the Nation, Q2 2012 to Q32018.

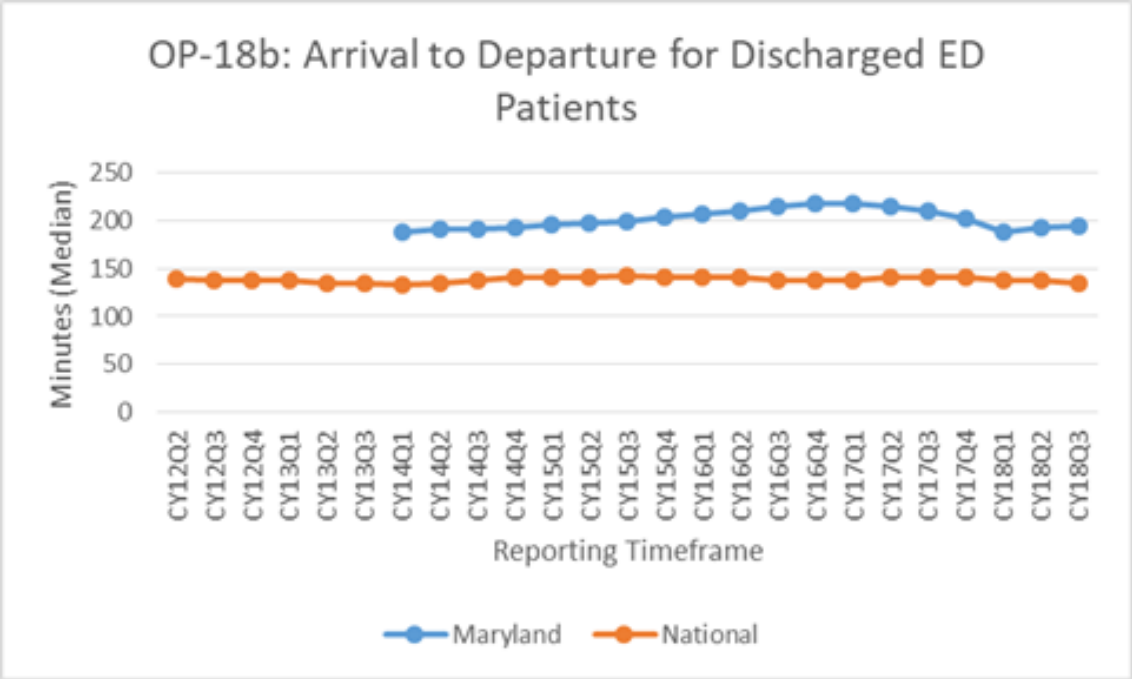


As staff notes above, for the RY 2022 QBR program, since CMS has discontinued mandatory reporting of the ED-2b measure after CY 2019, this measure will no longer be available on Hospital Compare for use. With the redesign of the QBR program for RY 2023, staff proposes to consider alternative data source options for re-adoption of ED Wait Time measures for admitted patients, such as the data submitted by hospitals to CMS specified as Electronic Clinical Quality Measures (eCQM).

With stakeholder interest continuing this year to retain ED Wait Time measures, particularly payer and consumer stakeholders, staff and the PMWG reconsidered whether to propose inclusion of OP-18b (non-admitted patients) for RY 2022. Maryland has performed poorly compared to the nation on the wait time for non-admitted/discharged patients as illustrated in

Figure 6. While some stakeholders voiced support for inclusion of the OP-18b measure last year, others suggested the measure is at odds with hospitals' efforts to reduce inpatient admissions and the time needed for care coordination in the ED.

Figure 6. Maryland Performance Compared to the Nation on OP-18b, CY 2014 Qtr 1-CY 2018 Qtr 3



Last year, staff noted its intent to monitor performance on the OP-18b measure over the coming program year. Staff noted it would reconsider inclusion of OP-18b in the future if "spillover" improvements from implementing the wait time measures for admitted patients were not seen in outpatient/non-admitted ED Wait Times, particularly in light of the fact that Maryland's higher wait times are paired with declining statewide ED visits. Conversely, staff acknowledged that a factor impacting the measure is related to difficulties with the behavioral health system in the State, such as the need for improvement in the behavioral health system infrastructure and labor shortages, which exacerbate emergency department throughput problems; however these issues are not unique to Maryland. Staff, therefore, proposed to reconsider adoption of the OP-18b measure as part of the process to redesign the QBR program during CY 2020 and to continue to monitor performance on this measure. With the data lag time, this will allow for two years of data to be analyzed where at least one ED Wait Time measure for admitted patients was included in the program. Staff has received stakeholder feedback on the draft policy which is summarized in the Stakeholder Feedback and Staff Response section below; staff does not at this time recommend adopting the OP-18b measure for RY 2022.

Finally, staff notes that, in the FFY 2020 notification of exemption from CMS quality programs, CMS acknowledged the challenges around improving patient experience, and were supportive of

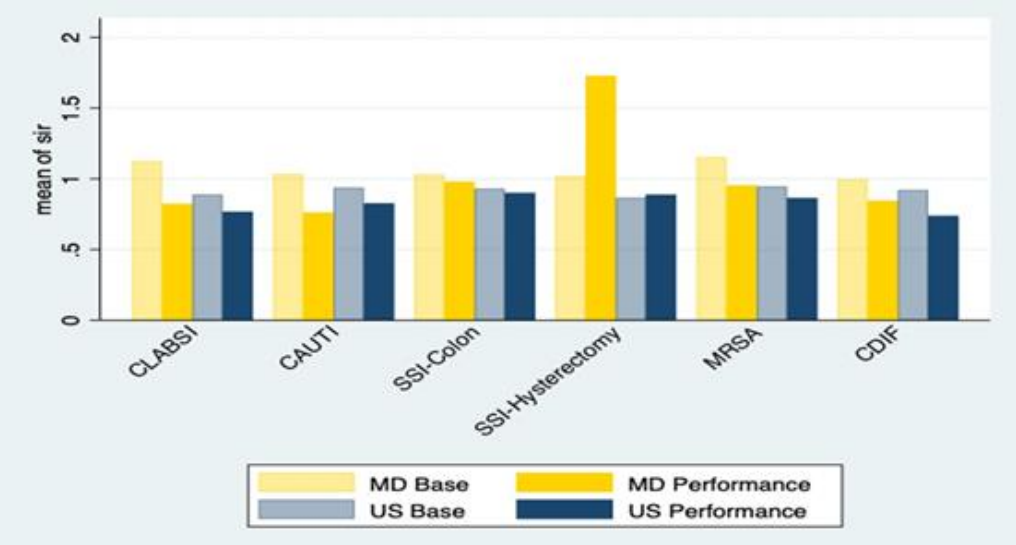
"...maintaining the highest weight for the person and community engagement component along with the one emergency department wait time measure (ED-2b) if publicly reported."

Based on the analysis of the Person and Community Engagement domain as well as stakeholder feedback, HSCRC staff recommends continuing to weight this domain at 50 percent of the QBR score, with the HCAHPS measures remaining in the domain. Staff proposes to consider ED Wait Time measure options as part of the QBR redesign during CY 2020 with potential re-adoption of measures for RY 2023 and beyond.

Safety Domain

The **Safety** domain consists of five CDC National Health Safety Network (NHSN) healthcare associated infection (HAI) measures. As illustrated in Figure 7 below, Maryland's performance on the NHSN measures has been mixed (lower scores are better). Average hospital standardized infection ratios (SIRs) for five of the six HAI categories declined (improved) both nationally and for Maryland in the performance period compared to the base.[10] Maryland's improvement from the base was better than that of the nation for three of the six infection categories (Central Line Associated Blood Stream Infection-CLABSI, Catheter Associated Urinary Tract Infection-CAUTI, Methicillin Resistant Staph aureus- MRSA) and on par with the nation for two measures (Clostridium difficile-CDIFF, Surgical Sight Infection Colon- SSI Colon). Additionally, in the performance period, Maryland's infection rates were better (lower) for CAUTI; slightly worse (higher) for CLABSI, SSI colon, MRSA, and CDIFF; and, markedly worse for Surgical Sight Infection hysterectomy.

Figure 7. Maryland vs. National Median Hospital SIRs on NHSN HAI Safety Measures (Base period Calendar Year 2016, Performance period October 1, 2017 to September 30, 2018)



[10] While there are six Healthcare Associated Infection categories, the two SSI colon and hysterectomy categories are combined resulting in five Safety domain measures.

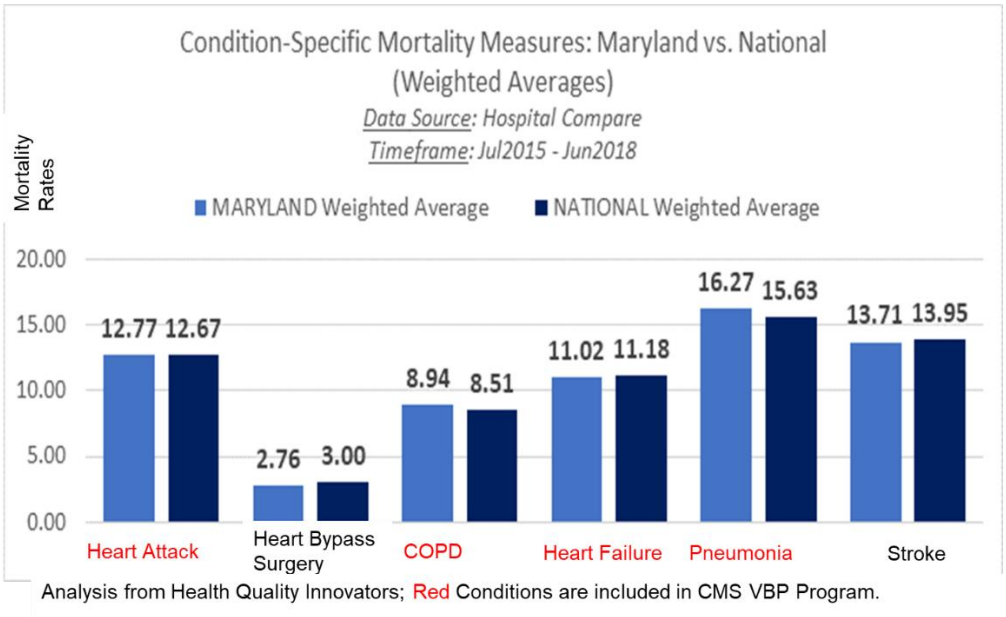
Staff recommends continuing to weight the Safety domain at 35 percent of the total QBR score (10 percent greater than the 25 percent in CMS VBP).

Clinical Care Domain

The QBR **Clinical Care** domain consists of one all-payer, all-cause, all-condition inpatient mortality measure, while the Medicare VBP program includes four 30-day condition-specific mortality measures (Heart Attack, Heart Failure, Pneumonia, and COPD). Medicare also monitors two additional 30-day mortality measures for Coronary Artery Bypass Graft and Stroke, but does not include these measures in VBP. Both QBR and VBP include the Total Hip and Knee Arthroplasty (THA/TKA) complication measure on Medicare patients with elective primary procedures.

Based on the analysis of the weighted average rates for Maryland versus the nation for the condition specific mortality measures provided by Health Quality Innovators, Maryland performs similarly to the nation for all condition-specific measures of 30-day mortality (Figure 8).

Figure 8. Maryland Hospital Performance Compared with the nation on CMS Condition-Specific Mortality Measure Rates



For the QBR all-payer inpatient mortality measure for RY 2020, statewide survival rate increased (improved) from 0.9553 in the base period to 0.9617 in the performance period. As illustrated in Figure 9 below, all but three hospitals earned points for either attainment or

improvement on the mortality measure; 33 hospitals performed better than the statewide benchmark (50th percentile) as they earned at least one attainment point.

Figure 9. Maryland Hospital Performance, FY 2020 QBR Inpatient All Condition, All Payer Mortality Measure

Number of Hospitals Scoring Points		Attainment Points	
		Yes	No
Improvement Points	Yes	24	9
	No	9	3

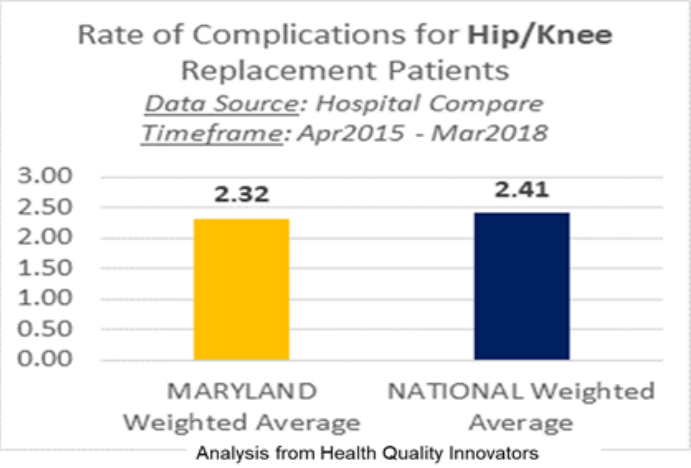
Attainment summary:
6 Hospitals better than benchmark (statewide 95th percentile)
12 Hospitals worse than threshold (statewide median)

For RY 2022, staff is not proposing any significant methodology changes to the inpatient mortality measure. However, Johns Hopkins and University of Maryland have brought to our attention two technical adjustments that the staff will implement - these are minor adjustments to align the measure with the original intent of the 80 percent DRG inclusion, and to update the exclusions to accommodate recent ICD-10 updates.[11] Other stakeholder comments on the inpatient measure will be considered during the QBR redesign, and as part of the development of the 30-day all-payer, all-condition mortality measure. Staff have been working with contractor support to develop the new mortality measure and will vet the measure with the QBR redesign subgroup and the PMWG during the course of the coming year, with potential plans for inclusion of the measure in the RY 2023 QBR program.

For the hip and knee complication rate measure for RY 2020, Figure 10 illustrates that, based on analysis of the weighted average rates for Maryland and the nation, Maryland performed on par with the nation.

[11] Two technical changes to the mortality measure are: 1. adding the procedure code for removing ECMO patients previously identified only by DRG (under ICD-10 ECMO patients are now in multiple DRGs); 2. adjusting the process for selecting the included DRGs to ensure all DRGs with same number of observed deaths at the cut-point are included.

Figure 10. Maryland THA/TKA Measure Performance Compared to the Nation



Since this measure is calculated by Hospital Compare using Medicare claims data and includes only Medicare patients, payer stakeholders of the PMWG have voiced support for expanding this measure to the commercial population and other payers if feasible. In addition, staff notes that this measure is applicable only to patients in the inpatient setting. With the removal of hip and knee replacement procedures from the Medicare "inpatient only" list--procedures for which Medicare will reimburse only if performed in the inpatient setting--, and the shift of these procedures to the outpatient setting, staff believes the QBR re-design subgroup should consider both payer and care setting applicability options for measure expansion.

Staff recommends continuing to include the inpatient mortality measure and hip and knee replacement complication measure in the Clinical Care domain consistent with the VBP program, and continuing to weight the Clinical Care domain at 15 percent.

Appendix IV details the available published performance standards (for VBP measures) for each measure by domain for RY2022; staff will calculate and disseminate the inpatient mortality standards when Version 37 of the 3M APR DRG grouper is implemented.

Revenue Adjustment Modeling

HSCRC staff modeled hospital QBR scores and revenue adjustments using the methodology approved for RY 2021. This includes maintaining the reward/penalty cut-point at 41 percent, which is consistent with updated analyses showing that the FFY19 national average score using QBR weights is 41 percent. The only changes in calculating the modeled QBR scores were the removal of the ED Wait Time measure and technical updates to the inpatient mortality measure.

Hospital-specific domain scores and total QBR scores are included in Appendix V. Statewide, the average hospital score is 35 percent; with a range from 13 to 59 percent. The modeled hospital-specific and statewide revenue impacts are found in Appendix VI. Figure 11 provides the estimated statewide revenue adjustments and counts of hospitals receiving a reward and

penalty and compares to the final RY 2020 QBR revenue adjustments. Overall, the estimated revenue adjustments are significantly less than the net RY 2020 due to the lower cut-point (RY 2020 cut-point was 45 percent) and measure changes (ED Wait Time removal, addition of hip and knee measure).

Figure 11. Maryland THA/TKA Measure Performance Compared to the Nation

Statewide Revenue Adjustments	RY2020 Actual		RY2020 with 41% cutpoint		RY2022 Modeling with 41%	
	$	%	$	%	$	%
Net	-$59,633,534	-0.62%	-$47,350,623	-0.49%	-$40,033,022	-0.42%
Penalties	-62,675,974	-0.65%	-51,979,616	-0.54%	-44,513,968	-0.46%
Rewards	3,042,440	0.03%	4,628,993	0.05%	4,480,946	0.05%
# Hospitals Penalized	36		35		31	
# Hospitals Rewarded	8		9		13	

QBR Future Updates

As previously mentioned, staff intends to convene a sub-group of the Performance Measurement Work Group, comprised of key stakeholders and subject-matter experts, to consider an overhaul of the QBR program in CY 2020. This group will review the existing QBR policy and goals of the TCOC model, and develop recommendations to modify the QBR program for the RY 2023 QBR Policy and beyond. Because the QBR policy assesses multiple domains of hospital quality (as opposed to the complications or readmissions program), this program is particularly well suited for expanding into new areas that are relevant under the TCOC model. To accomplish this redesign, which will necessitate consideration of measures and domains outside of those in the current program, the sub-group will consider 1) measurement selection, which will include evaluating the feasibility of including other CMS inpatient and outpatient measures, as well as retaining measures currently used, or adopting other measures that cover important all-payer clinical areas that may not be addressed by CMS measurement and reporting; and 2) methodological concerns, which will include appropriate risk adjustment, scoring, and scaling, and establishing reasonable performance targets.

Among the topics the sub-group may consider are the following:

- Strengthen the current incentives to improve patient experience, safety, and clinical outcomes.
- Consider re-adoption of ED Wait Time measures.
- Explore potential new QBR measures from those already in the CMS inpatient hospital reporting pipeline but not currently used in pay for performance, such as the Severe Sepsis and Septic Shock: Management Bundle measure (SEP-1).

- Explore other available measures using measure catalogues such as the CMS's Measure Inventory Tool and the National Quality Forum's Quality Positioning System.
- Evaluate additional data sources needed for performance measurement under the TCOC model.
- Evaluate new opportunities for performance measurement as care is moved from the inpatient setting to other settings of care (e.g., outpatient hospital measures). Ensure that financial incentives under the population-based revenue system are aligned.
- Identify or develop holistic and patient-centered measures.
- Develop hospital pay-for-performance programs that foster accountability for broader care transformation and population health initiatives; specifically, the QBR program could be utilized to support goals developed for the State Integrated Health Improvement Strategy (SIHIS) that do not fit under other quality programs.

Staff acknowledges that this redesign will require substantial work in concert with industry and a broad array of other stakeholders, including consumers, payers, cross-continuum providers, quality measurement experts, and government agencies (local, state, and federal). Staff welcomes additional topics for consideration related to the QBR sub-group, and encourages those interested in participating in the sub-group to contact the Quality team at hscrc.quality@maryland.gov.

STAKEHOLDER FEEDBACK AND STAFF RESPONSES

Staff received comment letters on the draft QBR recommendation from Maryland Citizens' Health Initiative Education Fund (MCHI), CareFirst, the Maryland Chapter of the American College of Emergency Physicians (ACEP), Luminis Health (an integrated system comprised of Anne Arundel Medical Center and Doctors Community Hospital), the Maryland Hospital Association (MHA), Johns Hopkins, and Maryland Institute for Emergency Medical Services Systems (MIEMSS).

The comments received with staff responses are summarized below.

Program Methodology

Several stakeholders registered support for maintaining the current methodology for scoring cut-point, scaling, and revenue adjustments (MHA and CareFirst).

> **Staff Response:** Staff is not recommending alterations to the scoring, scaling or revenue adjustment methodologies for the RY 2022 policy. However, staff does propose that alternative options for these parts of the methodology be considered during the process to reconstitute the QBR program next year.

Concerns about Maryland's Long ED Wait Times

All commenters expressed concern about the sustained trends of extended ED Wait Times in Maryland. Stakeholders argued both for and against the inclusion of the OP-18b measure into the RY 2022 QBR program. This feedback was generated in response to staff's suggestion to include the OP-18b measure following the removal of both ED-1b and ED-2b measures from CMS Hospital Compare.

Arguments For OP-18b Measure Inclusion:

- OP-18b represents the experience of the majority of patients who visit the Emergency Department, "since the majority of ED visits result in no admission" (Luminis, CareFirst).
- "Longer ED wait times erode patient confidence in the hospital system and are perceived by many as an indicator of poor quality care provision" (MCHI).

Arguments Against OP-18b Measure Inclusion:

- Hospitals have undertaken significant efforts to reduce avoidable admissions, which include additional care coordination and treatment in the Emergency Department. These additional efforts will increase the OP-18b wait time but are indicative of proper care under the global budget model (ACEP, MHA, Johns Hopkins Medicine).
- Trends in Emergency Department utilization suggest that, while overall visits are declining, the relative complexity of patients is increasing. Additionally, behavioral health ED visits are trending upwards (MHA).

Other Suggestions to Address the ED Throughput Issue:

- Ask hospitals to directly report ED-2b, a better metric of the "boarding" of patients who should be admitted; hospitals should begin direct reporting to HSCRC for CY 2020 so there is not a gap in measurement and in accountability through the QBR program (ACEP, CareFirst, MIEMSS).
- Concurrent with including ED-2b in QBR through direct reporting to HSCRC, "…placing value on this measure [OP-18b] will help our understanding and management of complex systems issues" (MIEMSS)
- Consider including time on ED diversion status, as well as a measure of hospital capacity, to better understand the challenges to addressing ED throughput (Luminis)
- Consider options for adjusting ED Wait Time measures for bed capacity and socioeconomic status, but pending the completion of this work, it is of paramount importance that we continue to track and incentivize hospitals' efforts to reduce ED wait times (CareFirst).
- Score hospitals on ED Wait Times on both improvement and attainment (Luminis).
- Given multiple factors contributing to ED Throughput concerns (both within and outside of hospital control), delay inclusion of any ED Wait Time measures in QBR program pending further review through QBR Re-design (Johns Hopkins Medicine).

Staff Response: Staff agrees that Emergency Department throughput remains an area of concern and acknowledges stakeholder feedback that the ED-2b measure should continue to be collected, as the preferred measure of "boarding" and of overall hospital throughput efficiency. HSCRC clarifies that the source of information regarding ED Wait Times is CMS Hospital Compare, and without this source data, staff is at present unable to easily collect ED Wait time data. HSCRC would need to establish data collection, reporting and auditing parameters, and infrastructure in order to collect the ED Wait Time measures for patients who are admitted. Staff views this proposal as not feasible at this time. Fortunately, CMS has created an electronic clinical quality measure of ED-2b, which staff can incorporate into mandatory collection and reporting during the QBR re-design. Staff will explore how to receive validated ED wait time data (potentially as a mandated eCQM) over the coming year with the QBR re-design group. Staff does not recommend including OP-18b but as with the ED-2b measure staff agrees that this should be considered for inclusion in the future along with other measures of hospital throughput and efficiency. Finally, staff notes that Maryland does not have an accurate and comprehensive measure of ED diversion or capacity at this time, and would need to work with stakeholders before using such metrics to adjust measures of ED throughput.

Feedback Regarding HCAHPS:

- Engage consumers to improve HCAHPS scores (MCHI).
- Consider implementing focus groups to highlight hospitals with particular opportunity to improve upon HCAHPS scores (CareFirst).
- Target HCAHPS hospital outliers for updating how incentives are used in QBR.

Staff Response: Staff appreciates these additional suggestions regarding our persistently low HCAHPS scores. Staff will consider this feedback for engaging consumers to improve HCAHPS, and for updating the QBR methodology and incentive structure for HCAHPS outliers, as part of the QBR re-design in the coming year.

Feedback Regarding Hip-Knee Complication (THA-TKA) Measure

- Consider expanding the existing THA-TKA measure to include payers other than Medicare FFS (CareFirst).

Staff Response: Staff acknowledges that, where possible, all-payer metrics are preferable over payer-specific metrics. However, staff is not proposing any changes to the THA-TKA measure population for RY 2022, but will consider this suggestion in terms of the feasibility, validity, and reliability of applying the CMS Medicare measure specifications to the all-payer population as part of the QBR re-design in the coming year.

FINAL RECOMMENDATIONS FOR RY 2022 QBR PROGRAM

1. Implement the following measure updates:
    A. Remove the ED-2b measure commensurate with its removal from the CMS Inpatient Quality Reporting (IQR) program.
    B. Through the work of the QBR Redesign Sub Group, consider options for re-adopting ED Wait Time measures into the program for the RY 2023 policy and beyond.
2. Continue Domain Weighting as follows for determining hospitals' overall performance scores: Person and Community Engagement - 50 percent, Safety (NHSN measures) - 35 percent, Clinical Care - 15 percent.
3. Maintain the pre-set scale (0-80 percent with cut-point at 41 percent), and continue to hold 2 percent of inpatient revenue at-risk (rewards and penalties) for the QBR program.

APPENDIX I. CMS NOTIFICATION OF QUALITY PROGRAM EXEMPTIONS, FFY 2020

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop WB-06-05
Baltimore, Maryland 21244-1850

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

August 29, 2019

Katie Wunderlich
Executive Director, HSCRC
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: Maryland's Request for Hospital Quality Program Exemption for Federal Fiscal Year 2020

Dear Ms. Wunderlich:

Thank you for your letter on behalf of the State of Maryland requesting an exemption from the national hospital quality and value-based payment programs for federal fiscal year (FFY) 2020, which include the Hospital Value-Based Purchasing (HVBP) program, Hospital Acquired Conditions Reduction (HAC) program, and the Hospital Readmissions Reduction program (HRRP). Under Section 8.d.iii. of the Maryland Total Cost of Care Model (MDTCOC model) Agreement, the Centers for Medicare & Medicaid Services (CMS) will waive Maryland from participating in the national hospital quality and value-based payment programs as long as the State implements hospital quality and value-based payment programs that achieve or surpass the measured results in terms of patient outcomes and cost savings in HVBP, HAC, and HRRP.

CMS has reviewed your exemption request and supporting documentation. We officially grant the State of Maryland's exemption from HVBP, HAC, and HRRP based on the fact that Maryland under their state-based quality and value-based payment programs achieved performance results in terms of patient outcomes and cost savings that were as good as or better than if Maryland was participating in the national hospital quality and value-based payment programs.

Below are a few requests for the State regarding their state-based hospital quality and value-based payment programs:

- *Quality Based Reimbursement*. CMS reviewed each component of the State's version of HVBP, the Quality Based Reimbursement (QBR) program, which includes three components: clinical care, safety measures, and person and community engagement. While the State is performing well in clinical care and safety measures, Maryland's performance continues to lag behind the nation in patient experience of care under person and community engagement. We acknowledge the challenges around improving patient experience, and we are supportive of maintaining the highest weight for the person and community engagement component along with the one emergency

department wait time measure (ED-2b) if publicly reported. Furthermore, with CMS removing the early elective delivery measure (PC-01) from the HVBP due to performance topping off plus the State's focus on improving maternal mortality and morbidity, we request that the State continue to monitor this measure under QBR if it is publicly reported in the Hospital Inpatient Quality Reporting Program. We would like to see hospitals continue to be held accountable for obstetric care to help move the needle on improving maternal health outcomes in the state. We are hopeful that these modifications will incentivize hospitals to improve the patient care experience and maternal health in Maryland hospitals, and we are eager to assist in helping hospitals improve in these areas in any way possible.

- *PAU Savings*. CMS is in favor of the State evaluating PQIs on a per capita basis for the PAU Savings program starting in RY2021. We believe this aligns with the population health goals of the MDTCOC model by encouraging hospital accountability for the broad community it serves, e.g., including avoidable pediatric admissions. CMS requests the State set a concrete per capita PQI reduction target within a certain timeframe to help facilitate this transition. We expect the State to make progress on avoidable utilization since the potential for population health impact is much greater under the MDTCOC model given the wider range of tools available to Maryland providers.

- *Medicare Performance Adjustment*. CMS supports the addition of measures to the quality adjustment component of the Medicare Performance Adjustment (MPA) that align with the goals of the MDTCOC model and support the Statewide Integrated Health Improvement Strategy (SIHIS). We are also in favor of the State continuing to refine the MPA scoring methodology, such as considering incorporating attainment in the future as needed to ensure a fair threshold for well-performing hospitals under the MPA. Additionally, CMS requests the State to consider increasing the amount of revenue at risk under the MPA. It is not clear whether a Medicare Performance Adjustment to hospitals that is capped at 1% (or less than 0.35% as a share of hospitals' all-payer revenue) is adequate to ensure hospitals' focus on the Medicare TCOC of their MPA-attributed populations.

- *Improvement Strategy*. The State proposes a comprehensive strategic plan for improving the hospital quality programs under the MDTCOC model. We are supportive of the State's efforts to include population health measures in the hospital pay for performance quality programs. Furthermore, we are excited to continue working with the State to create a vision for Maryland's quality and population health priorities and goals under the TCOC Model, in particular developing a framework for the Statewide Integrated Health Improvement Strategy (SIHIS). CMS requests the State to have the broad framework for SIHIS to be in place by December 2019 and the goals with measures and targets finalized as soon as possible in 2020.

In regards to the State's Revenue at Risk for RY2019, thank you for including this preliminary information in your request for exemption from the national hospital quality programs. It is helpful to see an initial comparison of the percentage of hospital regulated revenue is at risk under the state-based programs versus the national programs. We look forward to receiving the final data in October 2019, and plan to provide our review shortly thereafter.

Thank you for your continued efforts to improve the hospital quality programs within the State of Maryland. Should you have any questions, please do not hesitate to contact the MDTCOC model team.

Sincerely,

Dawn Alley, PhD
Acting Director, State Innovations Group

APPENDIX II. HSCRC QBR PROGRAM BACKGROUND, DETAILED OVERVIEW

The Affordable Care Act established the hospital Medicare Value-Based Purchasing (VBP) program,[12] which requires CMS to reward hospitals with incentive payments for the quality of care provided to Medicare beneficiaries. The program assesses hospital performance on a set of measures in Clinical Care, Person and Community Engagement, Safety, and Efficiency domains. The incentive payments are funded by reducing the base operating diagnosis-related group (DRG) amounts that determine the Medicare payment for each hospital inpatient discharge.[13] The Affordable Care Act set the maximum penalty and reward at 2 percent for federal fiscal year (FFY) 2017 and beyond.[14]

Maryland's Quality-Based Reimbursement (QBR) program, in place since July 2009, employs measures that are similar to those in the federal Medicare VBP program, under which all other states have operated since October 2012. Similar to the VBP program, the QBR program currently measures performance in Clinical Care, Safety, and Person and Community Engagement domains, which comprise 15 percent, 35 percent, and 50 percent of a hospital's total QBR score, respectively. For the Safety and Person and Community Engagement domains, which constitute the largest share of a hospital's overall QBR score (85 percent), performance standards are the same as those established in the national VBP program. The Clinical Care Domain, in contrast, uses a Maryland-specific mortality measure and benchmarks. In effect, Maryland's QBR program, despite not having a prescribed national goal, reflects Maryland's rankings relative to the nation by using national VBP benchmarks for the majority of the overall QBR score.

In addition to structuring two of the three domains of the QBR program to correspond to the federal VBP program, the Commission has increasingly emphasized performance relative to the nation through benchmarking, domain weighting, and scaling decisions. For example, beginning in RY 2015, the QBR program began utilizing national benchmarks to assess performance for the Person and Community Engagement and Safety domains. Subsequently, the RY 2017 QBR policy increased the weighting of the Person and Community Engagement domain, which was measured by the national Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey instrument to 50 percent. The weighting was increased in order to raise incentives for HCAHPS improvement, as Maryland has consistently scored in the lowest decile nationally on these measures. In RY 2020, ED-1b, and ED-2b wait time measures for admitted patients were added to this domain with the domain weight remaining at 50 percent; in RY 2021, the domain weight remained constant but the ED-1b measure was removed from the program.

While the QBR program has many similarities to the federal Medicare VBP program, it does differ because Maryland's unique Model Agreements and autonomous position allow the State to be innovative and progressive. Figure 12 below compares the RY 2021 QBR measures and domain weights to those used in the CMS VBP program.

[12] 42 USC § 1395ww(o)(7).

[13] 42 USC § 1395ww(o)(7)(C).

[14] The HCAHPS increase reduced the Clinical Care domain from 20 percent to 15 percent.

Figure 12. RY 2021 QBR Measures and Domain Weights Compared with CMS VBP Program[15]

	Maryland QBR Domains and Measures	CMS VBP Domain Weights and Measure Differences
Clinical Care	15 percent (2 measures: all cause inpatient Mortality; THA/TKA Complication)	25 percent (4 measures: condition-specific Mortality, THA/TKA Complication)
Person and Community Engagement	50 percent (8 HCAHPS measures, ED-2b wait time measure)	25 percent Same HCAHPS measures, no ED Wait Time measures
Safety	35 percent (5 measures: CDC NHSN)*	25 percent (5 measures: CDC NHSN)*
Efficiency	N/A	25 percent (Medicare Spending Per Beneficiary measure)

*While there are six Healthcare Associated Infection categories, the two SSI colon and hysterectomy categories are combined resulting in five Safety domain measures.

The methodology for calculating hospital QBR scores and associated inpatient revenue adjustments has remained essentially unchanged since RY 2019, and involves: 1) assessing performance on each measure in the domain; 2) standardizing measure scores relative to performance standards; 3) calculating the total points a hospital earned divided by the total possible points for each domain; 4) finalizing the total hospital QBR score (0-100 percent) by weighting the domains based on the overall percentage or importance the Commission has placed on each domain; and 5) converting the total hospital QBR scores into revenue adjustments using the preset scale that ranges from 0 to 80 percent.

Domain Weights and Revenue At-Risk

As illustrated in the body of the report, for the RY 2021 QBR program, the policy weighted the clinical care domain at 15 percent of the final score, the Safety domain at 35 percent, and the Person and Community Engagement domain at 50 percent.

The HSCRC sets aside a percentage of hospital inpatient revenue to be held "at-risk" based on each hospital's QBR program performance. Hospital performance scores are translated into rewards and penalties in a process that is referred to as scaling.[16] Rewards (positive scaled amounts) or penalties (negative scaled amounts) are then applied to each hospital's update factor for the rate year. The rewards or penalties are applied on a one-time basis and are not considered

[15] Details of CMS VBP measures may be found at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html ; last accessed 10./28/19.

[16] Scaling refers to the differential allocation of a pre-determined portion of base-regulated hospital inpatient revenue based on assessment of the quality of hospital performance.

permanent revenue. The Commission previously approved scaling a maximum reward of 2 percent and a penalty of 2 percent of total approved base inpatient revenue across all hospitals.

HSCRC staff has worked with stakeholders over the last several years to align the QBR measures, thresholds, benchmark values, time lag periods, and amount of revenue at risk with those used by the CMS VBP program where feasible,[17] allowing the HSCRC to use data submitted directly to CMS. As mentioned above, Maryland implemented an efficiency measure in relation to population based revenue budgets based on potentially avoidable utilization outside of the QBR program. The potentially avoidable utilization (PAU) savings adjustment to hospital rates is based on costs related to potentially avoidable admissions, as measured by the Agency for Healthcare Research and Quality Prevention Quality Indicators (PQIs) and avoidable readmissions. HSCRC staff will continue to work with key stakeholders to complete development of an efficiency measure that incorporates population-based cost outcomes.

QBR Score Calculation

QBR Scores are evaluated by comparing a hospital's performance rate to its base period rate, as well as the threshold (which is the median, or 50th percentile, of all hospitals' performance during the baseline period), and the benchmark, (which is the mean of the top decile, or approximately the 95th percentile, during the baseline period).

Attainment Points: During the performance period, attainment points are awarded by comparing an individual hospital's rates with the threshold and the benchmark. With the exception of the MD Mortality measure and ED Wait Time measures, the benchmarks and thresholds are the same as those used by CMS for the VBP program measures.[18] For each measure, a hospital that has a rate at or above benchmark receives 10 attainment points. A hospital that has a rate below the attainment threshold receives 0 attainment points. A hospital that has a rate at or above the attainment threshold and below the benchmark receives 1-9 attainment points

Improvement Points: The improvement points are awarded by comparing a hospital's rates during the performance period to the hospital's rates from the baseline period. A hospital that has a rate at or above the attainment benchmark receives 9 improvement points. A hospital that has a rate at or below baseline period rate receives 0 improvement points. A hospital that has a rate between the baseline period rate and the attainment benchmark receives 0-9 improvement points.

Consistency Points: The consistency points relate only to the experience of care domain. The purpose of these points is to reward hospitals that have scores above the national 50th percentile in all of the eight HCAHPS dimensions. If they do, they receive the full 20 points. If they do not, the dimension for which the hospital received the lowest score is compared to the range between

[17] VBP measure specifications may be found at: www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html

[18] As an exception, for the ED wait time measures, attainment points are not calculated; instead full 10 points are awarded to hospitals at or below (more efficient) than the national medians for their respective volume categories in the performance period.

the national 0 percentile (floor) and the 50th percentile (threshold) and is awarded points proportionately.

Domain Denominator Adjustments: In particular instances, QBR measures will be excluded from the QBR program for individual hospitals. In the Person and Community Engagement domain, ED Wait Time measures (if included in the RY 2020 program) will be excluded for protected hospitals. As described in the body of the report, a hospital may exclude the ED-2b measure if it has earned at least one improvement point and if its improvement score would reduce its overall QBR score. If this measure is excluded, the Person and Community Engagement domain will reduce from 110 total points to 100 points.

Similarly, hospitals are exempt from measurement for any of the NHSN Safety measures for which there is less than 1 predicted case in the performance period. If a hospital is exempt from an NHSN measure, its Safety domain score denominator reduces from 50 to 40 points. If it is exempt from two measures, the Safety domain score denominator would be 30 total possible points. Hospitals must have at least 2 of 5 Safety measures in order to be included in the Safety domain.

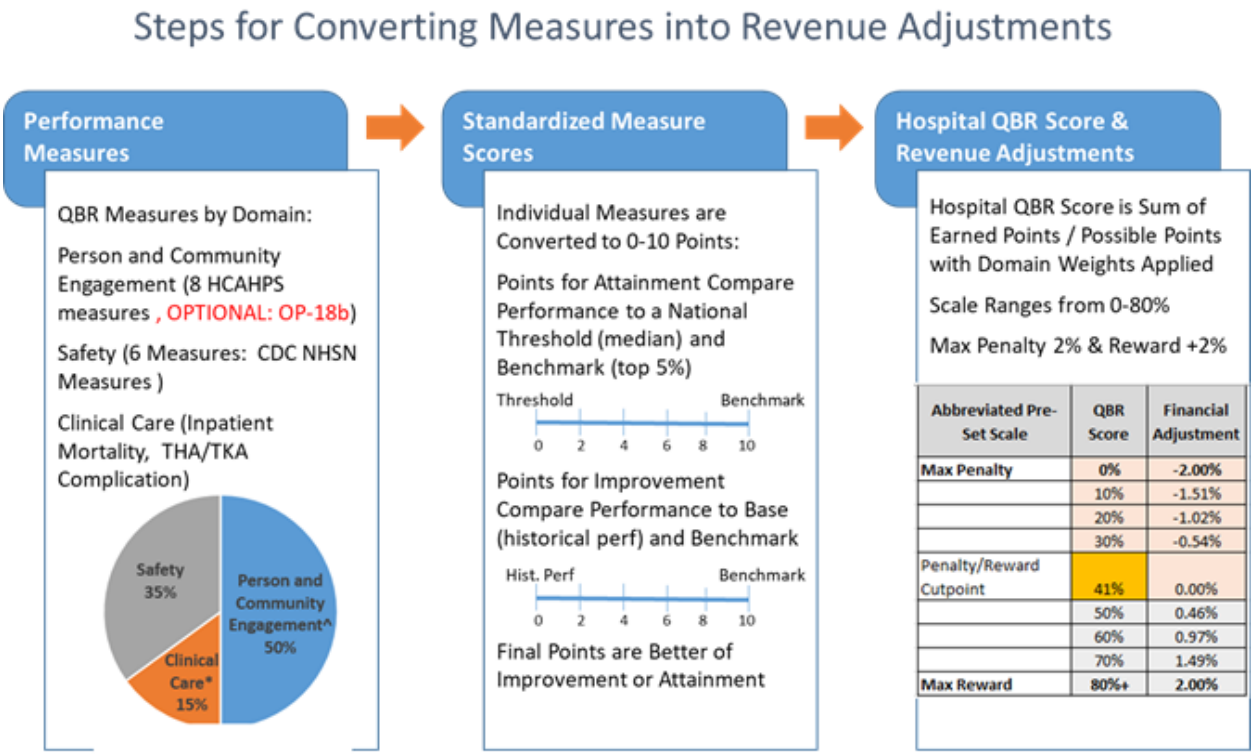
Domain Scores: The better of attainment and improvement for each measure is used to determine the measure points for each measure, which are then summed and divided by the total possible points in each domain and multiplied by 100.

Total Performance Score*:* The total Performance Score is computed by multiplying the domain scores by their specified weights, then adding those totals The Total Performance Score is then translated into a reward/ penalty that is applied to hospital revenue.

Proposed RY 2022 QBR Program Updates

For RY 2022, no fundamental changes to the methodology or measures are proposed. Figure 13 below depicts the steps for converting the measure scores to standardized scores for each measure, and then to rewards and penalties based upon total scores earned, with the proposed updates for RY 2022.

Figure 13. Proposed RY 2022 Process for Calculating QBR Scores



Similarly with the scoring and incentive methodology, there are no fundamental changes proposed for the measures and domain weighting for RY 2022, as illustrated in Figure 14 below.

Figure 14. Proposed RY 2022 QBR Domains, Measures and Data Sources

	Clinical Care	Person and Community Engagement	Safety
Proposed QBR RY 2022	15 percent 2 measures • Inpatient Mortality (HSCRC case mix data) • THA TKA (CMS Hospital Compare, Medicare claims data)	50 percent 8 or 9 measures • 8 HCAHPS domains (CMS Hospital Compare patient survey) • OPTIONAL: OP 18-b (CMS IQR chart abstracted)	35 percent 5 measures • 6 CDC NHSN HAI categories (CMS Hospital Compare chart abstracted)

Figure 15 illustrates the base and performance period timeline for the RY 2022 QBR program.

Figure 15. RY 2022 Proposed Timeline (Base and Performance Periods; Financial Impact)

Rate Year (Maryland Fiscal Year)	Q3-17	Q4-17	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22
Calendar Year	Q1-17	Q2-17	Q3-17	Q4-17	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22
Rate Year 2022																						
Quality Based Reimbursement (QBR) Base and Performance Periods					Hospital Compare Base Period (HCAHPS measures, All NHSN Measures, optional OP-18)															Rate Year Impacted by QBR Results			
												Hospital Compare Performance Period (HCAHPS measures, All NHSN measures, optional 18-b)										
							QBR Maryland Mortality Base Period																
													QBR Maryland Mortality Performance Period								
		Hospital Compare THA/TKA Performance Period**																				

**Hospital Compare THA /TKA Complications Base Period April 1, 2012-March 31, 2015

APPENDIX III. RY 2020 HCAHPS MEASURE RESULTS BY HOSPITAL

	HCAHPS Measure	Clean/Quiet		Nurse Commun-ication		Doctor Commun-ication		Staff Respon-siveness		Understood Medications		Discharge Information		Care Transitions Measure		Top-Rated Hospital	
HospID	HospName	Perf	Change from Base	Perf	Change from Base	Perf	Change from Base	Perf	Change from Base	Perf	Change from Base	Perf	Change from Base	Perf	Change from Base	Perf	Change from Base
210001	MERITUS MEDICAL CENTER	63.5	1	79	2	76	0	64	3	60	-2	89	1	48	3	64	-4
210002	UNIVERSITY OF MARYLAND MEDICAL CENTER	57	-1.5	78	0	79	1	60	0	62	4	89	4	51	-1	67	-4
210003	UM-PRINCE GEORGE'S HOSPITAL CENTER	51.5	-2.5	64	1	73	-1	44	2	52	4	80	3	38	4	48	3
210004	HOLY CROSS HOSPITAL	64	-1	73	3	75	1	57	2	54	0	81	1	43	-2	66	4
210005	FREDERICK MEMORIAL HOSPITAL	69	-0.5	78	-2	77	-2	59	-1	63	1	88	-1	49	-2	68	-2
210006	UM-HARFORD MEMORIAL HOSPITAL	58.5	8	81	8	80	6	59	7	60	-1	87	3	53	3	67	7
210008	MERCY MEDICAL CENTER	70	1	79	-1	78	-4	65	0	69	3	89	0	56	2	78	0
210009	JOHNS HOPKINS HOSPITAL	70	2	82	2	81	0	61	0	65	3	88	0	59	1	82	1
210011	ST. AGNES HOSPITAL	59	-1	75	0	79	1	61	4	62	3	84	-2	49	5	66	2
210012	SINAI HOSPITAL	61	-7	77	0	76	-1	59	-2	57	-7	85	0	50	-1	70	1
210013	BON SECOURS HOSPITAL	66.5	8.5	74	11	80	5	66	15	64	16	87	5	45	9	48	7
210015	MEDSTAR FRANKLIN SQUARE	62	7	76	2	77	3	60	7	63	8	87	2	48	6	66	5
210016	WASHINGTON ADVENTIST HOSPITAL	62	-0.5	75	2	78	1	62	6	61	3	83	-2	44	4	70	3
210017	GARRETT COUNTY MEMORIAL HOSPITAL	67	5.5	80	0	84	0	70	1	65	-3	90	0	52	7	75	6
210018	MEDSTAR MONTGOMERY MEDICAL CENTER	56.5	-6.5	73	1	75	0	55	1	57	1	88	0	44	1	64	4
210019	PENINSULA REGIONAL MEDICAL CENTER	62.5	-0.5	79	3	77	3	60	-1	58	-5	89	-1	55	6	73	4
210022	SUBURBAN HOSPITAL	64	-2.5	78	-1	81	0	64	-1	59	-1	85	1	53	1	71	0
210023	ANNE ARUNDEL MEDICAL CENTER	67	2	81	1	82	0	69	-1	61	-2	87	0	55	-1	78	-1
210024	MEDSTAR UNION MEMORIAL HOSPITAL	64	-4.5	76	-3	79	-5	61	0	65	2	89	-1	49	0	67	-7
210027	WESTERN MARYLAND REGIONAL MEDICAL CENTER	66.5	1	79	-2	77	-2	64	0	64	-2	90	-2	49	-2	70	1
210028	MEDSTAR ST. MARY'S HOSPITAL	66	2	78	-1	78	-1	60	-2	64	4	91	2	50	1	67	-3
210029	JOHNS HOPKINS BAYVIEW MEDICAL CENTER	58.5	1	78	1	80	2	61	-2	62	1	89	1	53	2	71	4
210030	UM-SHORE REGIONAL HEALTH AT CHESTERTOWN	64	5.5	81	6	81	5	73	8	66	13	88	3	48	6	67	12
210032	UNION HOSPITAL OF CECIL COUNTY	57	-3.5	76	-1	75	-5	61	-1	55	-5	88	-3	43	-3	62	-6
210033	CARROLL HOSPITAL CENTER	65.5	2.5	79	1	75	2	64	3	62	3	87	1	51	2	64	-5
210034	MEDSTAR HARBOR HOSPITAL CENTER	64	-2	76	2	80	1	62	2	61	3	85	-2	46	1	63	-3
210035	UM-CHARLES REGIONAL MEDICAL CENTER	64	6	78	7	77	3	62	3	61	3	86	-1	48	4	63	3
210037	UM-SHORE REGIONAL HEALTH AT EASTON	66.5	7.5	79	1	77	-2	67	0	60	1	85	3	50	3	64	6
210038	UMMC MIDTOWN CAMPUS	65.5	-0.5	72	1	76	-2	61	1	61	10	84	-3	46	3	58	1
210039	CALVERT HEALTH MEDICAL CENTER	62.5	0	82	5	79	1	64	4	63	0	85	-3	52	4	66	-1
210040	NORTHWEST HOSPITAL CENTER	65	-1.5	76	-4	76	-2	65	-4	62	2	86	-2	49	0	65	-2
210043	UM-BALTIMORE WASHINGTON MEDICAL CENTER	65	6	79	2	78	3	63	4	62	0	87	2	52	3	73	6
210044	GREATER BALTIMORE MEDICAL CENTER	57.5	-2	80	4	82	1	58	-7	62	3	87	2	51	2	72	2
210048	HOWARD COUNTY GENERAL HOSPITAL	65	3	81	4	78	1	62	3	63	2	87	2	52	3	70	0
210049	UM-UPPER CHESAPEAKE MEDICAL CENTER	63	2	82	4	78	4	57	-6	64	4	88	6	52	2	70	4
210051	DOCTORS COMMUNITY HOSPITAL	61	-1.5	73	0	72	-5	61	8	54	-2	85	-2	46	1	62	-1
210055	UM-LAUREL REGIONAL HOSPITAL	59	0.5	61	-2	65	-8	54	10	48	-12	79	0	41	1	52	6
210056	MEDSTAR GOOD SAMARITAN	61.5	4	74	2	79	3	55	-1	61	3	86	-1	46	1	62	1
210057	SHADY GROVE ADVENTIST HOSPITAL	62	3	75	0	76	0	56	3	58	0	87	-1	48	3	70	5
210060	FORT WASHINGTON MEDICAL CENTER	56	-3	70	1	74	-2	56	7	61	4	81	-5	45	7	51	-8
210061	ATLANTIC GENERAL HOSPITAL	59	3.5	82	4	82	5	67	3	61	2	91	0	51	0	71	4
210062	MEDSTAR SOUTHERN MARYLAND HOSPITAL CENTER	61	2.5	71	-1	77	2	59	5	57	2	83	-3	44	7	57	4
210063	UM-ST. JOSEPH MEDICAL CENTER	62.5	-6	80	-1	80	-2	65	-2	61	1	89	0	57	-2	76	1
210065	HOLY CROSS HOSPITAL-GERMANTOWN	68	3	67	-2	75	-1	54	2	55	-3	84	0	46	-3	69	2

APPENDIX IV. RY 2020 QBR PERFORMANCE STANDARDS

Person and Community Engagement Domain*

Dimension	Benchmark	Achievement Threshold (50th percentile)	Floor (Minimum)
Communication with Nurses	87.53 percent	79.18 percent	15.73 percent
Communication with Doctors	87.85 percent	79.72 percent	19.03 percent
Responsiveness of Hospital Staff	81.29 percent	65.95 percent	25.71 percent
Communication about Medicines	74.31 percent	63.59 percent	10.62 percent
Cleanliness and Quietness of Hospital Environment	79.41 percent	65.46 percent	5.89 percent
Discharge Information	91.95 percent	87.12 percent	66.78 percent
3-Item Care Transition	63.11 percent	51.69 percent	6.84 percent
Overall Rating of Hospital	85.18 percent	71.37 percent	19.09 percent

*The Person and Community Engagement performance standards displayed in this table were calculated using four quarters of calendar year 2018 data, and published in the CMS Inpatient Prospective Payment System FFY 20 Final Rule.

Safety Domain*

Measure Short ID	Measure Description	Benchmark	Achievement Threshold
CAUTI	Catheter-Associated Urinary Tract Infection	0.00	0.727
CDI	Clostridium *difficile* Infection	0.047	0.646
CLABSI	Central Line-Associated Blood Stream Infection	0.00	0.633
MRSA	Methicillin-Resistant Staphylococcus *aureus*	0.00	0.748
SSI	SSI - Abdominal Hysterectomy	0.00	0.727
	SSI - Colon Surgery	0.00	0.749

*The Safety Domain performance standards were published in the CMS Inpatient Prospective Payment System FFY 20 Final Rule.

Clinical Care Domain

Measure Short ID	Measure Description	Benchmark	Achievement Threshold
Mortality	All Condition Inpatient Mortality	TBD*	TBD*
THA/TKA RSCR**	Total Hip/Knee Arthroplasty Risk Standardized Complication Rate	0.021493	0.029833

*Mortality standards will be calculated by HSCRC staff and disseminated with implementation of v. 37 of the APR DRG grouper.
**THA/TKA standards were published in the CMS Inpatient Prospective Payment System FFY 20 Final Rule.

APPENDIX V. MODELING OF SCORES BY DOMAIN: RY 2020 QBR DATA WITH RY 2022 MEASURE UPDATES

This appendix includes modeled QBR scores with ED Wait Times removed, THA-TKA measure included, and technical changes to the mortality measure.

Hospital ID	Hospital Name	HCAHPS Score	Mortality Score	THA-TKA Score	Safety Score	Total Score
		50%	10%	5%	35%	
210001	Meritus	23%	10%	60%	33%	27.17%
210002	UMMC	19%	0%	100%	32%	25.58%
210003	UM-PGHC	8%	20%		17%	12.83%
210004	Holy Cross	15%	40%	0%	18%	17.92%
210005	Frederick	20%	100%	0%	35%	32.25%
210006	UM-Harford	33%	50%	70%	70%	49.50%
210008	Mercy	39%	60%	90%	23%	38.17%
210009	Johns Hopkins	43%	30%		23%	34.17%
210010	UM-Dorchester	27%	50%	90%	45%	38.75%
210011	St. Agnes	19%	40%	90%	35%	30.25%
210012	Sinai	15%	20%	100%	33%	26.17%
210013	Bon Secours	36%	50%		23%	33.67%
210015	MedStar Fr Square	33%	70%	100%	62%	50.08%
210016	Washington Adventist	21%	40%	90%	60%	40.00%
210017	Garrett	47%	10%	90%		44.89%
210018	MedStar Montgomery	15%	30%	70%	60%	35.00%
210019	Peninsula	30%	70%	100%	27%	36.33%
210022	Suburban	21%	20%	100%	18%	23.80%
210023	Anne Arundel	36%	40%	100%	42%	41.58%
210024	MedStar Union Mem	23%	30%	100%	8%	22.13%
210027	Western Maryland	24%	20%	10%	38%	27.92%
210028	MedStar St. Mary's	26%	90%	100%	17%	32.83%
210029	JH Bayview	22%	30%	100%	28%	28.92%
210030	UM-Chestertown	47%	100%	100%		59.19%
210032	Union of Cecil	14%	40%	50%	58%	33.63%
210033	Carroll	24%	100%	100%	42%	41.58%
210034	MedStar Harbor	18%	90%	10%	23%	26.67%
210035	UM-Charles Regional	28%	80%	100%	48%	43.92%
210037	UM-Easton	27%	40%	90%	45%	37.75%
210038	UMMC Midtown	18%	100%	80%	30%	33.50%
210039	Calvert	24%	100%	100%	80%	55.00%
210040	Northwest	17%	90%	70%	20%	28.00%

Hospital ID	Hospital Name	HCAHPS Score	Mortality Score	THA-TKA Score	Safety Score	Total Score
		50%	10%	5%	35%	
210043	UM-BWMC	31%	80%	0%	32%	34.58%
210044	GBMC	24%	90%	40%	43%	38.17%
210048	Howard County	27%	70%	50%	53%	41.67%
210049	UM-Upper Chesapeake	31%	60%	100%	57%	46.33%
210051	Doctors	16%	40%	60%	82%	43.70%
210056	MedStar Good Sam	18%	70%	20%	38%	30.30%
210057	Shady Grove	18%	10%	70%	45%	29.25%
210060	Ft. Washington	15%	60%	40%		23.75%
210061	Atlantic General	35%	70%	10%	60%	46.00%
210062	MedStar Southern MD	19%	20%	100%	45%	32.25%
210063	UM-St. Joe	31%	90%		63%	51.17%
210065	HC-Germantown	14%	80%		10%	22.50%

APPENDIX VI. MODELING OF QBR PROGRAM REVENUE ADJUSTMENTS

HOSPID	HOSPITAL NAME	RY19 Permanent Inpatient Revenue	RY 2022 Modeled QBR Points	% Revenue Impact	$ Revenue Impact
210001	MERITUS	$219,551,750	27.17%	-0.67%	-$1,470,997
210002	UNIVERSITY OF MARYLAND	$1,203,673,856	25.58%	-0.75%	-$9,027,554
210003	PRINCE GEORGE	$282,929,188	12.83%	-1.37%	-$3,876,130
210004	HOLY CROSS	$355,608,692	17.92%	-1.13%	-$4,018,378
210005	FREDERICK MEMORIAL	$232,665,827	32.25%	-0.43%	-$1,000,463
210006	HARFORD	$54,181,186	49.50%	0.44%	$238,397
210008	MERCY	$226,492,002	38.17%	-0.14%	-$317,089
210009	JOHNS HOPKINS	$1,456,687,424	34.17%	-0.33%	-$4,807,068
210010	DORCHESTER	$22,653,845	38.75%	-0.11%	-$24,919
210011	ST. AGNES	$238,757,730	30.25%	-0.52%	-$1,241,540
210012	SINAI	$399,817,673	26.17%	-0.72%	-$2,878,687
210013	BON SECOURS	$64,363,349	33.67%	-0.36%	-$231,708
210015	FRANKLIN SQUARE	$306,898,504	50.08%	0.47%	$1,442,423
210016	WASHINGTON ADVENTIST	$164,197,283	40.00%	-0.05%	-$82,099
210017	GARRETT COUNTY	$23,714,400	44.89%	0.20%	$47,429
210018	MONTGOMERY GENERAL	$84,721,645	35.00%	-0.29%	-$245,693
210019	PENINSULA REGIONAL	$249,228,264	36.33%	-0.23%	-$573,225
210022	SUBURBAN	$208,954,270	23.80%	-0.84%	-$1,755,216
210023	ANNE ARUNDEL	$294,544,506	41.58%	0.03%	$88,363
210024	UNION MEMORIAL	$243,156,679	22.13%	-0.92%	-$2,237,041
210027	WESTERN MARYLAND	$169,462,000	27.92%	-0.64%	-$1,084,557
210028	ST. MARY	$79,141,046	32.83%	-0.40%	-$316,564
210029	HOPKINS BAYVIEW MED CTR	$366,607,627	28.92%	-0.59%	-$2,162,985
210030	CHESTERTOWN	$17,859,942	59.19%	0.93%	$166,097
210032	UNION HOSPITAL OF CECIL	$65,426,887	33.63%	-0.36%	-$235,537
210033	CARROLL COUNTY	$140,291,849	41.58%	0.03%	$42,088
210034	HARBOR	$110,392,040	26.67%	-0.70%	-$772,744
210035	CHARLES REGIONAL	$76,930,098	43.92%	0.15%	$115,395
210037	EASTON	$103,481,053	37.75%	-0.16%	-$165,570
210038	UMMC MIDTOWN	$111,141,002	33.50%	-0.37%	-$411,222
210039	CALVERT	$67,111,996	55.00%	0.72%	$483,206
210040	NORTHWEST	$138,719,920	28.00%	-0.63%	-$873,935
210043	BALTIMORE WASHINGTON	$250,217,336	34.58%	-0.31%	-$775,674

HOSPID	HOSPITAL NAME	RY19 Permanent Inpatient Revenue	RY 2022 Modeled QBR Points	% Revenue Impact	$ Revenue Impact
210044	G.B.M.C.	$237,787,317	38.17%	-0.14%	-$332,902
210048	HOWARD COUNTY	$182,870,977	41.67%	0.03%	$54,861
210049	UPPER CHESAPEAKE HEALTH	$128,686,091	46.33%	0.27%	$347,452
210051	DOCTORS COMMUNITY	$141,094,311	43.70%	0.14%	$197,532
210056	GOOD SAMARITAN	$146,901,579	30.30%	-0.52%	-$763,888
210057	SHADY GROVE	$251,748,234	29.25%	-0.57%	-$1,434,965
210060	FT. WASHINGTON	$19,890,383	23.75%	-0.84%	-$167,079
210061	ATLANTIC GENERAL	$36,931,910	46.00%	0.26%	$96,023
210062	SOUTHERN MARYLAND	$162,087,856	32.25%	-0.43%	-$696,978
210063	UM ST. JOSEPH	$223,399,907	51.17%	0.52%	$1,161,680
210065	HC-GERMANTOWN	$59,062,315	22.50%	-0.90%	-$531,561
	Statewide Total	**$9,620,041,749**			**-$40,033,022**
		Average			-0.42%

Scaling Components	Values
QBR Lowest Score	0
QBR Max Penalty	-2%
QBR Highest Score	80%
QBR Max Reward	2%
QBR Threshold	41%

Total Penalties	-44,513,968
% Inpatient Revenue	-0.46%
Total rewards	4,480,946
% Inpatient revenue	0.05%

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Maryland Chapter
AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

November 25, 2019

Nelson Sabatini
Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Ms. Katie Wunderlich
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

RE: Draft Recommendation on Updates to the Quality-Based Reimbursement (QBR) Policy for RY 2022

Dear Chairman Sabatini and Ms. Wunderlich:

On behalf of the Maryland Chapter of the American College of Emergency Physicians (ACEP), we are writing to express our strong concern over the removal of the ED-2b measure from the RY2022 QBR program. Below are our specific comments, but we believe that it is important to understand that wait times in emergency departments are not simply a function of the emergency department. Rather, emergency department wait times are often predicated on the inability to timely transfer patients to an inpatient bed within the same hospital or the inability to timely place patients in other appropriate care settings. Therefore, we believe that this issue can be better characterized as a hospital throughput issue. While we understand that the removal of the ED-2b measurement is the result of the discontinuation by CMS, similar to its decision to discontinue mandatory data collection for ED-1b, we believe that the information collected in the measurement should continue.[1]

While the HSCRC staff recommendation indicates that it will "consider ED wait time measure options as part of the QBR redesign during CY2020 with potential re-adoption of measures for RY2023," we do not believe this is an adequate solution given Maryland's current performance as compared to the nation. For the last seven years, as noted in Figure 5 of the Draft Recommendation, Maryland hospitals have performed far worse on these measures than the national average. To repeat, 91% of Maryland hospitals perform worse than the nation in ED-1b, 77% perform worse than the nation in ED-2b, and 91% perform worse on OB-18b. Despite ED-1b and ED-2b being added to the QBR program, the Draft Recommendation indicates that "data trends to date do not reveal any positive impact since adding the measures to the QBR program."

[1] Our recommendation would be to require the return of ED-1b as a reporting measurement.

This seems to indicate that, without, a stronger "hammer," there is little incentive for hospitals to engage in behavior to improve on these measurements. Simply removing them without an alternative would not be in the patient's best interest or in the best interest of the Total Cost of Care Model. The Draft Recommendation makes the following statement: "a factor impacting the measure is related to difficulties with the behavioral health system in the State, such as the need for improvement in the behavioral health system infrastructure and labor shortages, which exacerbate emergency department throughput problems; however these issues are not unique to Maryland." While HSCRC staff noted this point in the discussion of OP-18, it is also relevant in the discussion of ED-1b and ED-2b. However, it begs the question: If these issues are not unique to Maryland, then why has Maryland historically scored far worse than our hospital counterparts in other states?

Because of this, rather than simply following CMS's lead, we request that the HSCRC consider maintaining these measurements, especially given the fact that Maryland hospitals are already collecting the information. While Maryland would not be able to compare our performance against the national average, we could continue to compare Maryland hospitals against each other and, more importantly, monitor improvement by each Maryland hospital.

With regards to the OP-18, we are concerned that this measurement fails to capture the complexities of delivering care in crowded emergency departments, especially when considered against the changes that have been reported since the redesign of Maryland's waiver/contract. Over the last few years, emergency personnel have experienced a shift in the services provided in an ER. In order to avoid inpatient admissions, many services that, in the past, would have been performed on an inpatient floor are now being performed in the ER, which have lengthened patient stay in the ER. In addition, efforts to link patients with care coordination programs to reduce inpatient admissions have caused patients to remain for a longer time in the ER. Lastly, the "boarding" of patients in the ER while they wait for an inpatient stay have also lengthened patient stay. "Boarding", which is an in-patient/hospital capacity problem and is measured by ED-2b, adversely impacts emergency department patient flow by decreasing available clinical spaces and resources to see and discharge other patients. The domino effect of these scenarios is that new patients arriving to the ER may have a longer wait time to be seen by a physician.

ACEP requests that, prior to a final recommendation, the HSCRC meets with our members to explore alternative operations for the continuation of these or similar measures in Maryland's QBR program. On behalf of our patients, Maryland must reverse the trend and improve on these measures. Thank you.

Sincerely,

Orlee Panitch, M.D.
President

cc: Joseph Antos, Ph.D., Vice Chairman
Victoria Bayless, Commissioner
Stacia Cohen, Commissioner
John Colmers, Commissioner
James N. Elliott, M.D., Commissioner
Adam Kane, Commissioner
Danna Kauffman, Schwartz, Metz and Wise, PA

November 20, 2019

Alyson Schuster
Deputy Director, Quality Methodologies
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Ms. Schuster:

On behalf of Anne Arundel Medical Center (AAMC) and Doctors Community Hospital (DCH), thank you for the opportunity to comment on the proposed Quality-Based Reimbursement (QBR) RY2022 policy. **We support the Staff's recommendation and endorse incorporating OP-18b into the methodology.** This is a primary indicator of Emergency Department (ED) performance, since the majority of ED visits result in no admission. We understand there are many reasons for poor performance on ED measures, but Maryland's performance compared to the nation is concerning to all stakeholders, including hospitals, and warrants visibility at the State level.

To more accurately reflect community access and care processes of hospitals, we also recommend the HSCRC:

1) **Include diversion time as a QBR metric**. Diversion time reflects a hospital's ability to address the critical access needs of its community and is a key indicator of performance. The HSCRC should collaborate with EMS to standardize the diversion metric across counties.

2) **Assess hospital capacity**. ED throughput is dependent on a hospital's ability to manage inpatient admissions. This assessment would provide insight into the barriers hospitals face in reducing ED wait times, such as delays when discharging patients to skilled nursing facilities.

3) **Score OP-18b and diversion time on both improvement and attainment**. Including both improvement and attainment helps to alleviate the impact of patient population differences between hospitals and encourages hospitals to outperform the nation in these metrics.

4) **Compare each hospital to a national peer group of similar volume**. It is important to stratify hospitals by ED admission volumes in order to create a reasonable comparison of Maryland hospitals to the nation.

Thank you again for the opportunity to provide comments. Please let us know if we can be of assistance.

Sincerely,

Paul Grenaldo
President, DCH

Bob Reilly
Chief Financial Officer, AAMC

Cc: Victoria Bayless, Chief Executive Officer, Luminis Health
Nelson J. Sabatini, Chairman, HSCRC
Katie Wunderlich, Executive Director, HSCRC
Camille Bash, Chief Financial Officer, DCH

Maria Harris Tildon
Executive Vice President
Marketing, Communications & External Affairs

CareFirst BlueCross BlueShield
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Fax 410-505-2855

November 19, 2019

Nelson J. Sabatini, Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Sabatini:

I write to provide CareFirst's comments on the HSCRC Staff's "Draft Recommendations for Updating the Quality-Based Reimbursement Program for Rate Year 2022."

First, CareFirst supports the Staff's recommendations to maintain the pre-set scale of 0 to 80 percent with a 41 percent reward and penalty "cut-point," which, per Staff's analysis, is commensurate with the average scores of hospitals participating in the national Value Based Purchasing program. Last year, CareFirst supported Staff's recommendation to include the Total Hip and Total Knee complication rates as reported in Hospital Compare for Medicare patients. This year, we would encourage Staff to investigate the feasibility of generating the same complication rates for Commercial patients and determining the feasibility of including these measures in the QBR scoring algorithm.

Second, we believe that Maryland's sustained poor performance relative to the nation on all three key ED wait time measures (ED-1b: Median time from emergency department arrival to emergency department departure for admitted emergency department patients; ED-2b: admit decision time to ED departure for admitted patients and OP-18b: emergency department arrival time to departure time for discharged patients) is unacceptable. We should be demanding improvement on these measures, regardless of the nation's direction. Accordingly, CareFirst opposes Staff's draft recommendation to remove the ED-2b from the QBR methodology. While we understand that this measure will no longer be collected nationally, we believe the Commission should mandate that Maryland hospitals report ED-2b wait times directly to the HSCRC for use in the scoring of hospital performance under QBR.

To further bolster efforts to incentivize Maryland hospitals to improve their ED wait time performance, CareFirst also supports the inclusion of the OP-18b measure in the Person and Community Engagement domain. As Staff knows, outpatient emergency room encounters account for over 85% of all ED visits and the OP-18b measure was described by one Commissioner as a "key indicator of overall ED efficiency." Thus, the inclusion of this ED measure will provide the HSCRC with a performance metric that reflects most Maryland citizens' emergency room experiences.

At the November Public Meeting, several Commissioners suggested the staff evaluate the possible use of various adjustments (related to patient socio-economic status and hospital bed capacity) to improve the ED wait time measures. We have no objection to staff undertaking this effort. However, in the meantime, we believe it is of paramount importance that we continue to track and incentivize hospitals' efforts to reduce ED wait times and improve patients' emergency room experiences.

Hospitals pay most attention to and are most likely to act on measures for which their performance is tracked and scored. As a commercial payer, we are keenly aware of the need to continually improve our members' experiences and ensure we are delivering them the highest value.

Third, as presented in Staff's draft recommendation, Maryland continues to score unfavorably compared to the nation on Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) measures. Despite additional focus on the Person and Community Engagement domain in recent years, there has been no improvement in Maryland on these metrics from CY 2016 through September 2018. Consistent with our desires on the efficiency measure to reward efficient hospitals with revenue-neutral funding from penalizing inefficient hospitals, we wonder if Staff's great work on targeting outliers could implement a similar targeted strategy. This would incentivize the worst performing hospitals (outlier hospitals) to make a more concerted effort to improve their performance on patient satisfaction.

Thank you for this opportunity to comment on the Quality-Based Reimbursement Program. We support the goals of this program and hope the HSCRC can structure the measures included in RY 2022 to prompt hospital action and ultimately, improved patient experiences at Maryland's emergency departments.

Sincerely,

Maria Harris Tildon

Cc: Joseph Antos, Ph.D., Vice Chairman
Victoria Bayless
Stacia Cohen
John Colmers
James N. Elliott, M.D.
Adam Kane
Katie Wunderlich, Executive Director

HEALTH CARE for All
MARYLAND CITIZENS' HEALTH INITIATIVE
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November 4, 2019

Katie Wunderlich
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Ms. Wunderlich,

As a consumer representative on the Performance Measurement Work Group, I appreciate the HSCRC's efforts over the past two years to work collaboratively with Maryland hospitals to monitor emergency department wait times. My organization, Maryland Citizens' Health Initiative Education Fund, is a nonprofit group that works to guarantee all Marylanders access to quality, affordable healthcare.

Excessive emergency department (ED) wait times are a serious concern for patients. For many Marylanders, periodic visits to the emergency department are the only times they interact with hospital personnel in a given year. Longer ED wait times erode patient confidence in the hospital system and are perceived by many as an indicator of poor quality care provision. We understand that new federal rules will prevent Maryland from using ED-1b and ED2b in its Quality Based Reimbursement Program. We recommend responding to this constraint by monitoring the OP-18b measure as part of the QBR redesign during CY 2020.

We can and should do better to reduce ED wait times, and the OP-18b measure can assist Maryland in this pursuit. We realize this is a complex issue and appreciate the efforts that Maryland hospitals have already made. We also appreciate that hospitals are taking extra time to educate patients and connect them with appropriate community resources, and do not want to discourage hospitals from equipping patients to take care of their health upon discharge. MCHI recommends that the Commission work collaboratively with Maryland hospitals on how to improve ED wait times while providing quality care.

In addition, under the QBR program we support having more discussion around improving overall HCAHPS scores as well as how to engage consumers to help support that goal.

Thank you for the opportunity to submit this feedback on the upcoming policy priorities for the HSCRC. I look forward to continuing to engage with staff and stakeholders in the Performance Measurement Workgroup.

Sincerely,

Stephanie Klapper, MSW
Deputy Director, Maryland Citizens' Health Initiative Education Fund

State of Maryland

Maryland Institute for Emergency Medical Services Systems

653 West Pratt Street
Baltimore, Maryland
21201-1536

Larry Hogan
Governor

Clay B. Stamp, NRP
Chairman
Emergency Medical Services Board

Theodore R. Delbridge, MD, MPH
Executive Director

410-706-5074
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November 27, 2019

Nelson Sabatini
Chairman, Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Katie Wunderlich
Executive Director, Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: Draft Recommendation on Updates to the Quality-Based Reimbursement (QBR) Policy for RY 2022

Dear Chairman Sabatini and Ms. Wunderlich:

I am writing to express the perspective of Maryland's emergency medical services community specific to the draft recommendations for changes to the inclusion of emergency department metrics in the QBR program for RY 2022. The draft recommendations propose removing the ED2b measure commensurate with its removal from the CMS IQR program, and consider adding OP-18b to the Person and Community engagement domain.

Collection of the ED2b measure should be continued

The draft recommendations call for removal of the ED2b measure because CMS will discontinue the measure from mandatory data requirements after CY 2019. The ED2b measure has been publically available on Hospital Compare since 2012.

MIEMSS is concerned that removing emergency department efficiency metrics from the QBR program signals a perspective that these considerations are not important factors in health care quality and the services facilities hold themselves out as providing. As you know, Maryland emergency departments do not compare well with national counterparts for these measures. We believe it is more appropriate to continue to emphasize that emergency department efficiency is relevant to hospital quality and deserves attention. Further, this issue directly affects our state's EMS services. This year, similar to last year, EMS clinicians in Maryland will collectively spend more than 160,000 hours attempting or waiting to transfer their patients to emergency department staffs. In doing so, they are unavailable to respond to other emergency needs in their communities. This is a direct reflection of emergency department [and hospital] efficiencies indicated by ED2b.

We believe there is value in continuing the ED2b measure even if it is no longer part of the CMS IQR program. While hospitals may no longer be compared to contemporary national performance, they could still be compared to historical measurements. Additionally, Maryland information could be made available for hospitals to track their own performance over time, for hospitals to benchmark themselves against Maryland counterparts, and for the public to make informed health care consumer choices.

MIEMSS, along with EMS system stakeholders, is facilitating a number of innovations in attempts to improve overall efficiency of the emergency medical care system. Among them is designating less injured and ill patients to be appropriate for transfer to an emergency department waiting room, as opposed to an emergency department bed. Measures such as ED2b will provide an indication of the effects of such initiatives.

We also believe that removal of the ED-2b measure is, at best, premature since the measure was only first included in the QBR program two years ago. Retaining the ED-2b measure should not present a hardship to Maryland hospitals since it is already being collected.

Collection of the OP-18b measure should be adopted

OP-18b measures emergency department arrival time to departure time for discharged patients. We appreciate the complexities faced by emergency departments and their clinicians, often resulting in longer emergency department lengths of stay. We believe that placing value on this measure will help our understanding and management of complex systems issues. Further, MIEMSS is working with EMS jurisdictions to develop and implement strategies to identify patients whose needs can be appropriately met using health resources in the community instead of at an emergency department. Our ability to assess any impact of changes to EMS triage protocols could be enhanced by the information that this performance measure captures.

Thank you for the opportunity to comment on the draft recommendations. We look forward to continuing to work with the HSCRC on improvements to health care in Maryland.

Sincerely,

Theodore R. Delbridge, MD, MPH
Executive Director

Renee J. Demski, MSW, MBA
Vice President of Quality
The Johns Hopkins Hospital and Johns Hopkins Health System
Armstrong Institute for Patient Safety and Quality
Office (410) 955-4313
Email: rdemski@jhmi.edu

JOHNS HOPKINS
MEDICINE

November 27, 2019

Nelson Sabatini
Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Chairman Sabatini,

On behalf of the Johns Hopkins Health System (JHHS), thank you for the opportunity to provide input on the proposed Quality Based Reimbursement (QBR) Program for RY 2022. Considering the modest changes to the QBR methodology and the commitment to re-design the QBR Program in future years, our issue with the RY 2022 draft recommendation is focused on the potential inclusion of OP-18b to the Person and Community Engagement domain. The inclusion of ED wait time measures in a pay for performance program, specifically the Person and Community Engagement domain of QBR, remains a concern. JHHS continues to be passionately engaged in improving patient experience, and maximizing the capacity and efficiency at each of our EDs. Our hospitals consistently explore opportunities to address inappropriate ED utilization that contribute to ED wait times.

Each of our EDs have engaged in strategies aimed to address both the common and unique challenges that our EDs face that contribute to wait times. Howard County General Hospital (HCGH) ED team, under the leadership of the Chief Medical Officer and Chief Nursing Officer have implemented several process improvements that address workflow and prioritization of patients. Through this process, the ED median length of stay for discharged patients was reduced from 5 to 4 hours over nine months. Suburban has also engaged in process improvements aimed at improving ED throughput, such as bedside registration, expedited testing, and the creation of a "fast-tack" area staffed by physician assistants and enhanced collaboration across services lines.

In addition to process improvements, The Johns Hopkins Hospital (JHH) and Johns Hopkins Bayview Medical Center (JHBMC) have created programs to address the needs of low acuity patients who frequent EDs. JHH and JHBMC implemented an outreach program that follows low-acuity patients after an ED visit to ensure that they are connected to primary care and non-hospital based urgent care. Through this initiative, we learned that these patients need much more than just health care and we connect them with additional social supports.

Recognizing that community providers can serve a critical role in diverting low-acuity ED visits, JHH recently engaged in a partnership with Chase Brexton, a Federally Qualified Health Center, to address the inefficient use of the JHH ED for dental issues. Through this partnership, patients presenting to the ED with a chief complaint of dental issues, will be offered transportation to Chase Brexton for same day dental care. Under this partnership, Chase Brexton offers patients access to primary care and other wrap around services that aim to establish community based care for patients who often struggle with access to health care services, which we hope and expect will decrease low-acuity ED utilization. The impact of this effort in reducing unnecessary ED utilization will take an extended time period to be realized.

Baltimore City hospitals efforts around funding supportive housing services for homeless individuals who are also high utilizers of hospital services are yet another example of collaborative efforts to divert patients with low acuity, but high social needs to appropriate services. Supportive housing services have been proven to significantly reduce ED utilization and overall health care costs. The impact of this initiative will take time to be realized.

Despite focused efforts to improve ED throughput, factors outside the control of the hospital, continue to contribute to ED wait times. Rather than penalizing individual hospitals, we continue to advocate for systemic evaluation of the factors beyond the control of hospitals, such as surges in patients brought in under emergency petition and an ongoing lack of placements for psychiatric patients. Over the past decade, there has been an increasing demand for behavioral health services, while the funding for and availability of state run behavioral health services has decreased dramatically. This has put stress on Maryland EDs as they struggle to find the appropriate placements for patients with complex behavioral health needs, resulting in patients languishing in EDs, often in a medical bed, well beyond what is medically necessary and contributing to overall increases in ED wait times.

Inpatient occupancy also has a major impact on patient flow. ED boarding time, regardless of whether a patient is admitted or discharged, is difficult to improve when inpatient occupancy remains high. For these reasons, we recommend that ED wait time measures be closely monitored along with other relevant statewide performance measures, but not included in QBR payment calculations. Monitoring, rather than penalizing hospitals, will help guard against unintended consequences. Through efforts to reduce inappropriate inpatient utilization, emergency medicine is increasingly expected to do more for patients in terms of testing, imaging and diagnostics. These efforts help ensure that patients who can avoid an impatient admission do so, while also ensuring that no health concerns are overlooked. A single focus on a throughput metric, without also considering the overall impact on quality and safety of patient care could result in negative outcomes.

We appreciate the concerns raised by the HSCRC regarding ED wait times and certainly share those concerns. In light of recent efforts deployed by hospitals and the HSCRC, we believe that a greater understanding of why Maryland hospitals perform worse than the nation in ED wait time measures should be obtained before implementing financial penalties for factors that may or may not be within the scope of control of certain hospitals. We would welcome the opportunity to partner with the HSCRC and other state agencies to gain a better appreciation for what is contributing to ED wait times in Maryland. Considering the comprehensive review that the HSCRC plans for the QBR policy, the inclusion of ED wait time measures should be delayed until the HSCRC completes this process.

Thank you to HSCRC commissioners and staff who have demonstrated their willingness to ensure that all stakeholders contribute the ongoing success of the QBR Program. This collaborative approach fosters ongoing engagement. We look forward to continued collaboration in our mutual efforts to support these critically important performance improvement initiatives. In particular, we look forward to active participation in the re-design of the QBR program next year.

Sincerely,

Renee Demski, MSW, MBA
Vice President of Quality
Johns Hopkins Health System
Armstrong Institute for Patient Safety and Quality

cc: Joseph Antos, Ph.D., Vice Chairman
Victoria W. Bayless
Stacia Cohen, RN
Katie Wunderlich
John Colmers
James Elliot, MD
Adam Kane

Maryland
Hospital Association

November 22, 2019

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

Dear Ms. Feeney:

On behalf of the Maryland Hospital Association's 61 member hospitals and health systems, we appreciate the opportunity to comment on the Health Services Cost Review Commission's (HSCRC's) *Draft Recommendations for updating the Quality-Based Reimbursement Program for Rate Year 2022.* We appreciate the collaborative process to engage with staff and offer input to shape the policy in the best interest of high-quality care for all Marylanders.

We agree with staff's recommendations, which have remained largely unchanged from the current version of the policy, though we look forward to working with HSCRC staff in the coming year to explore opportunities to revise the policy. As we consider options for a readoption of an emergency department (ED) wait time measure, we want to ensure it accurately focuses on improvements in ED care delivery related to appropriate use. Attached are slides showing drivers and trends in Maryland ED visits. Overall visits have decreased, particularly among low and medium complexity patients. For all payers, the number of ED visits for behavioral health conditions continues to rise, while non-behavioral health related ED visits and admissions decline.

We appreciate the commission's consideration of our feedback. We look forward to continuing to work with the commission to modify the QBR program. Should you have any questions, please call me at 410-540-5087.

Sincerely,

Traci La Valle

Traci La Valle
Senior Vice President, Quality & Health Improvement

cc: Nelson J. Sabatini, Chairman
Joseph Antos, Ph.D., Vice Chairman
Victoria W. Bayless
Stacia Cohen, RN
John M. Colmers
James N. Elliott, M.D.
Adam Kane
Alyson Schuster, Ph.D., Deputy Director

Enclosure

MARYLAND'S HOSPITALS
FUNCTION DIFFERENTLY TODAY

Screen for behavioral health conditions, social determinants, and abuse

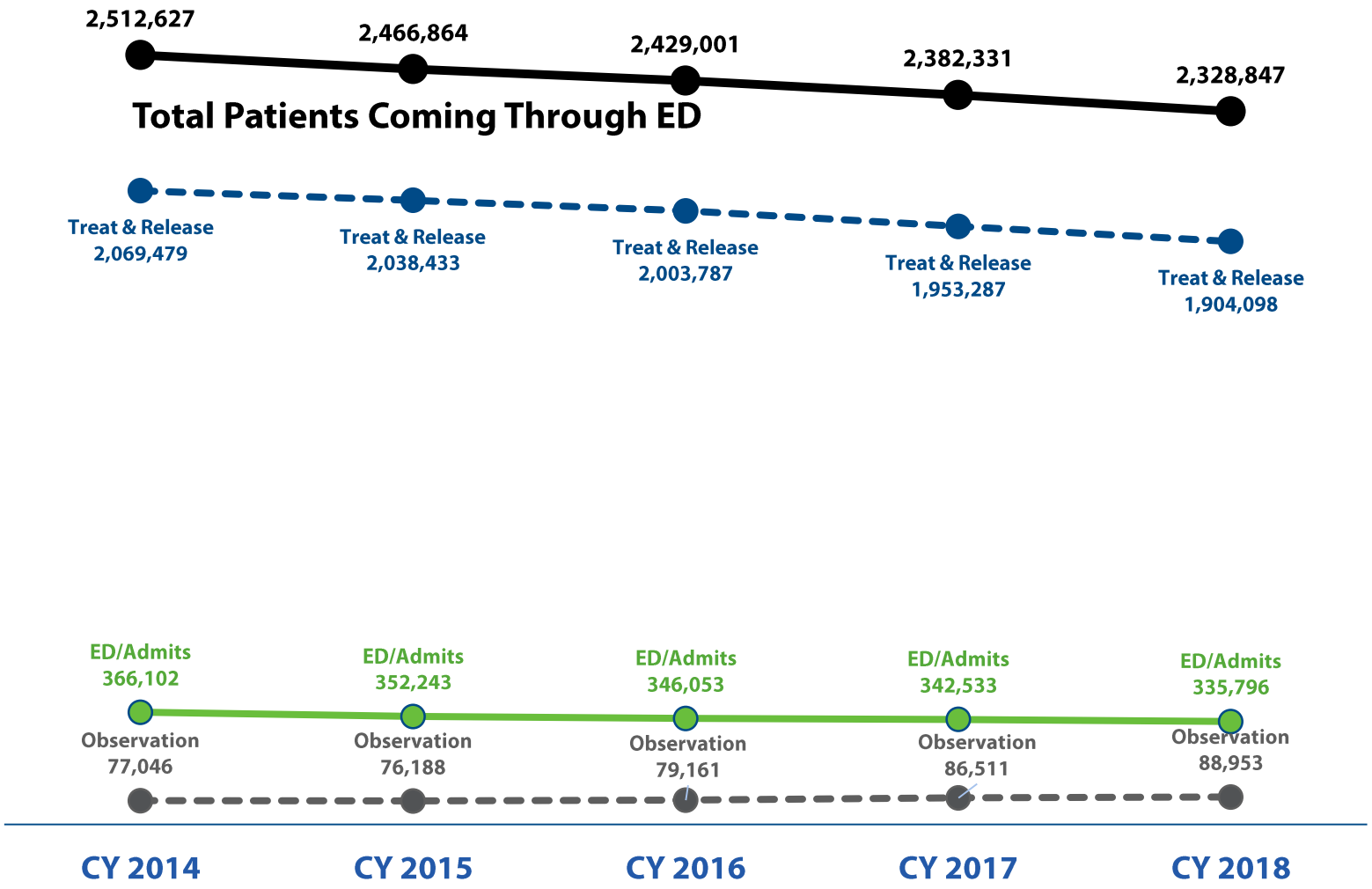
Administer more test and labs in emergency departments to determine which patients do not need to be admitted

Coordinate care with ambulatory and post-acute partners to ensure patients do not unnecessarily return

Are home for hard-to-place patients

On front-lines of behavioral health and opioid epidemic

VOLUME OF TOTAL ED VISITS HAS DECREASED

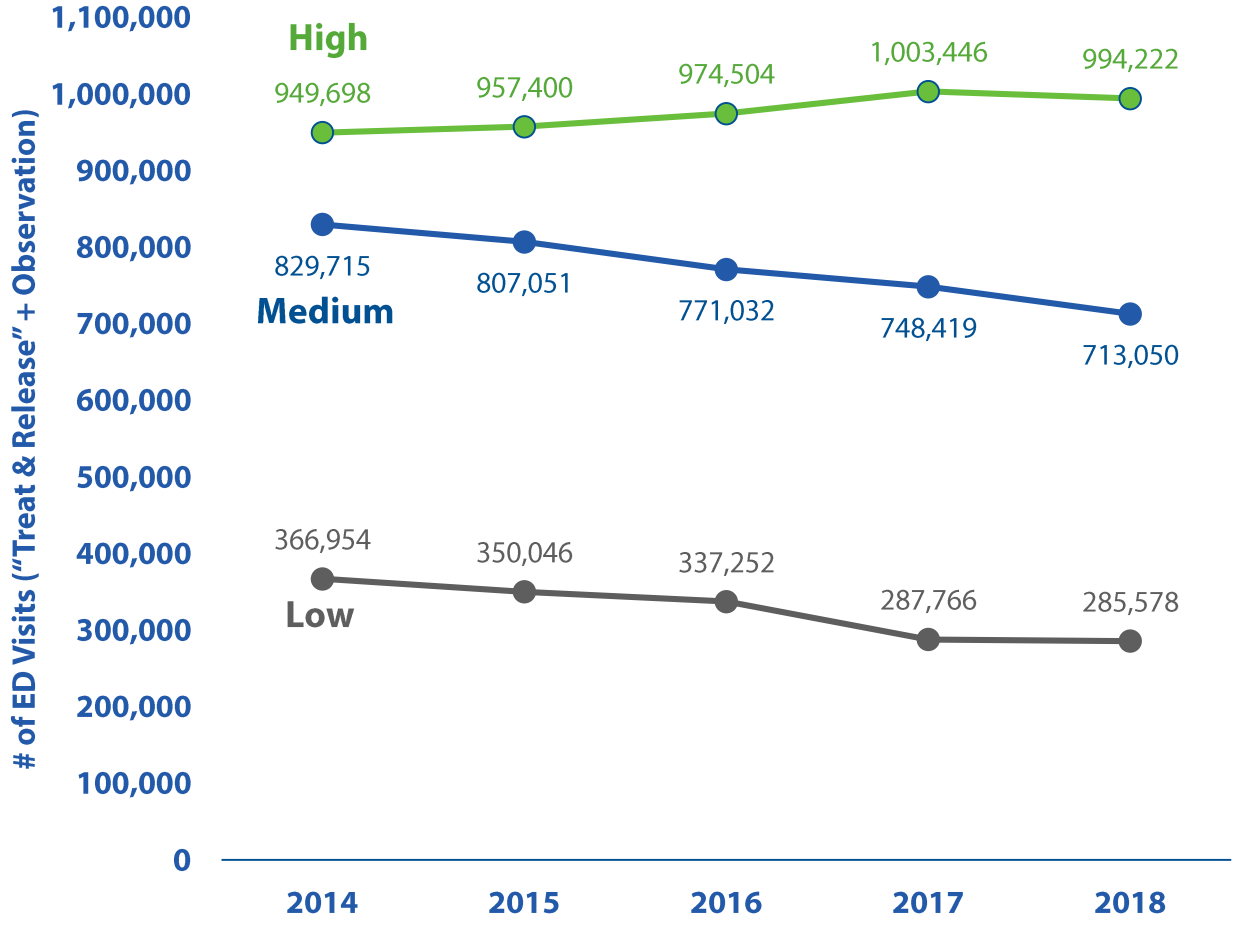


All ED Visits have decreased from 2014-2018 while Observation stays have increased

- **Total Patients Coming Through ED ↓7.3%**
- **Treat & Release ↓8.0%**
- **ED Admissions ↓8.3%**
- **Observation Stays ↑15.5%**

Source: MHA Analysis of HSCRC's hospital data (also referred to as the Revisit Files), calendar years 2014 through 2018
- ED "Treat & Release" patients that were discharged from the ED, died, or left against medical advice and does not include observation stays or inpatient admissions

ED VISITS ARE BECOMING MORE COMPLEX



LOW - Level I and II (CPT 99281 & 99282)

Example Interventions:

- Wound rechecks
- Suture removal
- Application of ace wrap or sling
- Assessment of visual acuity

MEDIUM - Level III (CPT 99283)

Example Interventions:

- Foley/In & Out catheterizations
- C-Spine precautions
- Mental health – anxious, simple treatment
- Routine psychiatric medical clearance; limited social worker intervention

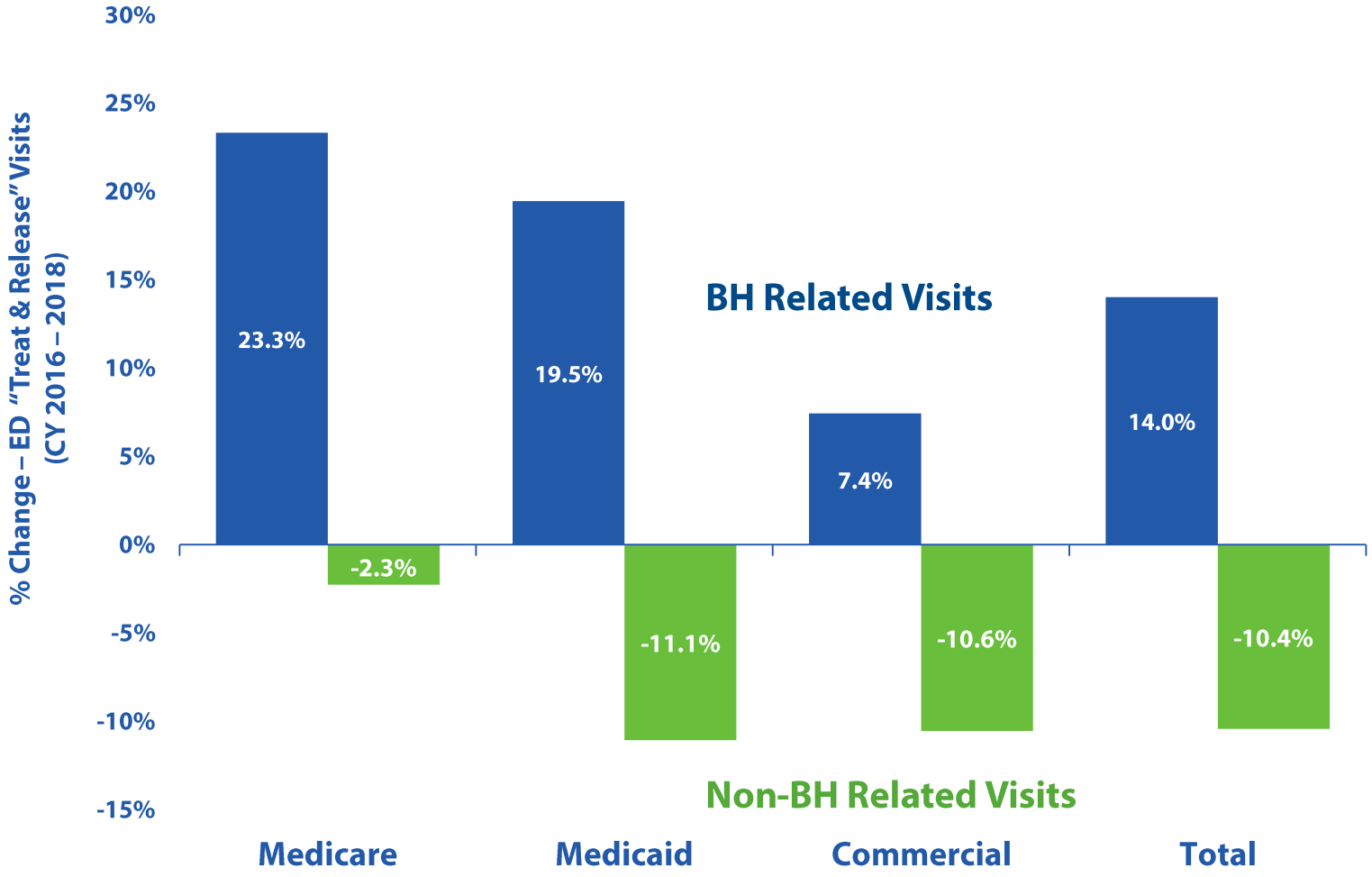
HIGH - Level IV and V (CPT 99284 & 99285)

Example Interventions:

- Cardiac monitoring
- Nebulizer treatments
- Administration of infusions or parenteral medications
- Coordination of hospital admission/transfer or change in living situation

Source: MHA Analysis of HSCRC's hospital data (also referred to as the Revisit Files), calendar years 2014 through 2018
- ED "Treat & Release" patients that were discharged from the ED, died, or left against medical advice and does not include observation stays or inpatient admissions
- ED Severity Levels – High (Level IV & V) , Medium (Level III), Low (Level I & II)

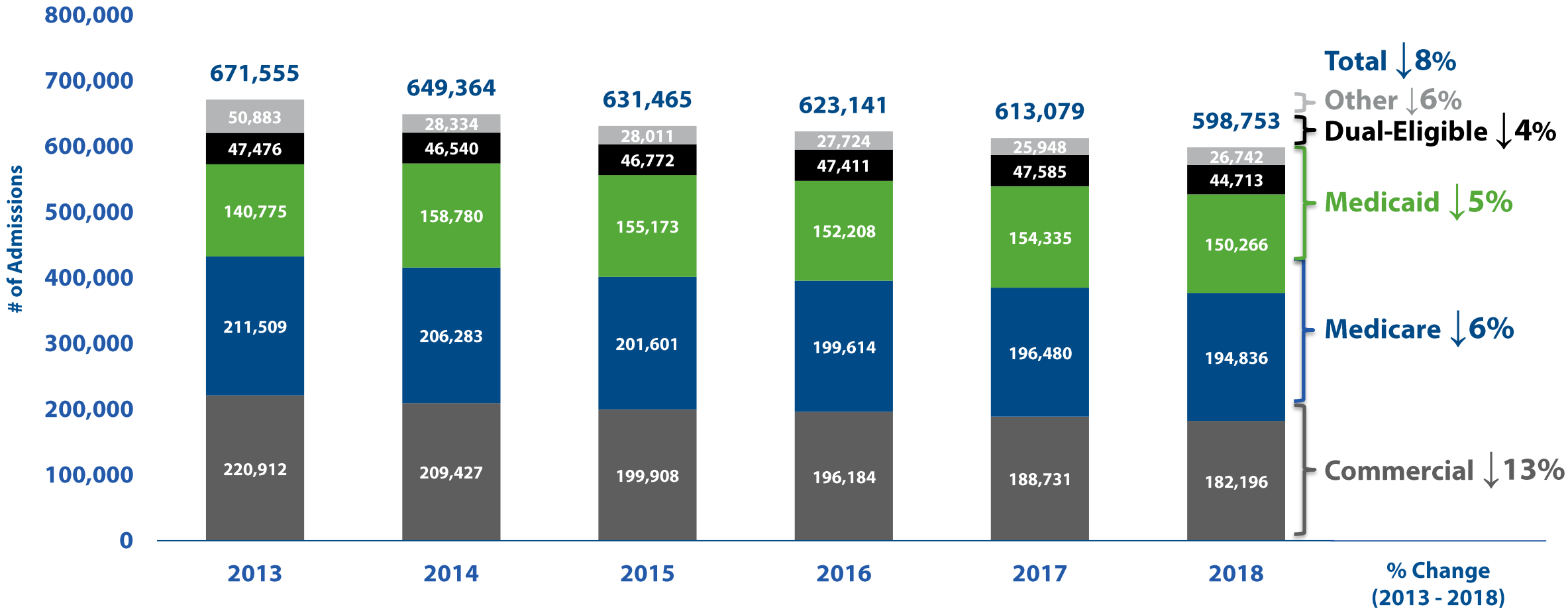
BEHAVIORAL HEALTH PATIENTS CONTINUE TO RISE IN MARYLAND'S EMERGENCY DEPARTMENTS



ED visits for behavioral health increased by **14%** from 2016-2018, while all other ED visits dropped by **10%**

Source: MHA Analysis of HSCRC's hospital data (also referred to as the Revisit Files), calendar years 2016, 2017, & 2018
- Diagnosis categories are based on MHA's application of the Agency for Healthcare Research and Quality's Clinical Classifications Software Refined, version 2019-1
- Behavioral health diagnosis identified as either primary or secondary conditions
- ED "Treat & Release" patients that were discharged from the ED, died, or left against medical advice and does not include observation stays or inpatient admissions

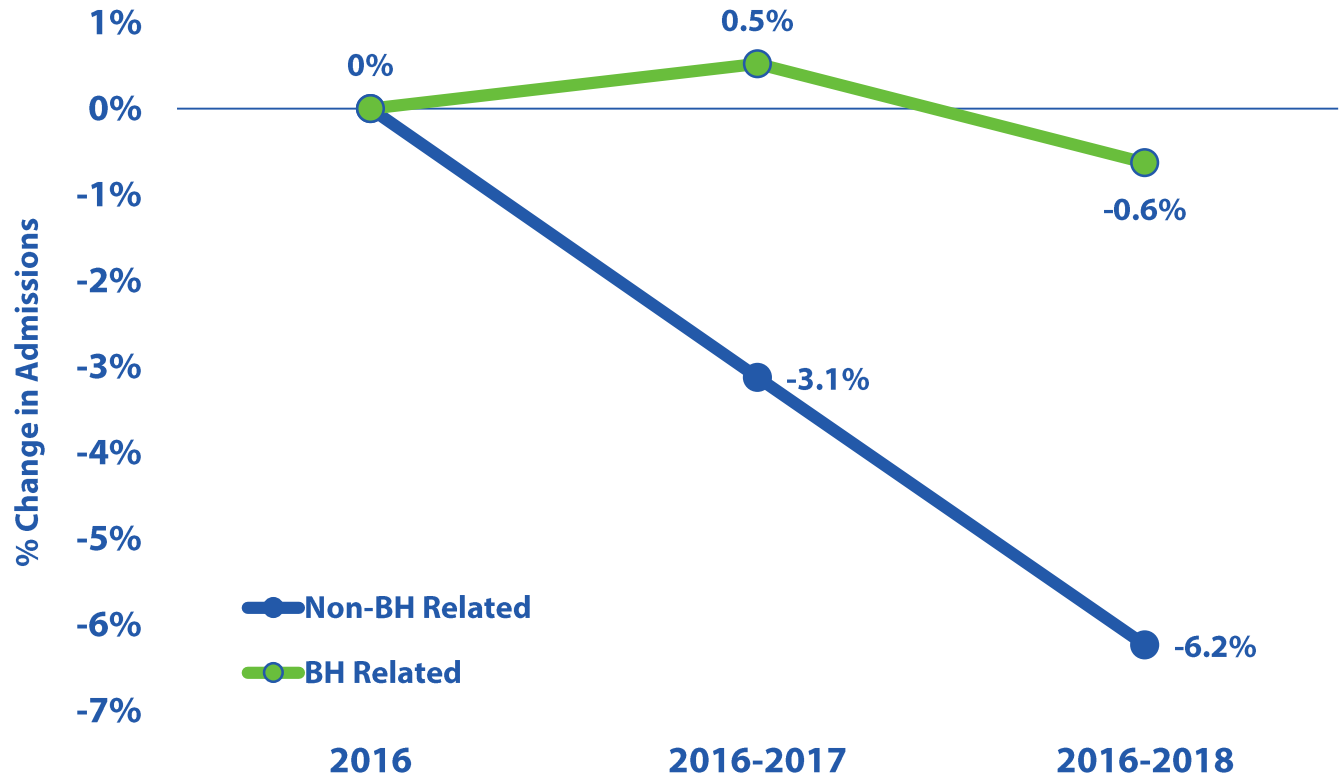
ADMISSIONS ARE DECREASING FOR ALL PAYERS



- **8%** decrease in inpatient admissions from 2014 to 2018
- Greatest decreases by payer includes Commercial **(13%)** & Medicare **(6%)**

Source: MHA Analysis of HSCRC's hospital data (also referred to as the Revisit Files), calendar years 2014 through 2018

ADMISSIONS FOR BEHAVIORAL HEALTH CONTINUE TO BE A CHALLENGE



Admissions for behavioral health remained steady in comparison to non-behavioral health related admissions from 2016-2018 with much of the increase attributed to Medicaid patients

Source: MHA Analysis of HSCRC's hospital data (also referred to as the Revisit Files), calendar years 2016, 2017, & 2018
- Diagnosis categories are based on MHA's application of the Agency for Healthcare Research and Quality's Clinical Classifications Software Refined, version 2019-1
- Behavioral health diagnosis identified as either primary or secondary conditions

Draft Recommendation for the Maryland Hospital Acquired Conditions Program for Rate Year 2022

December 11, 2019

Health Services Cost Review Commission

4160 Patterson Avenue
Baltimore, Maryland 21215
(410) 764-2605
FAX: (410) 358-6217

This document contains the draft staff recommendations for the Maryland Hospital Acquired Conditions Program for RY 2022. Comments on the draft policy may be submitted by email to hscrc.quality@maryland.gov and are due by Friday, December 20, 2019.

Table of Contents

List of Abbreviations

AHRQ	Agency for Health Care Research and Quality
APR-DRG	All Patients Refined Diagnosis Related Groups
CMS	Centers for Medicare & Medicaid Services
CY	Calendar Year
DRG	Diagnosis-Related Group
FFY	Federal Fiscal Year
FY	State Fiscal Year
HAC	Hospital-Acquired Condition
HAI	Hospital Associated Infection
HSCRC	Health Services Cost Review Commission
ICD	International Statistical Classification of Diseases and Related Health Problems
MHAC	Maryland Hospital-Acquired Condition
NHSN	National Healthcare Safety Network
NQF	National Quality Forum
PMWG	Performance Measurement Work Group
POA	Present on Admission
PPC	Potentially Preventable Complication
PSI	Patient Safety Indicator
QBR	Quality-Based Reimbursement
RY	Rate Year
SIR	Standardized Infection Ratio
SOI	Severity of Illness
TCOC	Total Cost of Care
VBP	Value-Based Purchasing
YTD	Year to Date

Key Methodology Concepts and Definitions

Potentially preventable complications (PPCs): 3M originally developed 65 PPC measures, which are defined as harmful events that develop after the patient is admitted to the hospital and may result from processes of care and treatment rather than from the natural progression of the underlying illness. PPCs, like national claims-based hospital-acquired condition measures, rely on **present-on-admission codes** to identify these post-admission complications.

At-risk discharge: Discharge that is eligible for a PPC based on the measure specifications

Diagnosis-Related Group (DRG): A system to classify hospital cases into categories that are similar clinically and in expected resource use. DRGs are based on a patient's primary diagnosis and the presence of other conditions.

All Patients Refined Diagnosis Related Groups (APR-DRG): Specific type of DRG assigned using 3M software that groups all diagnosis and procedure codes into one of 328 All-Patient Refined-Diagnosis Related Groups.

Severity of Illness (SOI): 4-level classification of minor, moderate, major, and extreme that can be used with APR-DRGs to assess the acuity of a discharge.

APR-DRG SOI: Combination of Diagnosis Related Groups with Severity of Illness levels, such that each admission can be classified into an APR-DRG SOI "cell" along with other admissions that have the same Diagnosis Related Group and Severity of Illness level.

Case-Mix Adjustment: Statewide rate for each PPC (i.e., normative value or "norm") is calculated for each diagnosis and severity level. These **statewide norms** are applied to each hospital's case-mix to determine the expected number of PPCs, a process known as **indirect standardization**.

Observed/Expected Ratio: PPC rates are calculated by dividing the observed number of PPCs by the expected number of PPCs. Expected PPCs are determined through case-mix adjustment.

Diagnostic Group-PPC Pairings: Complications are measured at the diagnosis and Severity of Illness level, of which there are approximately 1,200 combinations before one accounts for clinical logic and PPC variation.

Zero norms: Instances where no PPCs are expected because none were observed in the base period at the Diagnosis Related Group and Severity of Illness level.

Recommendations

The MHAC policy was redesigned in RY 2021 to modernize the program for the new Total Cost of Care Model. This RY 2022 draft recommendation provides updated performance data, methodology refinement considerations, and modeling of scores and revenue adjustments, but in general maintains the measures and methodology that were developed and approved for RY 2021[1].

These are the draft recommendations for the Maryland Rate Year (RY) 2022 Hospital-Acquired Conditions (MHAC) policy:

A. Continue to use 3M Potentially Preventable Complications (PPCs) to assess hospital-acquired complications.
    1. Maintain focused list of PPCs in payment program that are clinically recommended and that generally have higher statewide rates and variation across hospitals.
    2. Monitor all PPCs and provide reports for hospitals and other stakeholders.
        a) Evaluate PPCs in "Monitoring" status that worsen and consider inclusion back into the MHAC program for RY 2023 or future policies.
B. Require hospitals to be scored on a minimum of six of the fourteen PPCs to be included in the payment program.
C. Continue to assess hospital performance on attainment only.
D. Continue to weight the PPCs in payment program by 3M cost weights as a proxy for patient harm.
E. Maintain a prospective revenue adjustment scale with a maximum penalty at 2 percent and maximum reward at 2 percent and continuous linear scaling with a hold harmless zone between 60 and 70 percent.

[1] See the RY 2021 policy for detailed discussion of the MHAC redesign, rationale for decisions, and approved recommendations

Introduction

Since 2014, Maryland hospitals have been funded under a Population-Based Revenue system, a fixed annual revenue cap that is adjusted for inflation, quality performance, reductions in potentially avoidable utilization, market shifts, and demographic growth. Under the Population-Based Revenue system, hospitals are incentivized to transition services to the most appropriate setting, and may keep savings that they achieve via improved health care delivery (e.g., reduced avoidable utilization, readmissions, hospital-acquired infections). It is important that the Commission ensure that any incentives to constrain hospital expenditures do not result in declining quality of care. Thus, the Maryland Health Services Cost Review Commission's (HSCRC's or Commission's) Quality programs reward quality improvements that reinforce the incentives of the Population-Based Revenue system, while guarding against unintended consequences and penalizing poor performance.

The Maryland Hospital Acquired Conditions (MHAC) program is one of several pay-for-performance initiatives that provide incentives for hospitals to improve patient care and value over time. The MHAC policy currently holds 2 percent of hospital revenue at-risk for complications that occur during a hospital stay as a result of treatment rather than the underlying progression of disease. Examples of the types of hospital acquired conditions included in the current payment program are respiratory failure, pulmonary embolisms, and surgical-site infections.

With the commencement of the Total Cost of Care (TCOC) Model Agreement with CMS on January 1, 2019, the performance standards and targets in HSCRC's portfolio of quality and value-based payment programs are being reviewed and updated. This is in response to stakeholder requests that these policies be reviewed to ensure they remain in line with the goals of the Model and that they maintain methodological validity. Additionally, because the State must also request annual exemptions from the CMS Hospital Acquired Conditions (HAC) program as well as the other quality programs in the State, another key aspect of these reviews is to demonstrate that Maryland's program results continue to be aggressive and progressive, i.e. meeting or surpassing those of the nation. In CY 2018, staff focused on the MHAC program redesign and convened a Clinical Adverse Events Measure (CAEM) subgroup with clinical and measurement expertise who made recommendations that were then further evaluated by the Performance Measurement Workgroup (PMWG) and approved by the Commission.

The major accomplishments of the MHAC program redesign were focusing the payment incentives on a narrower list of clinically significant complications, moving to an attainment only system given Maryland's sustained improvement on complications, adjusting the scoring methodology to better differentiate hospital performance, and weighting complications by their associated cost weights as a proxy for patient harm. The redesign also assessed how hospital performance is converted to revenue adjustments, and ultimately recommended maintaining the use of a linear prospective revenue adjustment scale with a hold harmless zone. Given the large changes that were implemented in RY 2021, this RY 2022 MHAC policy does not propose major changes to the

program, although staff proposes a process for re-evaluating the PPCs included in the program for future years and assesses hospital inclusion criteria.

Background

Exemption from Federal Hospital-Acquired Condition Programs

The Federal Government operates two hospital complications payment programs, the Deficit Reduction Act Hospital Acquired Condition program (DRA-HAC), which reduces reimbursement for hospitalizations with inpatient complications, and the HAC Reduction Program (HACRP), which penalizes hospitals with high rates of complications. Detailed information, including HACRP complication measures, may be found in Appendix I.

Because of the State's unique all-payer hospital model and its population based revenue system, Maryland does not directly participate in the federal pay-for-performance programs. Instead, the State administers the Maryland Hospital Acquired Conditions (MHAC) program, which relies on quality indicators validated for use with an all-payer inpatient population. However, the State must submit an annual report to CMS demonstrating that Maryland's MHAC program targets and results continue to be aggressive and progressive, i.e. that Maryland's performance meets or surpasses of the nation. Specifically, the State must ensure that the improvement in complication rates observed under the All-Payer Model is maintained. CMS granted Maryland exemption from the federal pay-for-performance programs (including the HAC Reduction Program) for Federal Fiscal Year 2020 on Aug 29. 2019.

Overview of the Maryland MHAC Policy

The MHAC program, which was first implemented for RY 2011, is based on a system developed by 3M Health Information Systems (3M) to identify potentially preventable complications (PPCs) using present-on-admission codes available in claims data. 3M originally developed specifications for 65 PPCs[2], which are defined as harmful events that develop after the patient is admitted to the hospital and may result from processes of care and treatment rather than from the natural progression of the underlying illness. For example, the program holds hospitals accountable for pulmonary embolisms and surgical-site infections that occur during inpatient stays. These complications can lead to 1) poor patient outcomes, including longer hospital stays, permanent harm, and death; and 2) increased costs. Thus, the MHAC program is designed to provide incentives to improve patient care by adjusting hospital budgets based on PPC performance.

[2] In RY 2020 there were 45 PPCs or PPC combinations included in the program as 3M had discontinued some PPCs and others were deemed not suitable for a pay-for-performance program.

MHAC Redesign

As mentioned previously, the MHAC policy was substantially changed for RY 2021. With the exception of maintaining the linear scaling with a hold harmless zone to determine hospital rewards and penalties, the MHAC policy was substantially overhauled for RY 2021. The policy updates included:

- Selecting a narrowed list of 14 PPC complication measures to focus on the most clinically meaningful and significant measures for use in the payment program.
- Using two years of data for establishing normative values to address case-mix concerns.
- Moving to an attainment only approach for assessing hospital performance.
- Modifying the scoring methodology to better differentiate hospital performance.
- Weighting complications using 3M cost weights as proxies for patient harm.

MHAC Methodology

Figure 2 provides an overview of the three steps in the MHAC methodology that convert hospital performance to standardized scores, and then payment adjustments, as outlined below:

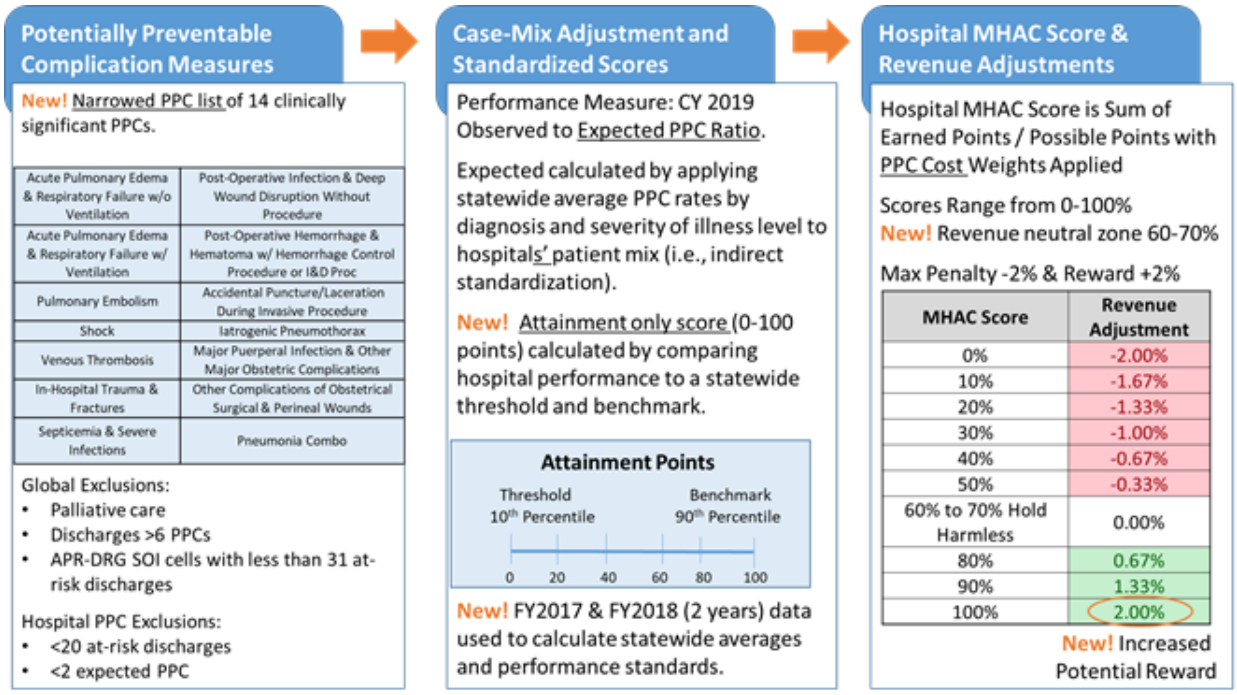
Step 1. For the PPCs identified for payment, global and hospital-level exclusions are determined.

Step 2. Case-mix adjustment is used to calculate observed to expected ratios that are then converted to a standardized point based score (0-100 points) based on each hospital's attainment levels using the same scoring methodology that is used for CMS Value-Based Purchasing and Maryland QBR program.

Step 3. Overall hospital scores are then calculated by taking the points for each PPC and multiplying by the 3M PPC cost weights, then summing numerator (points scored) and denominator (possible points) across the PPCs to calculate a percent score. A linear point scale set prospectively is then used to calculate the revenue adjustment percent. This prospective scaling approach differs from national programs that relatively rank hospitals after the performance period.

Additional information on the MHAC redesign and methodology can be found in Appendix II and in the RY 2021 policy. However, the major changes to the RY 2021 MHAC program are marked as "new" within the diagram.

Figure 2. Overview Rate Year 2021 MHAC Methodology



Assessment

In order to develop the RY 2022 MHAC policy, staff solicited input from the PMWG and other stakeholders. In general, stakeholders supported the staff's recommendation to not make major changes to the RY 2022 MHAC program. This section of the report provides an overview of the data and issues discussed by the PMWG, including analysis of statewide PPC trends, estimated hospital scores, and revenue adjustment modelling.

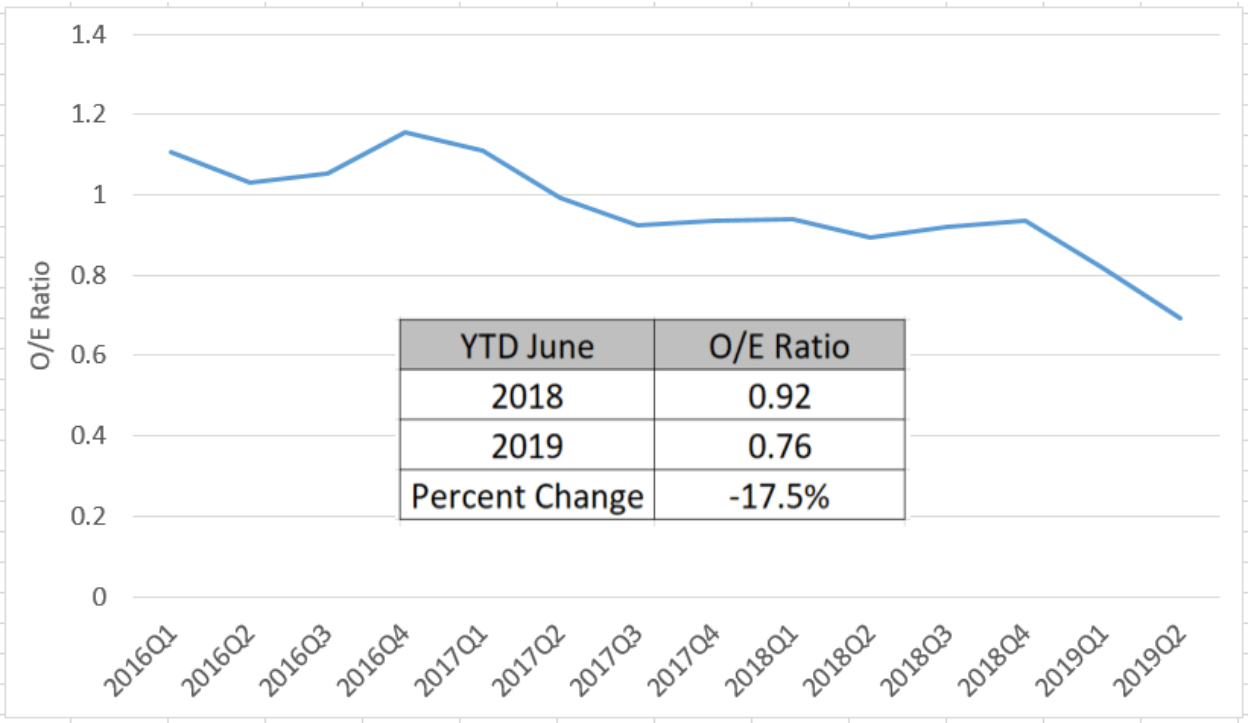
Statewide PPC Performance Trends

Complications Included in Payment Program

Under the All-Payer Model, Maryland hospitals saw a dramatic decline in complications and, as a State, exceeded the requirement of a 30 percent reduction by the end of CY 2018. These reductions were achieved through clinical quality improvement, as well as improvements in documentation and coding. As mentioned previously, the MHAC redesign assessed which PPCs should be included in the pay-for-performance program based on criteria developed by the CAEM subgroup. The criteria included clinical significance, opportunity for improvement, sample size considerations, and variation across hospitals.

Under the TCOC Model, Maryland must maintain these improvements by not exceeding the CY 2018 PPC rates. Figure 3 below shows the statewide observed to expected (O/E) ratio from 2016 through June of CY 2019 (most recently available final data). The O/E ratio presents the count of observed PPCs divided by the calculated number of expected PPCs (which is generated using normative values applied to the case-mix of discharges a hospital experiences). An O/E Ratio of greater than 1 indicates that a hospital experienced more PPCs than expected, and conversely, an O/E Ratio less than one indicates that a hospital experienced fewer PPCs than expected. The figure below also indicates how Maryland is performing relative to CY 2018, which is the time period that will be used to assess any backsliding on performance. Specifically, the CY 2019 YTD performance data for payment program PPCs shows that there has been about a 17.5 percent reduction in the observed to expected ratio (CY 2018 YTD O/E ratio = 0.92 and CY 2019 YTD O/E ratio = 0.76).

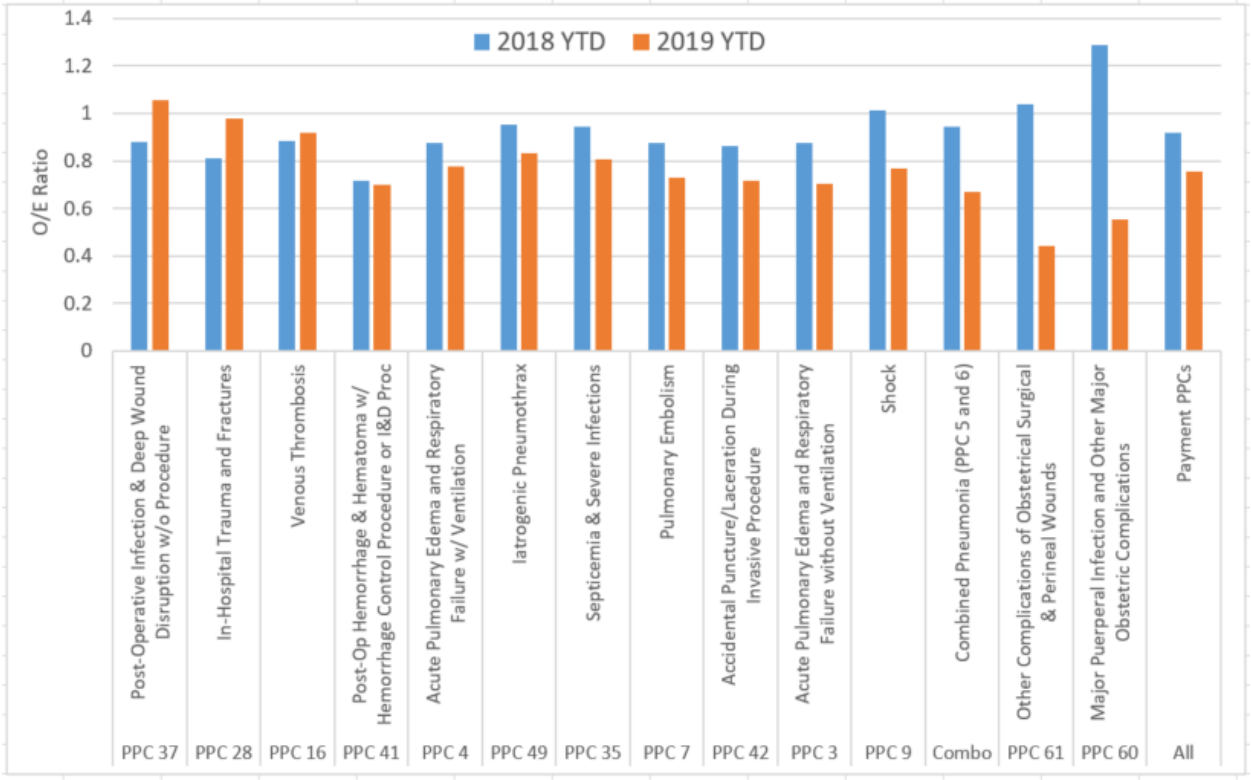
Figure 3. Payment Program PPCs Observed to Expected Ratios CY 2016 to CY 2019 YTD through June



YTD June	O/E Ratio
2018	0.92
2019	0.76
Percent Change	-17.5%

In terms of specific improvements among the 14 payment PPCs, Figure 4 shows the O/E ratios for CY 2018 and CY 2019 YTD through June, sorted from greatest percent increase (on the left) to greatest decrease (on the right). The three PPCs that have had an increased O/E ratio include PPC 37 Post-Operative Infection & Deep Wound Disruption Without Procedure, PPC 28 In-Hospital Trauma and Fractures, and PPC 16 Venous Thrombosis. The three PPCs with the greatest decreases include PPC 60 Major Puerperal Infection and Other Major Obstetric Complications, PPC 61 Other Complications of Obstetrical Surgical & Perineal Wounds, and the combined Pneumonia PPC.

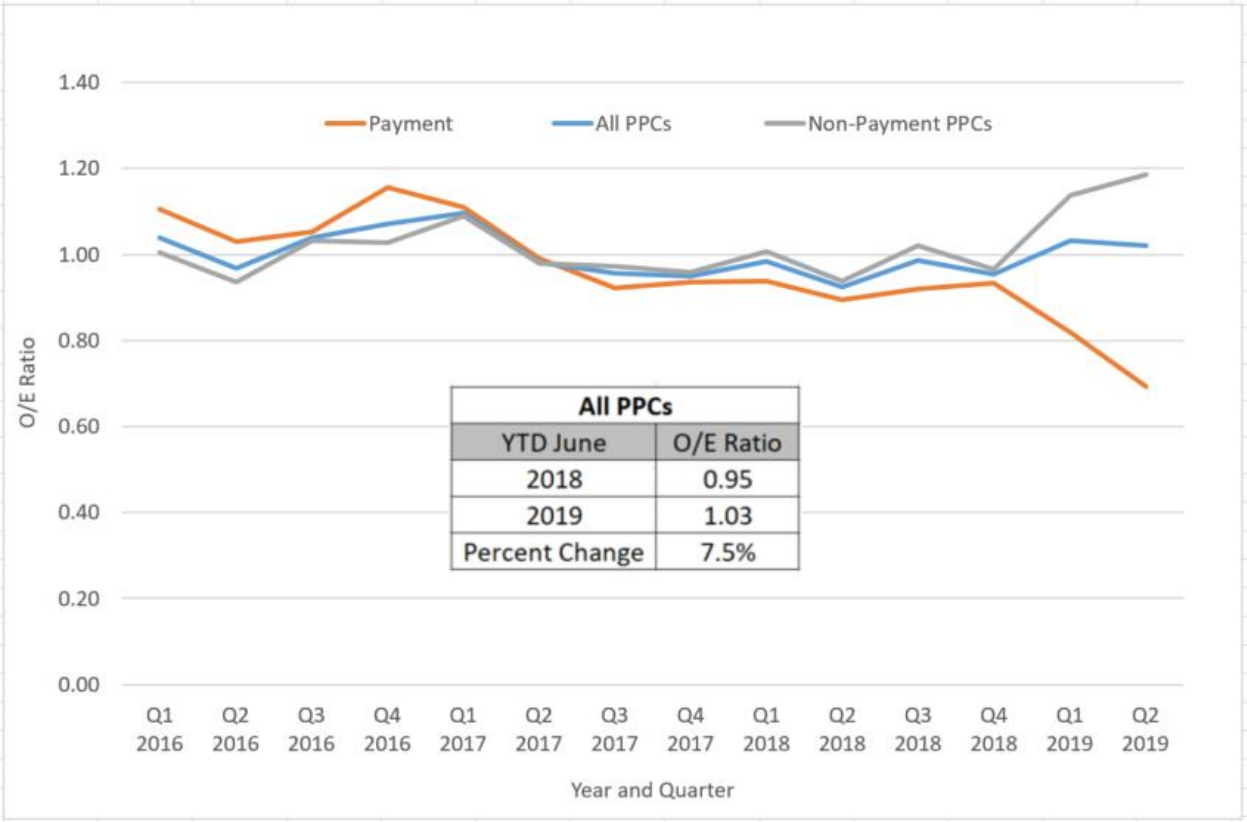
Figure 4. Payment Program PPC Observed to Expected Ratios CY 2018 and CY 2019 YTD through June



Monitored Complications

In addition to focusing on a narrowed list of PPCs for payment, the RY 2021 MHAC Policy included a recommendation to monitor the remaining PPCs. Staff fulfills this recommendation by monitoring all PPCs that are still considered clinically valid by 3m, and distinguishing between "Monitoring" and "Payment" PPCs, as in the analysis below. The overall PPC trend across all 56 PPCs shows that there has been an increase in the overall statewide O/E ratio from 0.95 in the first six months of CY 2018 to 1.03 in the first 6 months of CY 2019; the slight worsening in performance is driven primarily by increases in PPCs under monitoring, and not increases in the payment program PPCs, as illustrated in Figure 5.

Figure 5. PPC O/E Ratio Trends 2016 Through Qtr 2 CY 2019



All PPCs	
YTD June	O/E Ratio
2018	0.95
2019	1.03
Percent Change	7.5%

In response to the increase in PPCs overall, staff has reached out to select hospitals and requested that they provide a response, including any insight into underlying factors leading to these trends for the first 6 months of 2019 compared with 2018. Early hospital feedback regarding the trends include:

- **Clinicians' interpretations of clinic documentation that triggers the PPC vary, and many of the occurrences are not clinically significant events**—e.g., for PPC 40 Post-operative Hemorrhage without Procedure, this is subjectively evaluated by clinicians as to whether there was an occurrence of a hemorrhage or hematoma; also, even when a hematoma or bruising after a procedure is expected in the normal course of a particular surgical treatment, acknowledging this occurrence in the coding still causes these PPCs to be triggered.
- **The events are low volume and highly volatile**—e.g., For PPC 31 Decubitus Ulcer, for some hospitals with no occurrences in the base period, one or two occurrences in the performance period represents a large increase for that PPC, even when evaluated in the context of an O/E ratio.
- **The events were triggered and may not be the fault of the hospital**—e.g., for PPC 29 Poisonings Except from Anesthesia, one hospital indicated that there were cases assigned

this PPC that were triggered when the patients used opiates not prescribed but brought to them from outside the hospital during the patients' hospital stay.

- **Changes in Documentation and Coding Practices not associated with change in quality of care**—hospitals may focus on payment program PPCs when coding cases, especially given some of the clinical and definitional concerns documented for some of the PPCs removed from the MHAC program.

Additionally staff notes that some of the PPCs were removed from the payment program prior to the RY 2021 redesign due to clinical concerns or small cells, but they are included in the analysis, which may also contribute to the volatility of the monitoring only PPC evaluation..

Based upon all the feedback received to date, staff believes the criteria set up by the CAEM to select the PPCs for payment were set up to overcome the weaknesses in the broader list of PPCs; staff therefore supports ongoing monitoring and dialogue with hospitals, but not moving these PPCs back to payment, or using the PPCs to measure success on statewide complications. For RY 2022, staff proposes maintaining the same 14 PPCs for continuity over a two year period, however staff will continue to monitor all PPCs and may recommend non-payment PPCs with clinical significance and statistical reliability be reintroduced into the RY 2023 or future policies.

Hospital PPC Exclusion Criteria

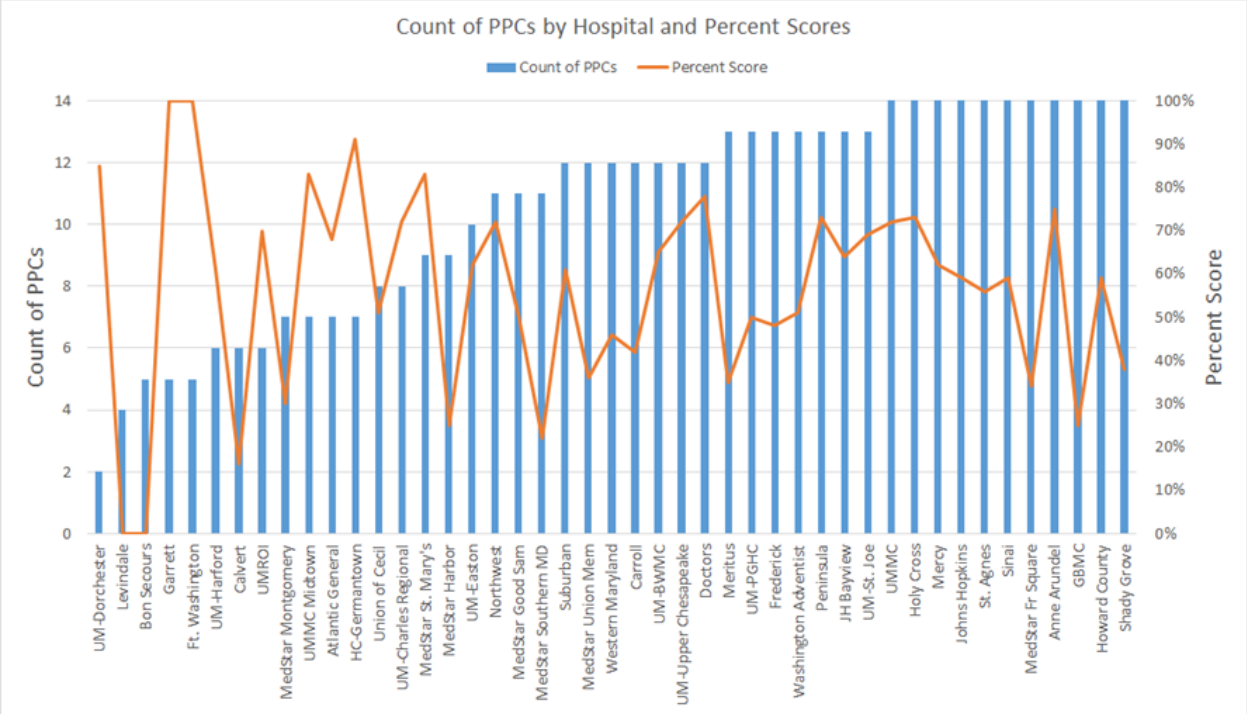
Since the MHAC program moved to the observed to expected ratios to assess performance at the start of the All-Payer Model, minimum cell size exclusions have been applied at the hospital level for each complication. These requirements were maintained in RY 2021 but were doubled to reflect the use of two years of data to determine performance standards and prospectively determine which PPCs a hospital was being held accountable. Specifically, hospitals are required to have at least 20 at-risk discharges and 2 expected PPCs in order for that PPC to be included in the payment program. Staff does not propose changes to these requirements for RY 2022.

Staff is concerned that, with continued improvements in performance and the narrowed list of 14 PPCs in the payment program, there are now a handful of hospitals eligible to be scored on less than half of the PPCs. The bar chart in Figure 6 below illustrates the number of PPCs (i.e., shock, sepsis, etc) for which each hospital is eligible to be assessed based on the above criteria, along with a line graph indicating their modeled scores. As shown on the far right, there are 11 hospitals that are eligible for all fourteen PPCs, and on the far left there are 5 hospitals eligible for less than six PPCs.[3] Staff notes that all but one hospital with less than six PPCs are receiving scores of either 0 or 100 percent. To address the volatility in scores related to low cell sizes, staff proposes that hospitals

[3] UM Chestertown did not qualify for any of the 14 PPCs

must be scored on at least six PPCs to be included in the payment program, similar to the approach of national VBP programs.[4]

Figure 6. Number of Types of PPCs Included in Payment Program by Hospital, with Modeled Scores



To address stakeholder questions on the impact of these hospitals on the performance standards, staff recalculated and compared the standards (thresholds and benchmarks) with these hospitals removed as shown in Figure 7. This analysis shows that for some PPCs, the benchmark is slightly increased and/or threshold is lower, narrowing the range between the threshold and benchmark where points are earned. While staff believes that PPCs experienced at these hospitals are clinically significant, the volatility in the hospitals' scores is a significant concern and staff are not sure whether these hospitals should be eligible for the full rewards or penalties when only assessed on a handful of PPCs. Appendix III provides a table of the PPCs with the volume of complications for the hospitals with less than 6 PPCs, which shows that these five hospitals had a total of 41 observed complications in FY 2019. While the data for these hospitals would still be included in the calculation of normative values and statewide complication rates, staff have modeled scores and revenue adjustments removing them from the data calculations for setting the threshold and

[4] The national VBP program Clinical Care Domain requires a minimum of two measures; Person and Community Engagement Domain requires a minimum of 100 HCAHPS surveys in the performance period; Safety Domain requires a minimum of three out of six measures; hospitals must be scored in at least three domains to be included in the program.

benchmark standards. The final policy will reflect the stakeholder input received on whether this additional exclusion should be applied.

Figure 7. Benchmark and Threshold (i.e., Performance Standards) Comparison

Estimated RY 2022 MHAC Performance Standards		With All Hospitals		Adjusted to Remove Hospitals with < 6 PPCs	
PPC Number	PPC Description	Threshold	Benchmark	Threshold	Benchmark
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1.9231	0.3226	1.7896	0.3375
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1.4789	0.5068	1.4789	0.6681
7	Pulmonary Embolism	1.5319	0.3291	1.5319	0.3291
9	Shock	1.6765	0.3756	1.6608	0.413
16	Venous Thrombosis	1.8015	0.1242	1.8015	0.1242
28	In-Hospital Trauma and Fractures	1.5279	0.445	1.5279	0.445
35	Septicemia & Severe Infections	1.5503	0.3806	1.5201	0.4203
37	Post-Operative Infection & Deep Wound Disruption Without Procedure	1.966	0.4007	1.966	0.4007
41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc	2.448	0.4264	2.448	0.4264
42	Accidental Puncture/Laceration During Invasive Procedure	2.1478	0.3557	2.1478	0.3557
49	Iatrogenic Pneumothrax	1.7916	0.3429	1.7916	0.3429
60	Major Puerperal Infection and Other Major Obstetric Complications	1.6214	0	1.6214	0
61	Other Complications of Obstetrical Surgical & Perineal Wounds	1.9689	0	1.9689	0
67	Combined Pneumonia (PPC 5 and 6)	1.5916	0.3916	1.5821	0.459

Palliative Care Exclusion

In prior years, the Performance Measurement Work Group had expressed interest to understand the assignment of PPCs for patients with a palliative care diagnosis (Z515), which the MHAC policy had explicitly excluded. This was in part because in October 2016 coding guidelines changed such that the palliative care diagnosis code was no longer exempt from POA and as such there had been indications from 3M that the PPCs would count if a patient had palliative care diagnosis not present on admission. However, most recently, 3M has indicated that the current PPC Grouper will not assign a PPC to a patient with a palliative care diagnosis regardless of present on admission except in the case of PPC 45, Post-Procedure Foreign Body. In light of 3M's direction on this matter, including palliative care cases back into the MHAC program will not have a material impact on the MHAC program. Therefore, the post-grouper exclusion of discharges with a palliative care diagnosis will be removed and instead the 3M clinical logic will be used for this exclusion.

Modeling of Scores and Revenue Adjustments

For RY 2022, staff will calculate normative values and performance standards using SFYs 2018 and 2019 (moved forward one year from the RY 2021 policy) and assess hospital performance for CY

2020 using Version 37 of the PPC Grouper. This policy presents modeling using this updated time period (SFYs 2018 and 2019) to calculate performance standards and SFY 2019 as the performance period, but using Version 36 of the PPC Grouper. Once data is available under Version 37, the normative values and performance standards will be updated.

Score Modeling

For the RY 2021 policy, the policy evolved to an attainment-only system with wider performance standards (i.e., 10th and 90th percentiles) to better differentiate hospital performance. For this draft policy, the estimated scores are SFY 2019 performance, which overlaps with the time period being used to determine performance standards (base period). Thus the RY 2021 YTD June results are also provided for comparison despite the limitations of only including six months of data for assessing performance. Both models remove hospitals with less than 6 PPCs for comparison.

Two sets of scores are presented below:

- Model 1: RY 2022 estimated scores using estimated RY 2022 performance standards
- Model 2: RY 2021 scores with six months of data through June using the actual RY 2021 performance standards

Figure 8 provides descriptive statistics for the total hospital scores. The modelled scores are lower than the actual YTD results, perhaps because of the overlap of the performance period and time period for calculating performance standards, or because the 6-month YTD data is not consistent with a 12-month performance period. Furthermore, it should be noted that the RY 2021 YTD scores are higher than the scores modeled when the policy was approved. As such, staff will continue to discuss the cut-point for penalties and rewards with stakeholders, however at this time we have not proposed a change from the RY 2021 scale with a hold harmless zone between 60 and 70 percent.

Figure 8. Hospital Score Models

Hospital Scores	Model 1: RY2022 Modeling	Model 2: RY2021 YTD Results
Median	62%	70%
Average	58%	70%
Min	17%	31%
Max	93%	93%
25th percentile	44%	59%
75th percentile	74%	82%

Revenue Adjustment Scale Modeling

Using scores presented above, staff modeled revenue adjustments using the RY 2021 preset scale. Figure 9 provides the count of hospitals in the penalty, hold harmless or zero adjustment, and

reward zones. Also provided are the statewide net revenue adjustments. Appendix IV contains the by hospital scores and revenue adjustments. These revenue adjustments exclude any hospitals without at least 6 PPCs. Overall the results show that under Model 1 the estimated penalties are around $19.8 million and the rewards are $10.5 million. However these estimates likely underestimate rewards and overestimate penalties when compared to the actual RY 2021 YTD results and the modeling from the RY 2021policy. This is because the performance period overlaps with the time period for determining the normative values and benchmark/thresholds. The RY 2021 YTD modeling showing $5.2 million in penalties and $33.7 million in rewards, is because the median score of 70 percent that is the cut point for the start of rewards. Given that hospitals are generally performing well on complications, staff feels it is reasonable that half the hospitals are rewarded, although the Commission could consider whether the cut point should be raised.

Figure 9: Revenue Modeling

Statewide Revenue Adjustments	Model 1: RY2022 Modeling*		Model 2: RY2021 YTD Results	
	$	%	$	%
Net	-$9,322,370	-0.10%	$28,587,343	0.31%
Penalties	-$19,841,009	-0.21%	-$5,156,010	-0.06%
Rewards	$10,518,639	0.11%	$33,743,353	0.36%
Median Score	62%		70%	
# Hospitals Penalized	17		10	
# Hospitals Revenue Neutral	10		10	
# Hospitals Rewarded	13		20	

*Due to the modeled performance period overlapping with the time period for performance standards, these revenue adjustments are probably an underestimate of rewards/overestimate of penalties (e.g., the RY2021 modeling with the increase to 2 percent rewards showed $15.7 M in penalties and $17.3 M in rewards)

Additional Future Considerations

For future years it will be important to continue to try and find a national comparison for PPCs, or to move to measures such as the AHRQ Patient Safety Indicators (PSIs). Staff believes that the upcoming review of the QBR program in 2020 will provide an opportunity to reevaluate complication measures and the respective roles of the QBR safety domain and MHAC program. Specifically, staff believes that the QBR program redesign should include adoption of the all-payer ICD-10 compatible version of the PSI 90 composite measure. This PSI measure includes some complications that are similar to PPCs in payment program but with ability to do national comparison (e.g., respiratory failure) and some PPCs that are not in payment program, assessing different facets of complications as well (e.g., pressure ulcers). In addition, staff should continue to monitor other safety measures in use or under consideration nationally for reporting or payment; these measures will be considered for possible inclusion in the MHAC program for FY 2023 or beyond.

Recommendations

These are the draft recommendations for the Maryland Rate Year (RY) 2022 Hospital-Acquired Conditions (MHAC) policy:

A. Continue to use 3M Potentially Preventable Complications (PPCs) to assess hospital-acquired complications.
    1. Maintain focused list of PPCs in payment program that are clinically recommended and that generally have higher statewide rates and variation across hospitals.
    2. Monitor all PPCs and provide reports for hospitals and other stakeholders.
        a) Evaluate PPCs in "Monitoring" status that worsen and consider inclusion back into the MHAC program for RY 2023 or beyond.

B. Require hospitals to be scored on a minimum of six of the fourteen PPCs to be included in the payment program.

C. Continue to assess hospital performance on attainment only.

D. Continue to weight the PPCs in payment program by 3M cost weights as a proxy for patient harm.

E. Maintain a prospective revenue adjustment scale with a maximum penalty at 2 percent and maximum reward at 2 percent and continuous linear scaling with a hold harmless zone between 60 and 70 percent.

Appendix I. Background on Federal Complication Programs

The Federal Government operates two hospital complications payment programs, the Deficit Reduction Act Hospital Acquired Condition program (DRA-HAC) and the HAC Reduction Program (HACRP), both of which are designed to penalize hospitals for post-admission complications.

Federal Deficit Reduction Act, the Hospital-Acquired Condition Present on Admission Program

Beginning in Federal Fiscal Year 2009 (FFY 2009), per the provisions of the Federal Deficit Reduction Act, the Hospital-Acquired Condition Present on Admission Program was implemented. Under the program, patients were no longer assigned to higher-paying Diagnosis Related Groups if certain conditions were acquired in the hospital and could have reasonably been prevented through the application of evidence-based guidelines.

Hospital-Acquired Condition Reduction Program

CMS expanded the use of hospital-acquired conditions in payment adjustments in FFY 2015 with a new program, entitled the Hospital-Acquired Condition Reduction Program, under the authority of the Affordable Care Act. That program focuses on a narrower list of complications and penalizes hospitals in the bottom quartile of performance. Of note, as detailed in Figure 1 below, all the measures in the Hospital-Acquired Condition Reduction Program are used in the CMS Value Based Purchasing program, and the National Healthcare Safety Network (NHSN) Healthcare-Associated Infection (HAI) measures are also used in the Maryland Quality Based Reimbursement (QBR) program.

Figure 1. CMS Hospital-Acquired Condition Reduction Program (HACRP) FFY 2020 Measures

Recalibrated Patient Safety Indicator (PSI) measure:^ • PSI 03 – Pressure Ulcer Rate • PSI 06 – Iatrogenic Pneumothorax Rate • PSI 08 – In-Hospital Fall with Hip Fracture Rate • PSI 09 – Perioperative Hemorrhage or Hematoma Rate • PSI 10 – Postoperative Acute Kidney Injury Requiring Dialysis Rate • PSI 11 – Postoperative Respiratory Failure Rate • PSI 12 – Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate • PSI 13 – Postoperative Sepsis Rate • PSI 14 – Postoperative Wound Dehiscence Rate • PSI 15 – Unrecognized Abdominopelvic Accidental Puncture/Laceration Rate
Central Line-Associated Bloodstream Infection (CLABSI)^*
Catheter-Associated Urinary Tract Infection (CAUTI)^*

Surgical Site Infection (SSI) – colon and hysterectomy^*
Methicillin-resistant Staphylococcus aureus (MRSA) Bacteremia^*
Clostridium Difficile Infection (CDI)^*

^Recalibrated PSI Composite Measures included in the CMS VBP Program beginning FFY 2023.

* National Healthcare Safety Network (NHSN) Healthcare-Associated Infection (HAI) measures included in both the CMS VBP and Maryland QBR Programs.

For more information on the DRA HAC program POA Indicator, please refer to: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/index

For more information on the DRA HAC program, please refer to: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Downloads/FAQ-DRA-HAC-PSI.pdf

For more information on the HAC Reduction program, please refer to: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program

Appendix II: Redesigned RY 2021 MHAC Program Methodology

The MHAC policy was redesigned in RY 2021 to modernize the program for the new Total Cost of Care model. To accomplish this work, staff convened a Clinical Adverse Events Measure (CAEM) subgroup with clinical and measurement expertise who made recommendations that were then further evaluated by the Performance Measurement Workgroup (PMWG) and approved by the Commission.

The major accomplishments of the MHAC program redesign included: focusing the payment incentives on a narrower list of clinically significant complications, moving to an attainment only system given Maryland's sustained improvement on complications, adjusting the scoring methodology to better differentiate hospital performance, and weighting complications by their associated cost weights as a proxy for patient harm. The redesign also assessed how hospital performance is converted to revenue adjustments, and ultimately recommended maintaining the use of a linear prospective revenue adjustment scale with a hold harmless zone. Below are additional details on the MHAC redesign and approved methodology.

Overview of MHAC Redesign

As part of the RY 2021 MHAC redesign, with stakeholder and staff support, the Commission approved the continued use of the 3M Potentially Preventable Complication (PPC) measures. In order to assess which PPCs should be included in a pay-for-performance program, the CAEM and PMWG members developed criteria for PPC inclusion, as shown in Figure 1. Based on these criteria, a focused list of 14 PPCs was selected for inclusion in the RY 2021 payment program, with all non-payment PPCs to be monitored.

Figure 1. Criteria for PPC Inclusion

Clinical Criteria	● All-payer focus ● Clinically significant complication ● Area of national focus ● Evidence-based prevention protocols/opportunity for improvement
Statistical Criteria	● At least half of hospitals eligible for PPC ● Higher statewide rate ● Variation across hospitals in performance

MHAC Performance Scoring

In redesigning the MHAC program the CAEM subgroup and PMWG considered many issues on how to assess hospital performance including the performance metric and its case-mix adjustment, the relative weighting of individual PPCs, the scoring of PPC rates via improvement and attainment or

attainment-only, and the methodology to convert measure rates to standardized scores. Based on these discussions, the Commission approved the following RY 2021 recommendations:

- Continue to use the observed-to-expected ratio with indirect standardization based on two years of data to calculate normative values
- Move to an attainment only program
- Weight PPCs by 3M cost weights as proxy for harm
- Continue to use a points system that is based on historical performance standards but make the system more continuous and better able to distinguish gradations in performance

Performance Metric

The MHAC program assesses performance using an observed to expected ratio for each PPC.[5] The expected number of PPCs at a hospital is calculated through indirect standardization, in which a statewide rate for each PPC (i.e., normative value or "norm") is calculated for each diagnosis and severity of illness level. The advantage of this method is that it is conceptually simple to understand and can be implemented easily in a prospective system. However, hospitals have raised concerns that the gradually lower statewide rates and increasingly granular indirect standardization at the diagnosis and severity level have led to what has been termed a "zero-norm" issue, i.e., hospitals are potentially penalized for a singular random event as opposed to materially poor clinical performance.[6] In the RY 2021 policy, this issue was addressed by selecting complications with higher statewide rates, using two years of data to calculate the normative values, and continuing to require at least 31 discharges per diagnosis and severity of illness cell.

Attainment Only Prospective System

The CAEM subgroup and PMWG considered recommendations from Commissioners that performance should be assessed based on attainment only, using a scoring methodology that recognizes improvement for poor performers through reduced attainment penalties. This aligns with the CMS HACRP program that is also attainment only. Furthermore, given the large improvements in PPCs over the past several years, future rewards will focus on optimal performance and not provide additional positive revenue adjustments for improvement.

However, stakeholders continue to desire a system that sets prospective targets and allows hospitals to track performance during the performance period. Thus, the normative values and

[5] The CAEM subgroup also evaluated alternatives to the observed to expected ratio, such as an excess PPC rate that takes into account the number of discharges. However, staff believes that the current performance metric takes into account the number of discharges through its calculation of the expected rate, and that further adjustment for number of discharges is not warranted. Additionally, the use of an observed to expected ratio aligns with other measures such as the NHSN standardized infection ratios.

[6] In RY 2020 there were 328 diagnosis groups and 45 PPC/PPC combinations proposed, which resulted in over 56,000 cells for which a statewide average PPC rate is calculated, the majority of which have a normative value of zero.

performance standards under an attainment only prospective system need to be set on a historical time period, which differs from the National attainment only program.

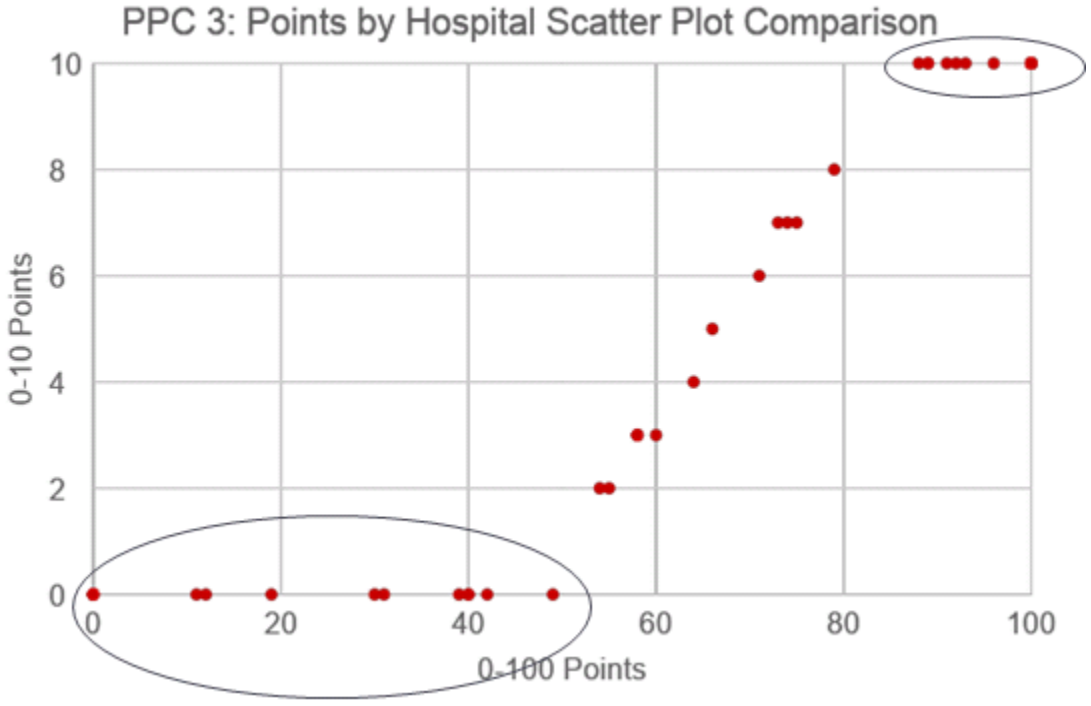
Standardized Scoring Methodology

Commissioners and other stakeholders who have expressed a preference for an attainment only system believe that such a system could incentivize poor performers to improve through reduced penalties for improvement. However, the previous scoring methodology for attainment assigned all hospitals that were worse than the statewide median a score of zero points, and thus did not differentiate hospital performance below the statewide median. This methodology, if maintained in an attainment only scoring methodology, may have generated adverse incentives for poor performers, especially outliers, as improvement toward but not surpassing the statewide median would have resulted in the same zero score. Therefore, CAEM and PMWG members collaborated with staff to develop a wider and more continuous scoring approach.

Specifically, staff adapted the MHAC point system to allow for greater performance differentiation by moving the threshold to the value of the observed to expected ratio at the 10th percentile of hospital performance, moving the benchmark to the value of the observed to expected ratio at the 90th percentile of hospital performance, and assigning 0 to 100 points for each PPC between these two percentile values.

As shown in Figure 2, the wider range in the performance standards differentiates hospital performance at the lower and upper ends and provides more continuous incentives for improvement. However, because hospitals can begin to earn points for relatively poor performance at the value of the 10th percentile, hospital scores are higher under this modified scoring methodology, and the preset revenue adjustment scale is adapted so that hospitals do not receive financial rewards for lackluster performance, as discussed in the next section.

Figure 2. Expanded Scoring Example



3M Cost Weights and Hospital Scores

Previously, the MHAC methodology placed PPCs into two tiers to emphasize the more significant PPCs. Under the revised methodology, the Commission approved weighting the 14 PPCs differentially using 3M cost weights as a proxy for degree of patient harm. Overall hospital scores are then calculated by taking the points for each PPC and multiplying by the 3M PPC cost weights (100 per PPC * 3M cost weight), then summing numerator (points scored) and denominator (possible points) across the PPCs to calculate a percent score. The percent score (e.g., 85 points earned /100 possible points = 85%) should not be interpreted as the percentile of hospital performance.

Prospective Revenue Adjustment Scale

Since RY 2019, the revenue adjustment scale has been based on the mathematical distribution of possible scores (0 to 100 percent) with a hold harmless zone. This approach is referred to as a prospective revenue adjustment scale, as opposed to a retrospective revenue adjustment scale that determines the scale *after* the performance period. For the RY 2021 policy, the Commission approved continued use of a prospective scale based on the range of possible scores, because using a prospective scale provides greater transparency and predictability for hospitals, which are already assuming risk under a population-based revenue system.

During the MHAC redesign for RY 2021, staff and stakeholders considered several issues related to the revenue adjustment scale including whether the scale should be linear or non-linear, the use of a hold harmless zone, and the appropriate cut point for penalties and rewards. The Commission approved the staff recommendation to continue to use a linear scale that ranges from 0 to 100 with a hold harmless zone between 60 and 70 percent to account for higher scores under the revised attainment only scoring methodology. In addition, the scale was modified to increase potential rewards from 1 to 2 percent.

Appendix III: PPCs for Hospitals being Considered for Exclusion

This table shows the hospitals that are assessed on less than 6 types of complications. It shows which types of complications would be removed if these hospitals were excluded from the program.

HOSPITAL ID	HOSPITAL NAME	PPC NUMBER	PPC DESCRIPTION	AT RISK DISCHARGES	OBSERVED PPCs
210010	UM-Dorchester	3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1102	1
210010	UM-Dorchester	67	Combined Pneumonia (PPC 5 and 6)	1105	0
210013	Bon Secours	3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	2211	8
210013	Bon Secours	4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	2212	3
210013	Bon Secours	9	Shock	2541	3
210013	Bon Secours	35	Septicemia & Severe Infections	1438	7
210013	Bon Secours	67	Combined Pneumonia (PPC 5 and 6)	2174	7
210017	Garrett	3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1024	0
210017	Garrett	4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1024	0
210017	Garrett	9	Shock	1321	0
210017	Garrett	35	Septicemia & Severe Infections	401	0
210017	Garrett	67	Combined Pneumonia (PPC 5 and 6)	1020	0
210060	Ft. Washington	3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1256	0
210060	Ft. Washington	4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1256	0
210060	Ft. Washington	9	Shock	1651	0
210060	Ft. Washington	35	Septicemia & Severe Infections	477	0
210060	Ft. Washington	67	Combined Pneumonia (PPC 5 and 6)	1259	0
210064	Levindale	3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	983	2
210064	Levindale	28	In-Hospital Trauma and Fractures	1175	3
210064	Levindale	35	Septicemia & Severe Infections	1093	4
210064	Levindale	67	Combined Pneumonia (PPC 5 and 6)	1032	3

Appendix IX. By Hospital Score and Revenue Adjustment Modeling

RY 2022 Policy Modeling			Model 1: RY 2022 Modeling			Model 2: RY2021 YTD		
HOSPITAL ID	HOSPITAL NAME	RY19 estimated Permanent Inpatient Revenue	Score	Percent Revenue Adjustment	Estimated Revenue Adjustment	Score	Percent Revenue Adjustment	Estimated Revenue Adjustment
210001	Meritus	$200,133,022	35%	- 0.83%	-$1,661,104	60%	0.00%	$0
210002	UMMC	$974,868,708	72%	0.27%	$2,632,146	85%	1.00%	$9,748,687
210003	UM-PGHC	$229,779,410	50%	- 0.30%	-$689,338	71%	0.07%	$153,186
210004	Holy Cross	$355,582,874	73%	0.33%	$1,173,423	73%	0.20%	$711,166
210005	Frederick	$232,665,827	48%	- 0.37%	-$860,864	54%	- 0.20%	-$465,332
210006	UM-Harford	$54,181,186	61%	0.00%	$0	68%	0.00%	$0
210008	Mercy	$226,370,703	62%	0.00%	$0	69%	0.00%	$0
210009	Johns Hopkins	$1,456,687,424	59%	0.00%	$0	75%	0.33%	$4,855,625
210011	St. Agnes	$238,757,730	56%	- 0.10%	-$238,758	61%	0.00%	$0
210012	Sinai	$399,817,673	59%	0.00%	$0	69%	0.00%	$0
210015	MedStar Fr Square	$306,446,338	34%	- 0.87%	-$2,666,083	52%	- 0.27%	-$817,190
210016	Washington Adventist	$162,051,703	51%	- 0.27%	-$437,540	73%	0.20%	$324,103
210018	MedStar Montgomery	$84,589,504	30%	- 1.00%	-$845,895	31%	- 0.97%	-$817,699
210019	Peninsula	$247,565,060	73%	0.20%	$495,130	87%	1.13%	$2,805,737
210022	Suburban	$208,447,370	61%	0.00%	$0	69%	0.00%	$0
210023	Anne Arundel	$294,544,506	75%	0.47%	$1,384,359	78%	0.53%	$1,570,904
210024	MedStar Union Mem	$243,948,251	36%	- 0.73%	-$1,780,822	54%	- 0.20%	-$487,897
210027	Western Maryland	$169,462,000	46%	- 0.37%	-$627,009	60%	0.00%	$0
210028	MedStar St. Mary's	$78,910,762	83%	1.07%	$844,345	90%	1.33%	$1,052,143
210029	JH Bayview	$361,658,457	64%	0.00%	$0	71%	0.07%	$241,106
210032	Union of Cecil	$65,426,887	51%	- 0.23%	-$150,482	59%	- 0.03%	-$21,809
210033	Carroll	$140,291,849	42%	- 0.60%	-$841,751	67%	0.00%	$0
210034	MedStar Harbor	$108,985,651	25%	- 1.17%	-$1,275,132	40%	- 0.67%	-$726,571
210035	UM-Charles Regional	$76,930,098	72%	0.27%	$207,711	67%	0.00%	$0
210037	UM-Easton	$103,351,265	62%	0.00%	$0	79%	0.60%	$620,108
210038	UMMC Midtown	$109,862,413	83%	0.87%	$955,803	75%	0.33%	$366,208
210039	Calvert	$67,116,620	16%	- 1.43%	-$959,768	45%	- 0.50%	-$335,583
210040	Northwest	$138,719,920	72%	0.27%	$374,544	92%	1.47%	$2,034,559
210043	UM-BWMC	$250,217,336	65%	0.00%	$0	74%	0.27%	$667,246
210044	GBMC	$237,757,970	25%	- 1.17%	-$2,781,768	57%	- 0.10%	-$237,758
210048	Howard County	$182,870,977	59%	0.00%	$0	66%	0.00%	$0
210049	UM-Upper Chesapeake	$141,387,237	72%	0.27%	$381,746	83%	0.87%	$1,225,356
210051	Doctors	$141,094,311	78%	0.67%	$945,332	93%	1.53%	$2,163,446
210056	MedStar Good Sam	$145,305,783	50%	- 0.27%	-$392,326	73%	0.20%	$290,612
210057	Shady Grove	$226,932,738	38%	- 0.70%	-$1,588,529	57%	- 0.10%	-$226,933
210058	UMROI	$72,350,285	70%	0.07%	$50,645	90%	1.33%	$964,670
210061	Atlantic General	$36,931,910	68%	0.00%	$0	93%	1.53%	$566,289
210062	MedStar Southern MD	$160,932,272	22%	- 1.27%	-$2,043,840	41%	- 0.63%	-$1,019,238
210063	UM-St. Joe	$242,574,826	69%	0.07%	$169,802	89%	1.27%	$3,072,614
210065	HC-Germantown	$59,062,315	91%	1.53%	$903,653	93%	1.53%	$905,622

Draft Recommendation for an Intensity and Innovation Policy

December 11, 2019

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This is a draft recommendation. Public comments will be accepted through January 10, 2020.
Comments should be submitted to
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TABLE OF CONTENTS

EXECUTIVE SUMMARY

This document puts forth a draft recommendation for evaluating and prospectively funding high intensity and innovative care at the Academic Medical Centers in Maryland, i.e. University of Maryland Medical Center and Johns Hopkins Hospital, in lieu of the current practice of providing a flat funding rate through an annual Intensity Adjustment with no formulaic evaluation methodology to determine the actual use of that funding.

Draft Recommendations for the Intensity and Innovation Policy

1. Determine the differential funding needs due to intensity and innovation at University of Maryland Medical Center and Johns Hopkins Hospital through a cell dominance approach, whereby in-state, inpatient cases are deemed highly specialized (referred to as "categorical exclusions") if the two academic medical centers comprise 95% or more of an ICD-10 procedure code.
    A. Dominance will be assessed in three capacities:
        - Dominant, i.e. greater than or equal to 95%, in the Base Period to Dominant in the Performance Period
        - Zero in the Base Period to Dominant in the Performance Period
        - Dominant in the Base Period to Non-Dominant in the Performance Period
2. Prospectively fund a working capital advance in concert with the annual Update Factor that reflects historical annual growth rates for categorical exclusions cases.
    A. Working capital advance will be part of the annual guardrail tests.
3. Remove categorical exclusions from various methodologies:
    A. Market Shift
    B. Transfers
    C. Demographic Adjustment
    D. Inter-Hospital Cost Comparison
    E. Potentially Avoidable Utilization Shared Savings Program
4. For FY 2021, remove high cost outpatient drugs from the current definition of categorical exclusions and use the same approach currently applied state-wide for high cost outpatient drug growth (the CDS-A adjustment) to regulate volume funding.

INTRODUCTION

Since 2014, the State has operated under a per capita constraint under the All-Payer Model and the Total Cost of Care (TCOC) Model Agreements with the Centers for Medicare and Medicaid (CMS). The Commission has set the Global Budget Revenue (GBR) for hospitals and the annual update factor to manage the per capita growth rate. The GBR limits a hospital's incentive to grow volume unnecessarily. However, volume growth, especially lower acuity, low variable cost care was historically used to finance the additional costs associated with high intensity cases and healthcare innovation, creating an inherent tension between the incentives of the TCOC Model and the ability for Maryland hospitals to be leaders in highly specialized, innovative care.

Stakeholders have thus expressed concern that there should be a predictable and formulaic methodology for specially funding high intensity cases and innovative care, one that still comports with the aims of the TCOC Model and requirements specified in the Contract that governs the TCOC Model, as well as the Commissioner's directive that funding be provided only for verifiable differentiated cost growth. This draft policy recommendation will outline staff's proposed methodology for funding in-state, inpatient high intensity cases and healthcare innovation through a prospective budgetary amount that uses historical growth patterns to determine an appropriate working capital advance that will be provided in concert with the annual Update Factor policy recommendation.

BACKGROUND

In the first three years of the All-Payer Model, the Commission addressed the concern that access to highly specialized care and healthcare innovation in Maryland could potentially be restricted under the new Model by carving out these types of cases, known as categorical exclusions, from methodologies that regulate most of the State's hospital volume. Specifically, in-state, inpatient categorical exclusions were removed from the market shift policy and categorical cost growth was funded prospectively based on a 50 percent variable cost per case except for the cost of drugs, supplies, and organ acquisition, where the funding was 100 percent of estimated costs. As this funding mechanism was not meeting the needs of Academic Medical Centers, the Commission moved away from funding categorical exclusions in RY 2017 and instead has provided prospective "Intensity Adjustments" in the annual Update Factor policy recommendation. Below are the annual adjustments provided to University of Maryland Medical Center and Johns Hopkins Hospital for high intensity cases and health care innovation:

Table 1: Intensity Adjustments Provided to Academic Medical Centers

	RY 2017	RY 2018	RY 2019	RY 2020
% Funding provided in rates (applied to Total Revenue)	.5%	.5%	1%	1%
$ Funding provided in rates	$15,852,689	$19,332,282	$40,268,368	$40,995,888

In both the RY 2019 and RY 2020 annual Update Factor policy recommendation, Commissioners expressed concern that continuing to provide funding for assumed growth with no verification is detrimental to a global fixed revenue system. Academic Medical Centers also expressed concern that in the absence of a formulaic methodology that allows for growth in line with advances in medicine, providers of highly specialized, innovative care will erode hospital margins and could be faced with restricting access to tertiary and quaternary care. This is especially true under the larger global budget revenue framework, as Academic Medical Centers were historically able to support the additional costs of highly specialized care by growing lower acuity, low variable cost care in a fee-for-service system, which is undesirable from an affordability standpoint and has been phased out in the Total Cost of Care Model.

Various stakeholders have posited that profitability or additional discretionary funding that was historically supported through volume growth has been substituted with the incentive to reduce Potentially Avoidable Utilization (PAU), and therefore Academic Medical Centers have an opportunity to fund highly specialized care through reduced PAU and do not require a separate volume methodology. However, as you can see from the table below, this opportunity is not uniform across all hospitals.

Table 2: Potentially Avoidable Utilization Opportunity across 17 Maryland Hospitals with Graduate Medical Education

Hospital	PAU Revenue as a % of Eligible Revenue	Statewide Rank
Rehab & Ortho Institute	0.24%	1
University Medical Center	11.79%	3
Mercy Medical Center	13.16%	5
Holy Cross Hospital	14.61%	7
Johns Hopkins Hospital	14.87%	8
Suburban Hospital	14.99%	9
Sinai Hospital	16.57%	11
Greater Baltimore Medical Center	17.02%	12
Prince Georges Hospital	19.37%	20
Union Memorial Hospital	20.20%	22
Johns Hopkins Bayview Medical Center	21.28%	25
Baltimore Washington Medical Center	22.89%	30
Harbor Hospital Center	24.22%	33
Franklin Square Hospital Center	24.44%	34
St. Agnes Hospital	25.56%	38
UMMC Midtown	27.48%	42
Good Samaritan Hospital	30.41%	46
Statewide	18.44%	

In light of all these concerns, staff has developed a methodology that determines highly specialized care through a cell dominance approach but still maintains the annual prospective funding mechanism, i.e. a working capital advance. In effect, the proposal creates a monitoring methodology to ensure volume growth associated with highly specialized care actually materializes, which in turn can be used to prospectively realign the working capital advance provided to the State's two Academic Medical Centers. Maintaining this funding mechanism ensures that Academic Medical Centers have an

allotment of funding for highly specialized care in line with historical annual growth while at the same time keeping fidelity to Total Cost of Care contract parameter that 95% of all Regulated Revenue for Maryland residents is paid according to a Population-Based Payment methodology.[1]

Establishing a Definition of Academic Medical Centers

The intent of this policy is to address the need for a methodology to substantiate the funding provided to the State's two Academic Medical Centers through the annual Intensity Adjustments. However, staff believed it was important to first establish a definition of Academic Medical Centers in Maryland in order to isolate the Intensity and Innovation policy to select hospitals.

National definitions of academic medical centers are descriptive but not prescriptive. For example, the Association of Academic Health Centers cites that "Academic Medical Centers provide tertiary and quaternary healthcare services, specializing in the most complex and difficult diagnoses and treatments while educating the next generation of health professionals. Their research provides important new knowledge leading to advances in understanding and treatment of diseases." Under this definition, one could argue that all of Maryland's seventeen hospitals with graduate medical education could qualify. However, while many of these hospitals provide specialized care, none are providing the level of research, teaching, and range of quaternary care provided by Johns Hopkins Hospital and University of Maryland Medical Center. Staff has therefore determined that to qualify for a prospective adjustment for highly specialized care under this draft policy, hospitals must have more than 500 beds, an intern/resident to bed ratio of .60 or higher, an Inpatient Casemix Index greater than 130% of the statewide average and the presence of a medical school.

Table 3: Criteria for Prospective Intensity and Innovation Adjustment

Hospital	FTE interns and residents	Total beds	IRB ratio	Med School	2018 IP MD Casemix Index
Johns Hopkins Hospital	915	993	0.92	Yes	1.5576
University Medical Center	565	711	0.83	Yes	1.8364
Union Memorial Hospital	86	211	0.40	No	1.4228
Harbor Hospital Center	45	113	0.39	No	0.8083
Johns Hopkins Bayview Medical Center	155	442	0.35	No	1.1327
Sinai Hospital	131	470	0.28	No	1.2899
University of Maryland Medical Center—Midtown	48	187	0.26	No	0.9731
Mercy Medical Center	51	210	0.25	No	1.1980
Prince Georges Hospital	48	249	0.19	No	1.1255
Franklin Square Hospital Center	70	386	0.17	No	0.9404
Good Samaritan Hospital	31	216	0.14	No	0.9958
UMROI	10	125	0.08	No	1.6825
Suburban Hospital	8	220	0.05	No	1.2351
Holy Cross Hospital	25	469	0.04	No	1.0139

[1] Population-Based Payment is defined to mean hospital payment that either (1) is directly population-based, such as prospectively tying hospitals' reimbursement to the projected utilization of services by a specific population or subpopulation of Maryland residents, or (2) establishes a fixed budget for Regulated Maryland Hospitals for services projected to be furnished.

Staff acknowledges that other hospitals in the State may provide unique and costly services that do not occur elsewhere in the State, and therefore could be eligible for special consideration under this policy. Staff welcomes this discussion and sees merit in opening this policy up to other hospitals, as long as the methodology comports with parameters of the Total Cost of Care contract and the cell dominance criteria discussed below.

Determining Highly Specialized Care (Cell Dominance)

Staff considered several approaches to determining highly specialized care, including using preexisting lists of healthcare innovation, most notably the Center for Medicare and Medicaid Services (CMS) list of procedures from the New Technology Add-On Payments (NTAP) policy. Two prevailing concerns prevented staff from using this type of approach. First, HSCRC staff is not comprised of clinical experts who can differentiate between regular acute care and highly specialized acute care at the procedure code level. This is especially true for emerging technologies that would not have charges to develop case weights for and which would require a clinical significance evaluation similar to the NTAP policy:

> "(1) The technology offers a treatment option for a patient population unresponsive to, or ineligible for, currently available treatments.
>
> (2) The technology offers the ability to diagnose a medical condition in a patient population where that condition is currently undetectable or diagnose a medical condition earlier in a patient population than allowed by currently available methods. There must also be evidence that use of the device to make a diagnosis affects the management of the patient.
>
> (3) Use of the technology significantly improves clinical outcomes for a patient population as compared to currently available treatments."[2]

Secondly, available preexisting lists only enumerated a handful of procedures as new or innovative, and none of these lists covered the historical high intensity cases that academic medical centers perform with enhanced cost based reimbursement, e.g. organ transplant cases.[3]

As such, staff proposes to identify cases for the Intensity and Innovation policy by isolating cases where Academic Medical Centers perform 95% of all procedures statewide, based on the presence of an International Classification of Disease (ICD-10) procedure code. Evaluation will allow cost plus markup for drugs, supplies and organ acquisition (similar to select CMS payment methodologies) and 50% for all other charges, which equates approximately to a 70% variable cost factor.[4]

Staff elected to use procedure codes in lieu of diagnosis related groupings (DRGs), as the latter is more prone to subjectivity. All procedure codes will be used to determine dominance and no hierarchy will be considered, e.g. the primary procedure code or the secondary procedure code on a record may be used

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[2] Health Affairs: *Experience With Medicare's New Technology Add-On Payment Program* https://www.healthaffairs.org/doi/full/10.1377/hlthaff.27.6.1632

[3] "Approved transplant centers are paid a PPS rate based on a MS-DRG for the actual organ transplant and they are also reimbursed for the reasonable and necessary costs associated with acquiring the organ (that is, organ acquisition costs)." - https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/MM11087.pdf

[4] 50% represents the statewide average of variable costs, which is incorporated in the market shift policy.

to determine dominance. Finally, it is important to note that staff will consider three types of dominance across the base fiscal year period and performance fiscal year period:

1. Dominant in the Base Period to Dominant in the Performance Period – all growth will be evaluated and cases will be removed from the market shift policy
2. Zero in the Base Period to Dominant in the Performance Period – this type of dominance will ensure that the Commission accounts for new emerging innovation. All growth will be evaluated and cases will be removed from the market shift policy.
3. Dominant in the Base Period to Non-Dominant in the Performance Period – this type of dominance will ensure that the evaluation of cost growth properly accounts for volume declines with a ~70% variable cost factor. All growth will be evaluated and cases will be placed into the market shift policy to ensure non-academic hospitals receive credit for market shifts.

Implications for Other Methodologies

As mentioned, the Intensity and Innovation policy has material impact on the market shift policy, as cases deemed to be high intensity and/or innovative will be removed from the market shift algorithm. Similarly, these cases will also be removed from the State's transfer policy and the Demographic Adjustment to ensure that funding is not provided twice for volume growth.

Staff will also remove existing innovative high cost outpatient drugs from the categorical exclusion definition and by extension the Intensity and Innovation policy, as these cases can be more properly regulated through the existing CDS-A methodology, which provides partial cost based reimbursement for high cost outpatient drugs. Existing outpatient drugs classified as categorical exclusions, such as Spinraza and Lutathera, will be included in the retroactive analyses outlined in the *Assessment* section that will help determine the appropriate working capital advance for RY 2021, but moving forward will be removed from future consideration in the Intensity and Innovation policy. Staff will continue to monitor the appropriateness of CDS-A inflation and increases each year to address high cost outpatient and infusion drugs.

Finally, staff will continue to remove categorical exclusions from the Inter-hospital Cost Comparison methodology (ICC) used to determine hospital's efficiency relative to its peers, and staff will also remove categorical exclusions from the current Potentially Avoidable Utilization Shared Savings policy.

ASSESSMENTS

In this section, staff will provide high level descriptive statistics of the cases identified as high intensity and/or innovative, as well as various sensitivity analyses performed to determine dominance. In the Final Recommendation, staff will also provide retroactive modelling back to RY 2017 when Intensity Adjustment funding was first put into rates. In doing so, staff will be able to to provide an appropriate RY 2021 working capital advance for University of Maryland Medical Center and Johns Hopkins University that is in line with historical growth patterns.

There are 70,000 ICD-10 procedure codes, and between Johns Hopkins Hospital and University of Maryland Medical Center there is approximately 10,000 unique procedure codes used each fiscal comprising approximately $4 billion in revenue. Of these codes, roughly 2,000 of them comprise $500 million and constitute the universe of charges deemed to be categorical exclusions or highly specialized under the 95% dominance rule. In effect, 20% of the codes and 13% of the revenue at the two

Academic Medical Centers are eligible for volume growth funding through the proposed Intensity and Innovation policy.

Table 4: Descriptive Statistics for Intensity and Innovation Policy

	RY 2016	RY 2017	RY 2018	RY 2019
Unique Procedure Codes	2,328	2,081	2,201	1,923
Total Charges identified by 95% IP Cell Dominance	$461,549,400	$472,837,447	$559,414,678	$515,752,345
Percent of Charges to Receive Cost Based Reimbursement	32%	32%	30%	31%
Percent of Charges to Related to Organ Acquisition	11%	11%	10%	11%
Percent of Charges to Related to Drugs	8%	8%	8%	8%
Percent of Charges to Related to Supplies	13%	13%	12%	12%

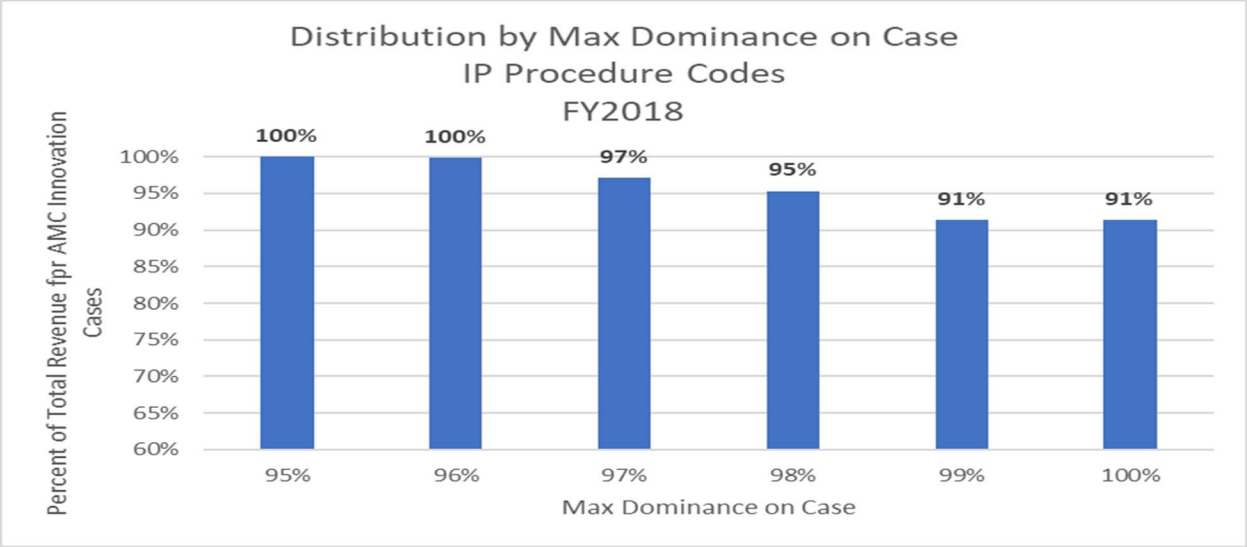
Of note, approximately one third of the $500 million in annual charges are eligible to receive cost based reimbursement under the proposed policy. This figure increases to one half when the current definition of categorical exclusions is evaluated as illustrated in Table 5.

Table 5: Descriptive Statistics for Intensity and Innovation Policy (Current Categorical Exclusions only)

	RY 2016	RY 2017	RY 2018	RY 2019
Charges Associated with Current Definition of Categorical Exclusions	$122,281,200	$120,104,402	$139,564,816	$149,103,697
Percent of Dominant Charges Associated with Current Definition of Categorical Exclusions	26%	25%	25%	29%
Unique Procedure Codes for Dominant Charges Associated with Current Definition of Categorical Exclusions	60	66	61	58
Percent of Charges Associated with Current Definition of Categorical Exclusions to Receive Cost Based Reimbursement	51%	53%	50%	51%
Percent of Charges NOT Associated with Current Definition of Categorical Exclusions to Receive Cost Based Reimbursement	25%	25%	24%	23%

Some stakeholders have expressed that staff are identifying too large a revenue base as highly specialized. As such, staff also performed sensitivity analyses to assess dominance through slightly alternative thresholds. As illustrated in Table 6, using higher dominance percentages does not materially change the revenue identified as highly intense and/or innovative. In fact, at 100% threshold, 91% of revenue is identified, i.e. $56 million out of $560 million is removed from the proposed Intensity and Innovation policy.

Table 6: Dominance Sensitivity – Varying Thresholds



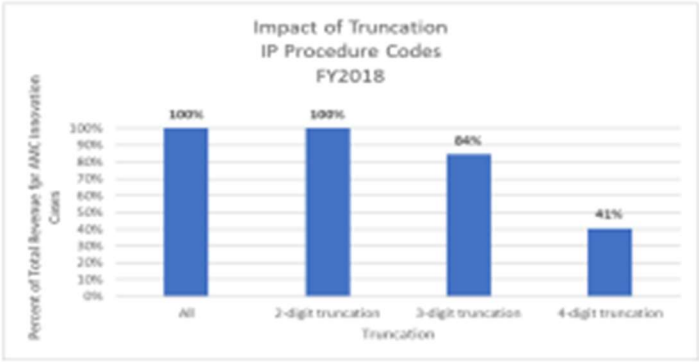
Source: Berkley Research Group

An additional analysis staff examined was the degree to which revenue associated with dominance charges changed if the ICD-10 procedure, which is seven digits, was truncated to a 6 or fewer digits. As detailed in Table 7, at 5 digits, there was no change in revenue and at 4 digits, 16% of revenue was removed. This falls much further if the truncation is extended to only include the first 3 digits (59% of revenue is removed.

Table 7: Dominance Sensitivity – Varying Truncations

1. **Section:** Med/Surg, obstetrics, placement, imaging, etc.
2. **Body system**
3. **Root operation:** removal, replacement, bypass, etc.
4. **Body part**
5. **Approach:** open, percutaneous, etc.
6. **Device**
7. **Qualifier**

4-digit truncation removes 4,5,6,7
3-digit truncation removes 5,6,7
2-digit truncation removes 6,7



Source: Berkley Research Group

Staff is not considering further truncation beyond the 7 digits of the ICD-10 procedure code because it is only until the 5th digit (Approach) is removed that there is a material impact, and the approach is what potentially distinguishes high intensity or innovative care from more traditional acute care, e.g. historical open health surgery procedures from transaortic valve replacement procedures.

RECOMMENDATIONS

Draft Recommendations for the Intensity and Innovation Policy

1. Determine the differential funding needs due to intensity and innovation at University of Maryland Medical Center and Johns Hopkins Hospital through a cell dominance approach, whereby in-state, inpatient cases are deemed highly specialized (referred to as "categorical exclusions") if the two academic medical centers comprise 95% or more of an ICD-10 procedure code.
    A. Dominance will be assessed in three capacities:
        - Dominant, i.e. greater than or equal to 95%, in the Base Period to Dominant in the Performance Period
        - Zero in the Base Period to Dominant in the Performance Period
        - Dominant in the Base Period to Non-Dominant in the Performance Period
2. Prospectively fund a working capital advance in concert with the annual Update Factor that reflects historical annual growth rates for categorical exclusions cases.
    A. Working capital advance will be part of the annual guardrail tests.
3. Remove categorical exclusions from various methodologies:
    A. Market Shift
    B. Transfers
    C. Demographic Adjustment

D. Inter-Hospital Cost Comparison
E. Potentially Avoidable Utilization Shared Savings Program

4. Remove high cost outpatient drugs from the current definition of categorical exclusions and use the same approach currently applied state-wide for high cost outpatient drug growth (the CDS-A adjustment) to regulate volume funding.

Policy Update Report and Discussion

Staff will present materials at the Commission Meeting.

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TO: **Commissioners**

FROM: **HSCRC Staff**

DATE: **December 11, 2019**

RE: **Hearing and Meeting Schedule**

February 12, 2020	To be determined - 4160 Patterson Avenue HSCRC/MHCC Conference Room
March 11, 2020	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 11:15 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://hscrc.maryland.gov/Pages/commission-meetings.aspx.

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