



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 recommendations and updates that will be presented at the April 14, 2021 Public Meeting:

1. Draft Recommendation on the Integrated Efficiency Policy

WRITTEN COMMENTS ON THE AFOREMENTIONED STAFF DRAFT RECOMMENDATION IS DUE IN THE COMMISSION'S OFFICES ON OR BEFORE MAY 5, 2021, UNLESS OTHERWISE SPECIFIED IN THE RECOMMENDATION.

2. Draft Recommendation on Maternal and Child Health Funding

WRITTEN COMMENTS ON THE AFOREMENTIONED STAFF DRAFT RECOMMENDATION IS DUE IN THE COMMISSION'S OFFICES ON OR BEFORE APRIL 21, 2021, UNLESS OTHERWISE SPECIFIED IN THE RECOMMENDATION.

**583rd Meeting of the Health Services Cost Review Commission
April 14, 2020**

(The Commission will begin public session at 11:30 am for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00pm)

**EXECUTIVE SESSION
11:30 am**

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
3. Update on Commission Response to COVID-19 Pandemic - Authority General Provisions Article, §3-103 and §3-104

**PUBLIC MEETING
1:00 pm**

1. Review of Minutes from the Public and Closed Meetings on March 10, 2021 and March 24, 2021.
2. Docket Status – Cases Closed
3. Docket Status – Cases Open
4. Presentation on COVID-19 Long-Term Care Partnership Funding Program Activities
 - a. Holy Cross
 - b. Luminis Health
5. Final Recommendation on Medicare Advantage Payer Differential
6. Draft Recommendation on Revised Integrated Efficiency Policy
7. Draft Recommendation on Maternal and Child Health Funding Program
8. Policy Update and Discussion
 - a. Model Monitoring
 - b. Update on FY 2020 GBR Compliance Recommendation
 - c. Update on Reliability of Race Data
 - d. CMMI Updates
 - e. Legislative Update

9. Hearing and Meeting Schedule



**Closed Session Minutes
of the
Health Services Cost Review Commission**

March 10, 2021

Upon motion made in public session, Chairman Kane called for adjournment into closed session to discuss the following items:

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
3. Update on Commission Response to the COVID-19 Pandemic – Authority General Provisions Article, §3-103 and §3-104

The Closed Session was called to order at 11:34 a.m. and held under authority of §3-103 and §3-104 of the General Provisions Article.

In attendance via conference call in addition to Chairman Kane were Commissioners Bayless, Cohen, Colmers, Elliott, and Malhotra.

In attendance via conference call representing Staff were Katie Wunderlich, Allan Pack, William Henderson, Tequila Terry, Geoff Daugherty, Will Daniel, Alyson Schuster, Claudine Williams, Megan Renfrew, Xavier Colo, Amanda Vaughn, Bob Gallion, and Dennis Phelps.

Also attending via conference call were Eric Lindemann, Commission Consultant, and Stan Lustman and Tom Werthman, Commission Counsel.

Item One

The Commission and staff discussed various approaches to facilitate greater access to COVID vaccines by the most vulnerable population.

Item Two

Eric Lindemann, Commission Consultant, updated the Commission on Maryland Medicare Fee-For-Service TCOC versus the nation.

Item Three

Will Daniel, Deputy Director-Payment Reform & Provider Alignment, updated the Commission on planning for possible expansion and transformation of the Total Cost of Care Model.

Item Four

William Henderson, Director-Medical Economics & Data Analytics, updated the Commission on additional population health reporting.

Item Five

Tequila Terry, Director- Payment Reform & Provider Alignment, updated the Commission on CMMI's response to our Statewide Integrated Health Improvement Strategy and Medicare Performance Adjustment proposals.

The Closed Session was adjourned at 1:06 p.m.

MINUTES OF THE
582nd PUBLIC MEETING OF THE
HEALTH SERVICES COST REVIEW COMMISSION
March 10, 2021

Chairman Adam Kane called the public meeting to order at 11:34 a.m. Commissioners Joseph Antos, PhD, Victoria Bayless, Stacia Cohen, John Colmers, James Elliott, M.D., and Sam Malhotra were also in attendance. Upon motion made by Commissioner Antos and seconded by Commissioner Colmers, the meeting was moved to Closed Session. Chairman Kane reconvened the public meeting at 1:21 p.m.

NEW STAFF

Ms. Katie Wunderlich, Executive Director, introduced Ms. Teneshia Richards-Brooks as the new Rate Analyst.

REPORT OF MARCH 10, 2021 CLOSED SESSION

Mr. Dennis Phelps, Deputy Director, Audit & Compliance, summarized the minutes of the March 10, 2021 Closed Session.

ITEM I
REVIEW OF THE MINUTES FROM THE FEBRUARY 10, 2021 CLOSED SESSION
AND PUBLIC MEETING

The Commissioners voted unanimously to approve the minutes of the February 10, 2021 Closed Session and public meeting.

ITEM II
CASES CLOSED

2549A- University of Maryland Medical Center

ITEM III

2550A- Johns Hopkins Health System
2552A- Johns Hopkins Health System

2551A- Johns Hopkins Health System

ITEM IV
PRESENTATION ON REGIONAL PARTNERSHIP CATALYST GRANT PROGRAM
ACTIVITIES

Greater Baltimore Regional Integrated Crisis System

Ms. Adrienne Breidenstine, Vice President, Policy & Communication, Behavioral Health System Baltimore, presented an update on the Greater Baltimore Regional Integrated Crisis System (GBRICS) Regional Partnership (see “Greater Baltimore Regional Integrated Crisis System Partnership” available on the HSCRC’s website).

Ms. Breidenstine stated that the HSCRC has awarded GBRICS \$45 million over 5 years under Funding Stream II- Behavioral Health Crisis Services of the Regional Partnership Catalyst Grant. Ms. Breidenstine noted that GBRICS is a collaboration between health leaders in Baltimore City and Baltimore, Carroll, and Howard Counties and seventeen hospitals located in the region.

Ms. Breidenstine stated that the overall goal is to reduce unnecessary Emergency Department use and police interaction for people in behavioral health crisis.

Ms. Breidenstine stated that GBRICS intends to accomplish this overall goal through the completion of the following:

- Care Traffic Control System- Create a regional hotline that is supported with infrastructure for real-time capacity and referrals tracking, coordinated dispatching of mobile crisis response plus dashboard reporting.
- Mobile Crisis Teams- Expand capacity, set regional standards following national best practices.
- Walk in/ Virtual Crisis Services- Support behavioral health providers to offer immediate access to services for people in crisis.
- Community Engagement & Outreach- Support culture change to increase awareness and use of the hotline as an alternative to calling 911 or using the Emergency Department.
- Multi-Stakeholder Oversight- Drive regional activity, and shared accountability.

The expectation is that activity in years one through three of the grant period (CY 2021 – 2023) will primarily be focused on the development and implementation of the programs. GBRICS expects that years four and five (CY 2024 – 2025) demonstrate the various initiatives' results.

Commissioner Colmers asked whether GBRICS had considered how to quantify the savings that its initiatives would generate for the criminal justice system, particularly to secure sustainable funding for the program.

Ms. Breidenstine replied that this has been considered but the savings have not yet been quantified.

Commissioner Bayless asked how GBRICS was structured.

Ms. Breidenstine explained that GBRICS is a legal agreement between Behavioral Health System Baltimore (BHSB) and the seventeen partner hospitals.

Commissioner Elliott questioned whether GBRICS intended to work with non-hospital providers.

Ms. Breidenstine answered that GBRICS would work with any provider interested in participating, regardless of whether they are affiliated with a hospital or not.

Nexus Montgomery

Ms. Susan Donovan, Managing Director, Nexus Montgomery and Mr. Ben Fulgenico-Turner, Director, Coverage & Connections, Montgomery County presented a Nexus Montgomery update (see “Nexus Montgomery” available on the HSCRC website).

Ms. Donovan stated that the HSCRC has awarded Nexus Montgomery \$11.8 million over 5 years under Funding Stream I- Diabetes Prevention and Management Programs of the Regional Partnership Catalyst Grant. Ms. Donovan noted that Nexus Montgomery is a collaboration among 6 hospitals located in Montgomery County.

Ms. Donovan stated that Nexus Montgomery's mission is to work with community partners to promote health, reduce hospital utilization, and manage Total Cost of Care for the community in ways that no single hospital could achieve on its own.

Mr. Fulgenico-Turner noted that there were several issues preventing successful diabetes prevention and management from operating in the community. He noted that Nexus Montgomery intends to alleviate these issues through the following actions:

- All Hands on Deck Outreach & Recruitment- Develop clinician referral relationships, increase community engagement, and create a self-referral tool
- CRISP e-Referral Tool- Utilize referral tool so that clinical partners receive feedback on patient’s progress and outcomes

- Centralized Referral Management- Develop a centralized hub that all referrals would flow through and to match clients to the appropriate programs based on location, transportation, and language needs
- Technical Assistance to Diabetes Education Providers- Assist in training, certification, data collection, reporting, and billing
- Model of Client Retention- Assessment and support from centralized case management team. Learning collaborative to identify best practices and shared challenges
- Community Based Coordination- Identify new partners to host activities, recruit participants, or become diabetes educators

Mr. Fulgenico-Turner noted that Nexus Montgomery has successfully recruited an entire diabetes team, on-boarded the CRISP e-referral tool, and has engaged with the community and clinical referral partners to discuss the program. Nexus Montgomery will begin educating diabetes prevention and diabetes management cohorts beginning in April 2021.

Commissioner Bayless asked how many patients Nexus Montgomery expected to be impacted by the program.

Mr. Fulgenico-Turner replied that the plan explicitly targets the twelve Montgomery County ZIP Codes with the highest incidence of diabetes. The organization expects to generate 23,000 resident referrals to the diabetes prevention program and 6,000 referrals to the diabetes management program.

Commissioner Colmers asked how Nexus Montgomery intended to fund the program after the Regional Partnership Catalyst Grant Program is completed in CY 2025.

Ms. Donovan responded that Nexus Montgomery's goal is to create the most efficient delivery model possible. Nexus Montgomery has begun having conversations with hospitals to discuss what results the hospitals required in order to justify the continuing of the program after CY 2025.

Commissioner Cohen requested that Ms. Donovan discuss any collaborative efforts between Nexus Montgomery and practices participating in the Maryland Primary Care Program (MDPCP).

Ms. Donovan explained that Nexus Montgomery partners with Care Transformational Organizations (CTOs) and MDPCP participants when possible to reduce duplication of efforts. Ms. Donovan also clarified that the case management fees paid by the HSCRC under MDPCP are for holistic case management. In contrast, case management under Nexus Montgomery is specific to diabetes.

Commissioner Elliott asked how Nexus Montgomery planned to assess the program's success in preventing and managing diabetes.

Mr. Fulgencio-Turner answered that the program's goals are to retain 60-70 percent of program participants and assist 50 percent of program participants in losing 5 percent of their bodyweight.

ITEM V
DRAFT RECOMMENDATION ON MEDICARE ADVANTAGE PAYER
DIFERENTIAL

Ms. Wunderlich presented the Staff's draft recommendation on the changes to the Medicare Advantage Differential (see "Draft Recommendation to Change Payer Differential for Medicare Advantage" available on the HSCRC website).

As an All-Payer system, Staff works to align State programs across all payers, including commercial insurers, Medicaid, Medicare, FFS and Medicare Advantage (MA), to improve access to care, enhance quality and care transformation, improve health outcomes and ultimately lower the cost of care for all Marylanders. The draft recommendation seeks to align the goals and infrastructure of the MA market under the terms of the All-Payer Hospital Rate Setting Authority consistent with the Total Cost of Care (TCOC) Model. Specifically, the HSCRC proposes to temporarily adjust the public payer differential for MA plans under the TCOC Model in order to improve access to MA for seniors and dual eligibles in Maryland. The MA market is significantly underperforming due in part to interactions between the Maryland rate setting model and the MA rate setting methodology. The lack of performance leaves consumers with few or no options for MA plans, including plans for dual eligibles, in a significant portion of the State.

This recommendation would align MA with the TCOC Model by adjusting the public payer differential, pending approval by the Centers for Medicare & Medicaid Services (CMS). The proposal would effectively adjust MA rates to what they would be but for the impact of the hospital rate setting component of the TCOC Model, while ensuring the State would still meet all required savings targets under the terms of the agreement with CMS. The recommendation does not undermine any of the goals or expectations of the TCOC Contract, harm hospitals, other providers, or beneficiaries.

Since early in Maryland's All-Payer system, government payers have been afforded a differential from rates paid by private payers. Currently, government payers (Medicare and Medicaid) pay 92.3 percent of HSCRC-approved hospital charges. The differential is designed to reflect differences in the practices of classes of payers, which result in cost-of-care differences. Under the TCOC Model Agreement, the HSCRC has the ability to adjust the public payer differential

with CMS approval. CMS most recently approved a public payer differential change that took effect in July 2019, which resulted in a 1.17 percent rate increase for commercial payers and a savings of \$46 million to Medicare.

In February 2020, the Commission approved a grant program to support MA through Maryland hospitals. This was intended to be an interim step to increase support for MA access throughout the State. The MA Partnership Grant Program was designed to achieve the following:

- Encourage partnerships and strategies that result in long-term health improvement of MA Partnership beneficiaries
- Improve MA penetration and/or improved services to high cost and high risk populations
- Preserve and/or expand access to the number of 4+ Star Rating MA plans in the State to promote competition and access for seniors
- Develop strategies that improve care coordination and quality of services offered in MA Plans
- Extend healthcare transformation efforts to the MA market. The MA Partnership Grant was authorized as a temporary funding mechanism for Fiscal Years 2020 and 2021. Hospitals were able to apply to participate in the grant program by partnering with an MA organization to submit a proposed list of activities that would result in increased quality and expanded access.

Staff's draft recommendation would temporarily increase the public payer differential from 7.7 percent to 16.88 percent for MA from January 1, 2022 until December 31, 2024. While this recommendation is revenue neutral to hospitals, it does change the allocation of charges across payers.

The HSCRC projects that, absent the effects of the TCOC waiver, the average MA benchmark in Maryland would be 100.8 percent of fee-for-service spending (4.9 percent above the current level). The proposed increase in the payer differential reflects the additional discount necessary to reduce MA costs by the amount of revenue lost due to the 4.9 percent gap.

At current enrollment levels the differential change would reduce hospital expenditures for MA plans by \$75 million. This increased differential for MA would not apply to other public payers (Medicare FFS and Medicaid). To maintain revenue neutrality for hospitals, hospital rates would need to increase by 0.5 percent for other payers resulting in cost increases of \$30 million for Medicare FFS, \$16 million for Medicaid and \$29 million for other payers. The amount of rate increase required varies depending on the MA enrollment; therefore, should the State be successful in increasing enrollment, the rate offset would also increase proportionally.

Pending federal approval of the differential change, the draft recommendation would do the following:

1. Temporarily increase the public payer differential from 7.7 percent to 16.88 percent for MA from January 1, 2022 until December 31, 2024.
2. Prepare a report to be submitted to the Commission in July 2024 that compares penetration levels across the State, by county, to assess the effectiveness of the differential change on access and options to MA plans in Maryland.
3. Nothing in this recommendation shall change the State's commitment to achieve TCOC savings under the terms of the Contract with CMS.

Commissioner Antos questioned what the next steps would be, given that the HSCRC cannot implement the change in differential without CMMI's approval.

Ms. Wunderlich replied that following the public comment period, Staff would bring forward a final recommendation. Commissioners can then discuss and vote on the final recommendation. Approval by the Commission being contingent on approval from CMMI.

Commissioner Colmers opined that the preferable approach would be to convince CMS to change the MA benchmarking approach, in acknowledgment of the unique nature of Maryland's All-Payer Rate Setting System.

Ms. Wunderlich agreed that changes to the benchmarking process would be the most optimal solution. She stated that all options for addressing issues with MA still remain on the table.

Chairman Kane stated that in his view, the ability of MA Plan's to operate successfully in Maryland has been one of the most significant downsides of the TCOC Model. Chairman Kane observed that due to the lack of MA penetration in the State, Maryland residents are not able to obtain the many benefits of MA. The Staff recommendation is a simple way to address the issue.

As this is a draft recommendation, no Commission action is required.

ITEM VI **WORKGROUP UPDATES**

Efficiency Workgroup

Mr. Allan Pack, Principal Deputy Director of Population-Based Methodologies, [presented](#) an overview of the Staff assessment to peer groups used in the inter-hospital cost comparison (ICC) methodology for the integrated efficiency policy.

Mr. Pack stated that Staff will present a draft recommendation on the Integrated Efficiency Policy during the April Public Meeting.

Mr. Pack noted that Staff has continued to assess ICC peer groups' validity. The peer groups directly impact the significant HSCRC efficiency policies, including the Full Rate Application Methodology, the Capital Funding Policy, and the Integrated Efficiency Policy. Staff historically included peer groups in the ICC to adjust for cost variations that hospitals should not be held responsible for (e.g., labor market or case mix) and are not otherwise directly adjusted for in the ICC Methodology.

Mr. Pack stated that Staff concluded that cost-per-case variation is often higher within a peer group than across peer groups, suggesting that peer grouping may not be the optimal approach. As an alternative, Staff believe that eliminating peer groups (except for the Academic Medical (AMC) peer group) and directly adjusting for indigent care and residual cost variation may be a better solution. Under this alternative approach, Staff would also include a metropolitan indicator for hospitals located in Baltimore City. Using a three-year regression on cost-per-case variation that controls for Baltimore City and excludes AMCs yields a direct risk adjustment of \$6,935 per Equivalent Case Mix Adjusted Discharges (ECMADs). When the methodology directly adjusts indigent care through regression and PAU volume credit is applied, there is no statistically significant relationship between indigent care statistics and ICC performance, suggesting that this approach accomplishes the intended goal of removing cost variations that hospitals are unable to account for from the ICC Methodology.

Mr. Pack noted that in the future Staff hopes to develop methodologies for handling AMCs, including setting national AMC benchmarks and determining the appropriate number of medical residents to adjust for in the ICC Methodology.

Chairman Kane asked how stakeholders were involved in the process of assessing the validity of ICC Peer Groups.

Mr. Pack explained that the Staff met with the Efficiency Workgroup in February and planned to discuss it again with the workgroup in March. Staff intends to present a draft recommendation on the Integrated Efficiency Policy in April and the final recommendation in June so that the industry has sufficient time to comment.

Commissioner Colmers asked how Staff handles costs associated with geography but are independent of poverty (e.g., additional security costs).

Mr. Pack stated that Staff has determined that the principal driver of additional costs in cities is not the geography, but the population. Mr. Pack stated that should a hospital identify such costs,

the hospital must prove that the cost is genuinely independent of the underlying population's characteristics.

Commissioner Bayless asked Mr. Pack how peer group changes influence ICC results and historical case mix differences.

Mr. Pack reported that the Staff's draft recommendation will include two peer group options. One would maintain some level of peer groups with a direct risk adjustment. The other would eliminate the current peer groups (except for academics) and use a direct risk adjustment.

Commissioner Bayless asked Mr. Pack if he could share more information on the removal of the peer groups.

Mr. Pack said removal of peer groups has a small impact on hospital ICC results and shows no relationship between resident count and performance, which the peer groups were originally intended to address. This is likely because indirect medical education adjustments have since been added to the methodology.

Ms. Bayless asked if payments for graduate medical education would be considered separately.

Mr. Pack confirmed there would be an indirect medical education adjustment. In addition, Staff is assessing if the number of residents by region is appropriate.

Payment Models Workgroup

Mr. William Henderson, Principal Deputy Director, Medical Economics and Data Analytics presented a Payment Model Workgroup update (see "Payment Models Workgroup Update" available on the HSCRC website).

The Staff has continued to refine the proposed approach for settling GBRs and the treatment of CARES Act funding received by hospitals. At the February Public Meeting, Staff presented a preliminary methodology for calculating GBR settlements. Through discussions with stakeholders, Staff has identified two potential minor improvements to the method. First, the Staff concluded that the February iteration of the methodology would impose an artificial settlement of December 31, 2020. Staff believes that revising the method so that settlement would occur on June 30, 2021 creates a more logical settlement point. As a result of this revision, the undercharge guarantee would extend through the end of FY 2021. This revision would also allow for savings against the Guardrail Test in CY 2021. The Staff has become increasingly concerned with the prospect of Maryland Medicare TCOC growth exceeding that of the nation in CY 2020. Realizing savings in CY 2021 would help ensure that Maryland does not fail to meet

the consecutive year requirement of the Guardrail Test. Under the Guardrail Test, Maryland Medicare TCOC growth cannot exceed that of the nation in successive years or exceed that of the nation by more than 1 percent in a single year. With this revision, the currently proposed methodology for GBR settlement calculates a hospital's funding position as follows:

1. Calculate the hospital's total approved revenue as the sum of the hospital's:
 - a) Total FY 2020 and FY 2021 approved charges, including approved expanded corridors
 - b) FY 2020 undercharge and FY 2021 undercharge
 - c) Impact of COVID-19 on FY 2020 expenses, aggregated through analysis of Annual Filings
 - d) Impact of COVID-19 on FY 2021 expenses, aggregated through analysis of Annual Filings
 - e) FY 2021 funding under current COVID Surge Funding Policy, if any
2. Calculate the hospital's total actual revenue as the sum of the hospital's:
 - a) Total FY 2020 and FY 2021 actual charges
 - b) Regulated portion of CARES funding
3. Determine the hospitals over / underfunding by subtracting the hospital's total actual revenue (Step 2) from total approved revenue (Step 1). If the result is positive, the Staff considers the hospital underfunded by that amount. If the impact is negative, then the hospital would be regarded as being overfunded by that amount. Settlement of over / underfunding would occur in the hospital's July 1, 2021, Rate Order.

Under this revised methodology, Staff estimates that hospitals would be in a net overfunded position of \$338M at the state-level. This net overfunding is before accounting for the impact of COVID-19 on expenses, over / undercharges in the second half of FY 2021, or funding provided through the HSCRC's COVID-19 Surge Funding Policy in FY 2021. Suppose GBR settlement instead occurred as of December 31, 2020, as described in the original proposal. In that case, Staff estimates the statewide net overfunding at \$241M.

Second, the Staff is considering revising the methodology to allocate CARES funding to the regulated hospital entity. Currently, Staff intends to use the ratio of regulated to total revenue reported in the hospital's FY 2019 Annual Filing to perform this allocation, which concerned stakeholders. As a result, the Staff is considering the following alternatives for determining the regulated portion of CARES funding for a hospital:

1. Allocate CARES Act funding to the regulated entity based on the hospital's ratio of regulated to total revenue, as reported in the FY 2019 Annual Filings

2. Allocate CARES Act funding to the regulated entity based on the statewide simple average ratio of regulated to total revenue, based on FY 2019 Annual Filings
3. Allocate CARES Act funding to the regulated entity based on the greater of the hospital's ratio of regulated to total revenue, or the simple statewide average, both based on FY 2019 Annual Filings

Utilizing option one would result in \$1.18B being considered regulated CARES Act statewide funding. Should Staff elect to use option two, the regulated portion of CARES funding would decrease by approximately \$20M. Should Staff select the regulated part of CARES funding would be reduce by about \$45M from the amount calculated using option one.

Finally, Staff has begun to determine an appropriate value for the RY 2022 Update Factor. The RY 2022 Update Factor's Projections are complicated by Staff concerns that Maryland Medicare TCOC growth may exceed that of the nation in CY 2020. Data through November 2020 shows Maryland Medicare TCOC growth approximately equal to that of the nation. The Update Factor is the primary tool that the HSCRC used to generate TCOC savings. In determining the RY 2022 Update Factor, Staff must consider the three TCOC Model Savings Tests:

1. Guardrail Test: Maryland Medicare TCOC growth may not exceed national Medicare TCOC growth in consecutive years or national Medicare TCOC growth by more than 1 percent in any year
2. Medicare Savings Test: Maryland must generate \$300M in TCOC savings to Medicare by the end of CY 2023
3. Per-Capita Hospital Spending Test: Maryland all-payer hospital spending may not exceed 3.56 percent per capita in any year.

Staff expects to review RY 2022 Update Factor projections with stakeholders in March and April, present a draft recommendation at the May Public Meeting, and present the final recommendation at the June Public Meeting.

Commissioner Colmers stated, if Maryland Medicare TCOC growth is even with the nation's growth due to hospital spending, it is not the Model's failure. Instead, he believes that Maryland's performance shows how quickly the Model allowed the HSCRC to respond to the COVID-19 pandemic and provide hospitals with financial stability.

Commissioner Bayless asked how the ICC Methodology impacts the Update Factor calculation.

Mr. Henderson replied that the methodology would make efficiency adjustments at the hospital level. The statewide net adjustment would be presented as "Other Adjustments" in the calculation.

Mr. Pack noted that, under the Integrated Efficiency Policy draft recommendation, efficiency adjustments would be budget neutral at the state level, but the annual set aside would be distributed.

Performance Measurement Workgroup

Dr. Alyson Schuster, Deputy Director, Quality Methodologies, presented and update on the Performance Measurement Workgroup (see “Performance Measurement Workgroup Update” available on the HSCRC website).

Dr. Schuster identified several concerns using CY 2020 performance to calculate rewards/penalties for HSCRC quality policies. The quality policies impacted by these data issues include the Readmission Reduction Incentive Program (RRIP), Maryland Hospital Acquired Conditions Policy (MHAC), Quality-Based Reimbursement Policy (QBR), and Potentially Avoidable Utilization Savings Policy (PAU).

Dr. Schuster noted that Staff has found a minimal correlation between CY 2019 and CY 2020 performance under the RRIP and MHAC Policies, suggesting that variations are likely due to the impacts of COVID19. An inverse relationship between hospital-level RRIP performance and COVID-19 volumes supports the Staff’s theory as well.

Dr. Shuster stated that the next steps for RY 2022 are as follows:

- To date, the most reasonable approach to assessing RY 2022 performance is using RY 2021 revenue adjustments, but Staff will continue to work through assessments to rule out any potential use CY 2020 performance
- For the time being, Staff advised the industry to use RY 2021 revenue adjustments for internal budgeting
- HSCRC Staff has met and are awaiting decision from CMMI on use of RY 2021 revenue adjustments
- If alternative solutions are required, HSCRC will vet with PMWG in a COVID specific meeting in March/April to finalize decisions for RY 2022

ITEM VII **POLICY UPDATE AND DISCUSSION**

COVID-19 Surge Policy

Ms. Wunderlich informed the Commissioners that the COVID-19 Surge Policy has been extended due to the presence of COVID cases through March.

Model Monitoring

Ms. Caitlin Cooksey, Chief, Hospital Rate Regulation, reported on the Medicare Fee-For-Service data for the 11 months ending October 2020. Maryland's Medicare hospital spending per-capita growth was unfavorable when compared to the nation. Ms. Cooksey noted that Medicare TCOC spending per capita was trending unfavorably for the past several months. Non-hospital spending per capita in Maryland is trending close to the nation through November. Maryland's Medicare Part A non-hospital spending is favorable. Medicare Part B non-hospital spending is close when compared to the nation through October.

Legislative Update

Ms. Megan Renfrew, Associate Director of External Affairs presented the Legislative Update (see "Legislative Update" available on the HSCRC website).

Ms. Renfrew noted that telehealth and health equity are priority health issues for legislators this year. Ms. Renfrew stated that Staff has been in contact with stakeholders on the issues of telehealth, medical debt, and financial assistance.

Ms. Renfrew noted that Staff is monitoring the following bills:

- HB 588- Budget Bill for FY 2022 (The Governor's Budget)
- HB 589/SB 493- Budget Reconciliation and Financing Act of 2021
- HB 123/SB 3- Preserve Telehealth Access Act of 2021
- HB 731/SB 567- Telehealth Services- Expansion
- HB 551/SB 393- Maryland Assistance Program and Health Insurance- Coverage and Reimbursement of Telehealth Services
- HB 565/SB 514- Hospitals- Medical Debt Protection
- HB 1021/SB 758- Health Insurance- Two-Sided Incentive Arrangements and Capitated Payments- Authorization
- HB 1022/SB 748- Public Health- State Designated Exchange- Clinical Information Sharing.

Ms. Renfrew stated that Staff proposed amendments to the Preserve Telehealth Access Act of 2021. The amendments address rate setting and clinic fees.

Ms. Renfrew noted that Staff also requested amendments to the Medical Debt Bill. The amendments would remove the requirement for HSCRC to determine alternative tax documentation for payment plans and allow flexibility in the data sources used for HSCRC reporting.

Commissioner Bayless asked Ms. Renfrew to clarify the provisions of the Medical Debt bill. Ms. Renfrew responded the bill would prevent hospitals from pursuing legal action for patient debt of less than \$1,000, including insured, uninsured, and patients not screened for financial assistance. The bill also prevents hospitals from assigning bills less than \$1,000 to bill collections.

Commissioner Bayless said with insurance carriers moving to higher deductibles, the bill would eliminate the cost-sharing requirement, the fastest growing component of for medical debt.

Ms. Renfrew reported that many stakeholders provided testimony on the bill, including insured consumers, the Maryland Insurance Agency, and the Maryland Hospital Association.

Chairman Kane questioned the feasibility of the provision requiring HSCRC to determine alternative tax documentation for payment plans.

Ms. Renfrew stated one of the amendments would remove the HSCRC regulatory requirement.

Chairman Kane asked about the impact on consumer payments.

Commissioner Colmers asked if continued relief to the deficit assessment may occur considering the federal COVID relief bill.

Ms. Wunderlich said it is too early to determine the impact.

ITEM VIII **LEGAL REPORT**

The Commission voted to take final action and adopt amendments to COMAR 10.37.10.26. This regulation concerns the Credit and Collection and Financial Assistance Policies of Maryland hospitals. The amendments bring the regulation into conformance with the Commission's statute.

ITEM IX
HEARING AND MEETING SCHEDULE

- April 14, 2021
- May 12, 2021

There being no further business, the meeting was adjourned at 3:37 p.m.

EMERGENCY MEETING
HEALTH SERVICES COST REVIEW COMMISSION
March 24, 2021

Chairman Adam Kane called the emergency meeting to order at 11:07 am. Commissioners Joseph Antos, PhD, Victoria Bayless, Stacia Cohen, John Colmers, James Elliott, M.D., and Sam Malhotra were also in attendance.

COVID-19 COMMUNITY VACCINATION FUNDING PROGRAM

Ms. Tequila Terry, Principal Deputy Director, Payment Reform & Provider Alignment presented Staff's recommendation on the COVID-19 Community Vaccination Funding Program (see "COVID-19 Community Vaccination Funding Program" available on the HSCRC website).

The State of Maryland has spent the past year battling the COVID-19 pandemic. The strengths of the State's Total Cost Of Care Model and its components that can be leveraged to stabilize hospitals, build critical healthcare infrastructure, and extend public health activities designed to combat the COVID-19 pandemic. The COVID-19 Community Vaccination Funding Program will use the flexibility of the TCOC Model and the State's rate setting system to aid in statewide vaccination efforts. The remaining Rate Year 2021 TCOC Model set-aside amount will be directed to support hospital efforts to engage in community-based vaccination efforts. The Program will provide funding to hospitals to create, optimize, and/or expand community-based vaccination programs in alignment with the State's Vaccine Equity Task Force (VETF). The Program is designed to increase the vaccination rate in disadvantaged, vulnerable, underserved, and hard-to-reach communities throughout Maryland. The aggregate amount available for the Program is a maximum of \$12 million.

The HSCRC Community Vaccination Funding Program is built on the following key principles that have influenced the design of the Program. These design principles include the following:

- Support strategies to increase vaccination rates - Hospitals will be able to create new programs and/or optimize and expand existing programs to increase access to and adoption of vaccines
- Promote equitable access – Communities identified as disadvantaged, vulnerable, underserved, and/or hard-to-reach that have been affected disproportionately by disparities and low vaccination rates will have an increase in access to the COVID-19 vaccines.
- Leverage existing State infrastructure – Wherever possible, the Program will build upon existing State vaccination strategies, resources, and technology developed by the Maryland Department of Health and the Vaccine Equity Task Force
- Encourage collaboration – Hospitals will be encouraged to engage "trusted partners" in local communities
- Recognize the urgency – The Program will be designed to keep the application process simple in order to ensure a quick response from the HSCRC and ensure the timely availability of funding.
- Design for the Future - The Program will support efforts for hospitals to further develop community-based infrastructure that can support post-pandemic health improvement efforts.

Under the Program, hospitals must volunteer to implement community-based programs in ZIP Codes that have been identified by the VETF or local health departments as disadvantaged, underserved, vulnerable, and/or hard-to-reach areas. In the application, hospitals must agree to focus on at least one of the targeting strategies below:

- Target Strategy 1: Priority Area ZIP Codes (ZIP Codes defined by the VETF)
 - Hospitals select ZIP Codes that the VETF has identified as priority
- Target Strategy 2: Additional ZIP Codes (additional justification required)

- Hospitals apply for funding for alternative ZIP Codes with an explanation of other special consideration populations that need to be targeted (e.g., disabled, home bound, homeless, etc.)
- Hospitals must include a statement from the local health department confirming the vaccine targeting strategy and including data to verify the demographic/special needs of the ZIP Code to be targeted.

The HSCRC will accept applications for the Community Vaccination Funding Program at any time during the State's COVID-19 emergency period until the aggregate \$12 million in funding has been awarded. Priority consideration will be given to applications received by April 8, 2021, and preference in funding will be given to hospitals that volunteer for VETF ZIP Codes under Target Strategy 1. Only hospitals may apply for funding; however, partnerships with community organizations must be a part of the vaccination model. Hospitals must use the HSCRC formatted application in Appendix A to be considered. Part I and Part II of the application template must be completed for consideration. Part I of the application template should be a maximum of five pages.

Hospitals participating in the Community Vaccination Funding Program will be required to provide data on their vaccination activities through ImmunNet, CRISP, and/or other HSCRC reporting. In addition to state required vaccination reporting, hospitals will be required to report to the HSCRC on the following:

1. Type of vaccination events
2. Number of vaccination events
3. Total number of patients vaccinated (1st dose, 2nd dose, single dose)
4. Number of patients vaccinated by Race/Ethnicity/Age/Gender Identity/ZIP

The impact of this program will be measured based on the following areas that will be tracked for each participating hospital/health system:

1. Number of vaccines applied during reporting period
2. Vaccination Rate by ZIP Code (comparison to pre-program baseline)
3. Vaccination Rate by race, ethnicity, age (comparison to pre-program baseline).

An Evaluation Committee formed by the HSCRC will review and score the grant applications. The HSCRC may engage additional subject matter experts to assist in the review and evaluation of grant applications. The HSCRC or its designee will make awards based on applications received and will determine how funds are disbursed. This means that:

- Determinations by the Evaluation Committee are not subject to appeal;
- The Evaluation Committee may require alterations to the scope or amount of an application during the process; and
- The Evaluation Committee may require an applicant to alter an application(s) to comply with the award limitation described above.

Applications will be reviewed and funding awarded based on the following criteria:

1. Community Collaboration Model – The extent to which applications articulate plans to establish meaningful collaboration between hospitals and community organizations.
2. Targeting Approach – Whether the proposed approach will target disadvantaged, vulnerable, underserved, and hard-to-reach communities and address barriers to vaccine access.
3. Impact Potential– The projected number of vaccinations that will be performed with Program funds. The potential for the proposed activities to increase vaccination rates for the targeted population.
4. Budget for COVID-related activities – The reasonableness and adequacy of the proposed budget. A clear description of how awarded funds will be disbursed.
5. Implementation Plan – Feasibility of implementation plan including a model to enable partners to work together effectively and strategies that can be implemented quickly.

Staff's recommendation

- Establish a new COVID-19 Community Vaccination Funding Program that will run through FY2022
- Allocate the remainder of the FY 2021 set aside to fund the vaccination program for FY2021-FY2022
- Issue an RFA to competitively bid funds
- Delegate authority to HSCRC Staff to:
 - Develop the COVID-19 Community Vaccination Funding Program RFA
 - Publish the RFA
 - Evaluate applications submitted for funding
 - Make award determinations up to the approved limit of \$12M
- HSCRC staff will work with one or more Commissioners during the process.

Commissioners voted uniamously in favor of the Staff's recommendation.

There being no further business, the meeting was adjourned at 10:43 a.m.



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COVID-19 Long-Term Care Partnership Funding Program

Presentations by:

Holy Cross Hospital

Luminis Health

Program Overview

- In July 2020, Commissioners approved \$10 million of funding in FY 2021 for the COVID-19 Long Term Care (LTC) Partnership Funding Program.
- The LTC Partnership Funding Program is intended to foster collaboration between hospitals and long-term care facilities and other congregate living facilities that serve vulnerable populations during the COVID-19 crisis.
- Under the LTC Grant Program, hospitals and their long-term care/congregate living partners collaborate on best practices to reduce the spread of COVID-19 in these settings.
- Main types of collaboration opportunities employed by applicants:
 - Resource Sharing
 - Quality Improvement Consulting
 - Data/Analytics
- HSCRC issued a Request for Applications in July 2020 and accepted applications on a rolling basis.
- By September 2020, HSCRC issued awards totaling \$8.2 million to 11 partnerships with 121 LTC partners.

Adventist HealthCare and Holy Cross Health Long Term Care Partnership Program

Health Services Cost Review Commission

April 14, 2021

Grant goal and impact measures

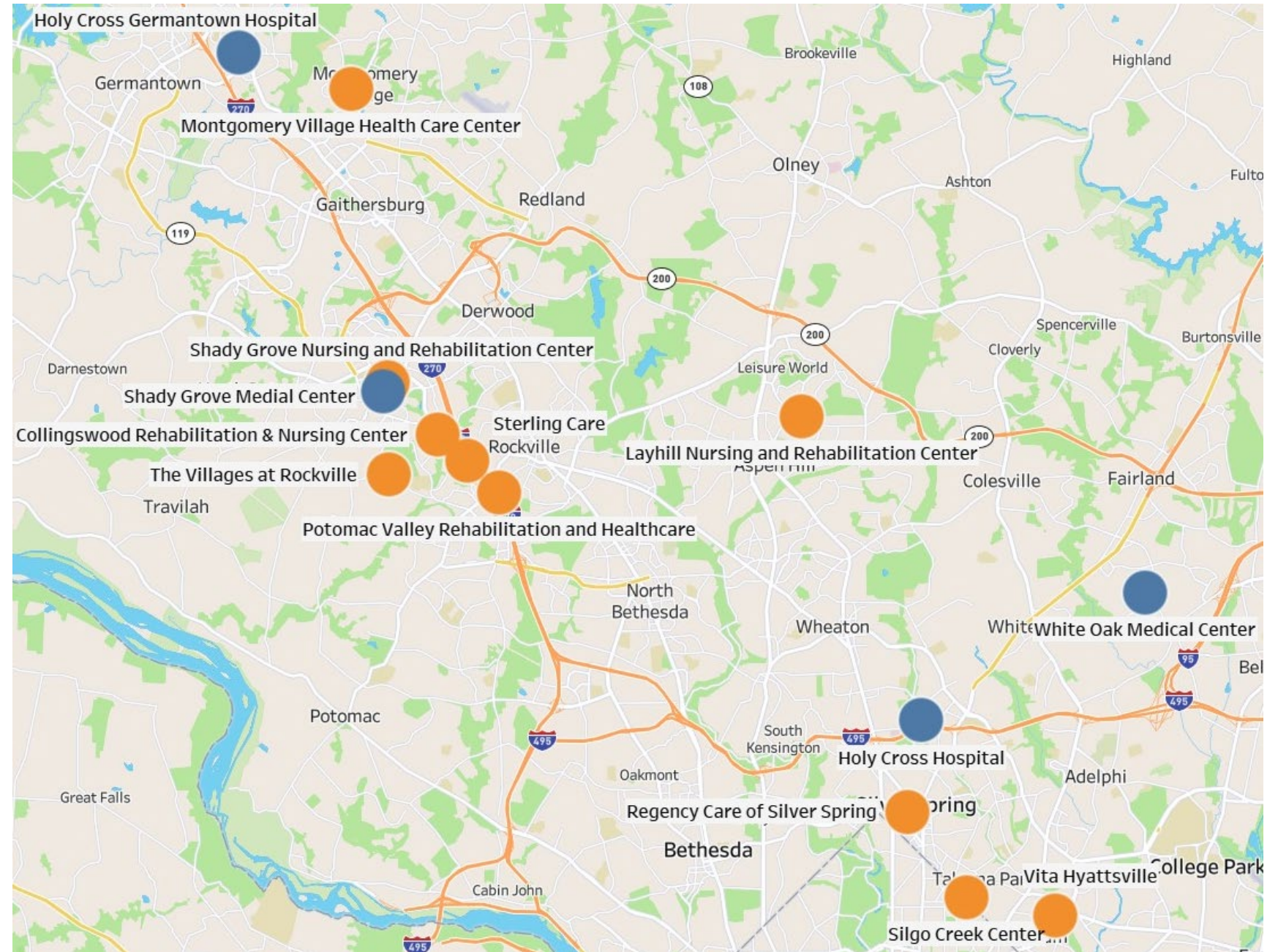
Goal: Support the development and enhancement of COVID-19 patient management, infection prevention, and infection control strategies.

Impact measures:

- Rate of COVID-19 hospitalizations
- 30 Day hospital readmission rate
- Number of COVID-19 Related Deaths
- Hospital utilization rates

Adventist HealthCare and Holy Cross Health LTC Partnership Program

- Four Hospitals
 - AHC Shady Grove
 - AHC White Oak
 - HC Hospital
 - HC Germantown Hospital
- 10 Skilled Nursing Facilities



Partner SNF Characteristics

Facility	ADC
Regency Care of Silver Spring	54
Montgomery Village Health Care Center	83
Layhill Nursing & Rehabilitation Center	118
The Villages at Rockville	125
Potomac Valley Rehabilitation & Healthcare	154
Shady Grove Nursing & Rehabilitation Center	123
Sterling Care	58
Vita Hyatsville	128
Sligo Creek Center	NA
Collingswood Rehabilitation & Nursing Center	131
Total	974

- 1,100 unique patients per month
- Two-thirds are long-term vs. post-acute
- ~30% of AHC and HC SNF discharges go to these facilities
- AHC and HC are primary source of post-hospital admissions

Grant Overview

- \$1,209,000 in total funding awarded to Adventist HealthCare and Holy Cross Health
- Implement Real Time clinical decision support
 - Disease and symptom surveillance trigger alerts for both Covid-19 and other conditions that could lead to hospitalization
 - Case managers provide support for individual care and process improvement
- Timing
 - Grant awarded September 15, 2020
 - SNFs came on-line between November 2020 and March 2021
 - Intervention will run through December 2021

Covid-19 Mitigation

- Facility-wide initiatives
 - Two-week isolation of all new admissions
 - Twice weekly testing of patients/residents and staff – one rapid, one PCR
 - Contact tracing
 - Monoclonal antibodies
- Data mining can recognize subtle signs of Covid-19 up to three days in advance of symptoms
 - Rapid testing with drop of pulse oxygenation or increased temperature
 - Early identification has led to isolation and prevention of hospitalization with on-site treatment

Early “Wins”

- Medication adjustments preventing readmissions
 - Congestive Heart Failure
 - Diabetes
- Identification of previously unknown conditions
 - Urinary Tract Infections
 - Pneumonia
 - C-difficile
 - Deep Vein Thrombosis
- Care management and partner engagement
 - Identification of incorrect or missed admission orders
 - Opportunity for sharing trends and best practices

Sustainability

- Independent evaluation by Dobson DaVanzo & Associates
 - Patient Outcomes (to be measured 30-, 60- and 90 days post-discharge)
 - Readmission to acute care hospital
 - Total number of institutional and community days
 - Total Medicare expenditures
 - Mortality
- Sustainability planning assisted by Berkeley Research Group
 - Do TCOC savings support program continuation?
 - Beyond TCOC savings, do social benefits support continuation? (e.g. better outcomes, improved access, more established provider relationships across the care continuum, etc.)
 - Explore model to share savings with participating facilities to encourage ongoing participation and support the Maryland TCOC model

Luminis Health COVID LTC HSCRC Grant Updates

Total HSCRC Grant Funds Awarded: \$990,136.34

Luminis Health Anne Arundel Medical Center (LHAAMC):\$419,136.34

Luminis Health Doctor's Community Medical Center (LHDCMC):\$571,000.00

Goal:

In alignment with Maryland State TCOC Model, Luminis Health will foster increased collaboration between long-term care/congregate living facilities in support of statewide efforts to combat COVID-19

Strategy:



Resource Sharing

Quality Improvement

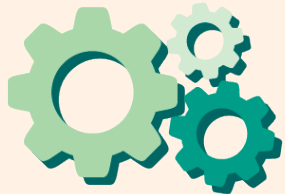
Data/Analytics

Challenges Addressed



Resource Sharing

Lack of PPE limited patient transfers to nursing facilities.
Lack of ready access to educational support and best practices limited optimizing care for patients with COVID-19.



Quality Improvement

Disparate **EHR systems** between hospitals and LTC partners posed challenges to improving patient care, while reducing costs.



Data Analytics

Lack of access to data analytics hindered reduction of Healthcare-associated infections (HAIs).



Challenge 1:

Lack of PPE limited patient transfers to nursing facilities. **Lack of ready access to** essential information to optimize care of patients with COVID-19.



Luminis Health

Solution:

Luminis Health shared supply of PPE and staff resources with key post-acute care partners.

LTC Participating Sites:

Genesis Waugh Chapel, Doctor's Rehab

Total Funding Allocated (LHAAMC and LHDCMC):

\$728,719

Challenge 1: Activities and Interventions

- Clinical nurse deployed to assist with testing
- Provider and NP imbedded in the facility
- Developed a dashboard to track readmission trends
- Data analyst hired to compile data and create dashboards
- Printed materials distributed to increase resident awareness of COVID-19
- iPads deployed to facilitate visitation between patients and family
- Epic Care Link Access to Doctor's Rehab in process

Outcomes

Waugh Chapel:

- Testing turn-around times reduced from 5 days to 1-2
- Readmissions reduced from 17.9% to 12.5%
- Patient testing for COVID-19 increased by 15.5% due to support for AAMC.

Doctors Rehab:

- Testing turn-around times reduced from 5 days to 1-2 days
- Readmissions rates held steady at 15%.



Challenge 2: Disparate EHR systems between hospitals and LTC partners posed challenges to improving patient care and reducing costs.

Solution:

Luminis Health leveraged Real Time Medical (RTM) to collaborate with LTC partners to reduce costs and improve patient quality outcomes.

LTC Participating Sites:

Crofton, Fairfield, Future Care Chesapeake

Total Funding Allocated (LHAAMC):

\$140,520



Real Time Medical Systems Data

Real Time provides clinical line of sight into patients' progress and provides live early warning alerts for concurrent decision making. It captures data from the EHR for analysis.

BENEFITS

- Provides post-acute interoperability
- Provides actionable post-acute patient data
- Identifies patients at high risk for readmission
- Intervenes in care when subtle changes in patient conditions occur
- Reduces avoidable readmissions
- Minimizes length of stay
- Improves LTPAC partnerships



Challenge 2: Activities and Interventions

- Coordinated and implemented SNF staff training on Real Time for early identification of patient decline and intervention.
- Real Time deployed during daily rounds.
- Increased collaboration for gap identification and process improvement thru data analysis.
- Developing a Real Time dashboard to track readmission trends.
- Epic Care Link deployment in process.

Outcomes

Crofton:

- Average readmission rate declined from 23% to 5%

Fairfield:

- Average readmission rate increased from 9% to 12%
 - Facility had three months in 2020 with zero readmissions

FutureCare Chesapeake:

- Average readmission rate increased from 18% to 30%*
 - *Facility was in outbreak status in February 2021. Pre pandemic, the readmission rate declined by 2% from Dec 2020 to Jan 2021.



Challenge 3: Lack of access to data analytics hindered reduction in Healthcare-associated infections (HAIs).



Solution:

Luminis Health facilitated partnerships between LTCs and the MPSC Clean Collaborative to address cleaning and validation monitoring, share data, best practices and emerging technologies to address HAIs.

LTC Participating Sites:

Crofton, Fairfield, Future Care Chesapeake, Doctors Rehab

Total Funding Allocated (LHAAMC and LHDCMC):

\$80,000

Challenge 3: Activities and Interventions

- Established partnership with Maryland Patient Safety Center (MPSC)
- Deployed Evidence based activities e.g. swabbing to identify gaps in cleaning surfaces
- Hard wired SNF participation in Clean Collaborative Webinars and Reporting
- Developing a dashboard to efficiently review infection trends
- Facilitated training and education to SNF staff on implementing cleaning technology (ATP).

Outcomes

Crofton:

- 78% decline in high touch surface contaminants

Fairfield:

- 34% decline in high touch surface contaminants

FutureCare Chesapeake:

- 59% decline in high touch surface contaminants

LHDCMC: Doctors Rehab:

- 7% increase in high touch area surface contaminants, likely due to increase in testing.

The Whole is Greater than the Sum of the Parts...

- Deployed early identification and proactive responses to infection via Real Time ✓
- Improved staffing levels and competencies via The Clean Collaborative ✓
- Enhanced Culture of safety through partnerships ✓
- Contained infection through consistent screening measures ✓
- Proactively improved care gap elimination through collaboration ✓
- Optimized admission processes and time allotted for donning and doffing between patients ✓
- Increased par levels and inventory for PPE to 30-60 day supplies ✓
- Deployed ATP testing to measure environmental cleanliness ✓

Questions ?



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Revised Integrated Efficiency Policy Draft Recommendation

April 14, 2021

Executive Summary

- Policy Overview
- Revised Methodology & Results
- Stakeholder Comments and Staff Responses



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Policy Overview

Integrated Efficiency Policy Overview

- The principal aim of the Integrated Efficiency Policy is to formulaically penalize and reward hospital cost per case and total cost of care efficiency with approved objective standards while:
 - Maintaining the Model's incentive to reduce avoidable utilization
 - **i.e. DON'T DISINCENTIVE CARE TRANSFORMATION**
 - Keeping fidelity to the Commission's statutory mandate to ensure costs are reasonable and charges are reasonably related to costs
- Policy will not produce model savings but will redistribute funding from poor performers to excellent performers
 - Corrects maldistribution of global budgets
 - Marginal statewide budget increases may occur due to set aside amounts provided by Commissioners during Annual Update Factor policy

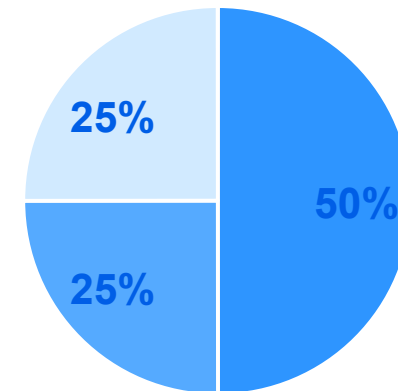
Overview of Efficiency Matrix and Application

- Array hospitals into quartiles and identify inefficient hospitals based on the combination of:
 - Cost per case efficiency using the Volume Adjusted ICC
 - Includes credit for reductions in potentially avoidable utilization
 - TCOC efficiency using Medicare and Commercial TCOC benchmark performance
- Identify hospitals in the worst and best quartile and apply efficiency methodology to bring hospitals over time closer to peer average standards
 - Poor performing hospitals will not receive a full update factor increase
 - Withholding this revenue will benefit all payers
 - Apply the same algorithm in future years until wide variation in efficiency is reduced
 - Excellent performing hospitals will receive funding from poor performing hospitals and annual set aside
 - Staff still recommends maintaining the ICC standard deviation threshold as well as the best quartile classification in order to be eligible for global budget enhancements.

Efficiency Matrix Weighting

- Because global budgets are based on hospital budgets from 2013, ICC performance is 50% of the Integrated Efficiency Policy
- Staff proposal for TCOC Weighting is 50%
 - 25% Medicare 2018 performance, 25% Commercial 2018 performance
 - Medicare FFS represents 37% of hospital payments
 - Commercial represents 36% of hospital payments
 - Excluding all other payers, which are not accounted for in national TCOC analyses at present, the effective weighting is 51% Medicare, 49% commercial
- Moving forward, benchmark performance for both payers will have an 18-month delay for incorporation into the Integrated Efficiency Policy (e.g. CY 2018 for RY 2021)

Efficiency Matrix



■ ICC ■ Medicare TCOC ■ Commercial TCOC



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Revised Methodology & Results

Methodology Revisions from First Draft

- Updates to ICC Input Variables
 - Permanent RY 2020 Revenue Updates
 - Exclude all Revenue Associated with Bon Secours Transition (not just Safe Harbor)
 - Update to RY 2022 Update Factor Inflation for Withhold
 - Subject to Commission's Approval of Update Factor Policy
- Critical Access Hospital Adjustment
- Pilot Revenue for Reform Policy
- Sliding Scale Approach vs ICC One Standard Deviation Rule
- Alternative to ICC Peer Groups

Critical Access Hospital Adjustment

- HSCRC staff in conjunction with the University of Maryland Medical system explored adding an additional risk adjustment for Chestertown hospital to recognize their unique rural service delivery system.
- Based on analyses of hospital size, driving distance to the nearest facility, and low volume with short length of stay, staff have concluded that Chestertown Hospital should be provided a Critical Access Hospital (CAH) Adjustment, i.e. an adjustment that benchmarks Chestertown Hospital costs to similar national CAH's.
- The proposed CAH adjustment is based on:
 - 15 peer hospitals
 - Medicare Cost Reports
 - Straight Average of Cost Centers - excludes Cost Centers that represent services not provided by Chestertown (e.g. psych, snf)
 - Casemix adjusted inpatient and outpatient discharges to recognize differences in acuity and to scale straight average method to Chestertown's volume
 - Effectively weights the comparison
 - A ratio of non-Medicare casemix index to Medicare casemix index to convert the analysis to all-payer
 - Adjusting Chestertown's approved cost structure at the end of the ICC methodology so as not to affect Maryland peer group cost average, i.e. functions as a final credit in ICC
- CAH analysis indicates that Chestertown costs are 6% higher than national CAH's

Revenue Reform: Inclusion of Safe Harbor

- Commissioners expressed a desire to implement the Revenue for Reform policy more quickly, which is a concept that allows hospitals to create safe harbors for hospital charges that support care transformation and population health efforts.
- The Commission had already implicitly directed staff to create a safe harbor for these types of costs when it negotiated the Bon Secours acquisition with Lifebridge Health in RY 2020. Under this agreement an allotment of the hospital GBR would be permanently exempt from future efficiency assessments.

	Year 1	Year 2	Year 3	Year 4	Year 5
LifeBridge Capital	\$ 5.0	\$ 8.5	\$ 13.5	\$ 15.0	\$ -
Foundation Contribution	\$ 2.5	\$ 3.0	\$ 5.0	\$ 5.0	\$ -
Community Investment	\$ 4.5	\$ 5.0	\$ 8.8	\$ 7.3	\$ 27.3
Total Savings	\$ 12.0	\$ 16.5	\$ 27.3	\$ 27.3	\$ 27.3

- Staff have also included in the Integrated Efficiency Modelling a pilot of \$2 million safe harbor for Chestertown Hospital that will provide funding for Rural Health Transformation, e.g. an Aging and Wellness Center.
 - Staff does not recommend including any additional safe harbors until the Revenue for Reform Policy is officially promulgated, at which point a reporting and auditing function for safe harbors will be outlined.

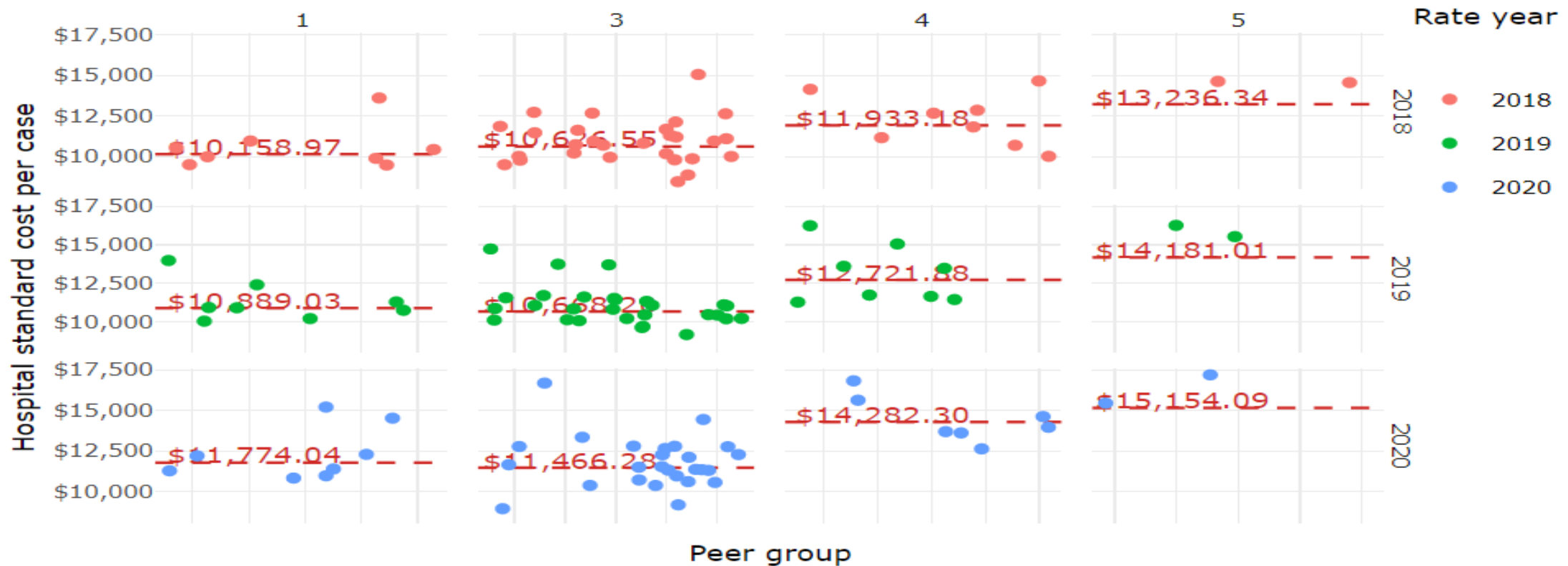
Revised Scaling Approach

- Commissioners expressed concerns over the:
 - Size of the policy
 - The cliff effect created by the one standard deviation ICC threshold and
 - The lack of recognition of performance variation in the worst quartile
- Due to these concerns, staff is proposing a revised scaling approach that would withhold inflation from all hospitals in the worst quartile (4th quartile) but it would do so on a sliding scale prorated by a hospital's point distance from the worst hospital's score in the 3rd quartile, e.g. 60 points.

	ICC Performance (Rank)	TCOC Performance (Rank)	Efficiency Points	Prior % Reduction	New % Reduction	
	A	B	C	D= A+Average (B&C)	E= 1.68% if Hospital is in Worst Quartile & Worse than 1 Std Dev on ICC	F=(D-60)/(80-60)*1.68%
Hospital A	36	35	33	70	0.00%	0.84%
Hospital B*	40	34	34	74	1.68%	1.18%
Hospital C*	42	38	38	80	1.68%	1.68%

* Hospital has ICC worse than one standard deviation from average performance

ICC Peer Group Analysis

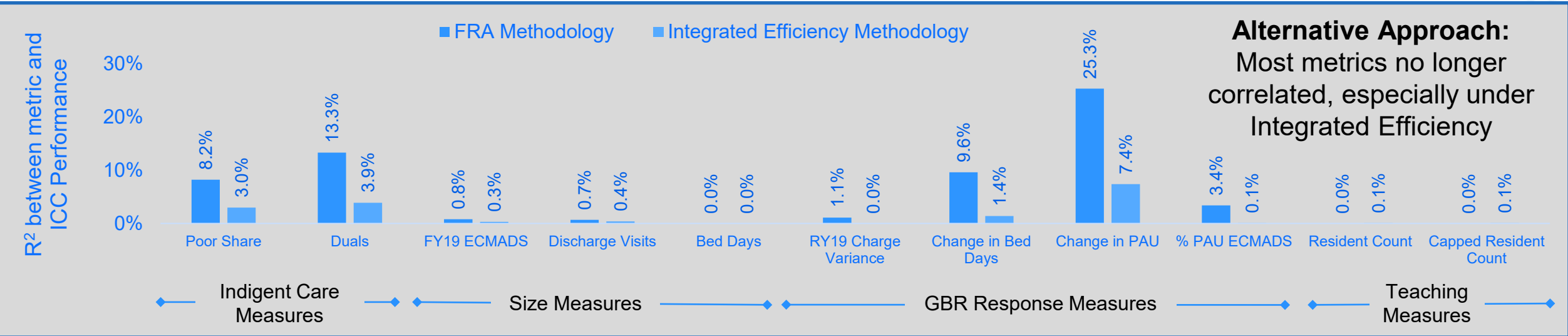
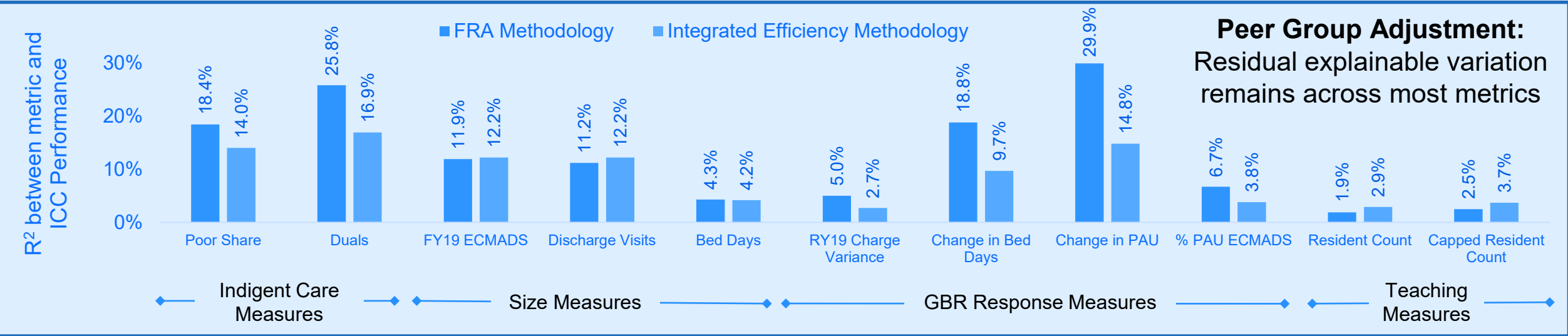


- Hospital Cost Per Case Exhibit Large Variation Within Each Peer Group
- Cluster analyses were performed but results were not consistent, lacked face validity, and did not materially improve within peer group variation relative to across peer groups.

Alternative Approach to Peer Groups

- Proposed alternative approach is a direct adjustment of indigent care for residual cost variation in lieu of peer grouping
 - Staff were concerned that indigent care, as the last remaining adjustment in the ICC, was capturing other cost variation, likely due to actual inefficiency.
 - Example: Excess Capacity
 - As such, staff explored including a metropolitan indicator in addition to a variable for indigent care to ensure any risk adjustment used in the ICC was not reflective of inefficiencies we would not want to pass through at 100% in an efficiency assessment
 - Approach will maintain peer group for AMC's since staff plans to develop IP only efficiency analysis relative to national AMC peers given unique cost structure; AMC's will have not bearing on regression
- Using a 3-year regression on cost per case variation that controls for Baltimore city and excludes AMC's yields a direct risk adjustment of \$6,914 per ECMAD (statistically significant and R2 of .525)
 - Staff is advancing a 3 year approach to smooth out any volatility in indigent care coefficient
 - The adjustment in simple terms means that a 1 percentage point increase in charges for disadvantaged populations leads to a \$69.14 increase in a hospital's average cost per case; statewide average cost per case is just under \$11k
- When indigent care is directly adjusted for through regression and PAU volume credit is applied, there is no statistically significant relationship between indigent care statistics and ICC performance.
 - Using a direct risk adjustment in lieu of peer groups does change efficiency results but not substantially so:
 - $R = .70$ (ICC with and without peer groups)
 - $R = .82$ (Efficiency Matrix Score with and without peer groups)

Alternative Approach Efficacy: Residual Variation As Measured by R² with Other Metrics



Efficiency Rankings (Worst Quartile with Peer Groups)

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC Relative to Benchmark	2018 Medicare TCOC Rank (25%)	2018 Commercial TCOC Relative to Benchmark	2017 Commercial TCOC Rank (25%)	Total Rank Points (Low Score is Better)
MedStar Franklin Square Hospital Center	-15.68%	25	19.24%	34	-16.15%	34	59
Carroll Hospital Center	-19.73%	34	15.88%	27	-21.25%	24	60
University of Maryland Rehabilitation & Orthopedic Institute	-24.80%	41	16.60%	29	-26.77%	9	60
Sinai Hospital	-15.74%	26	20.99%	37	-14.56%	35	62
Western Maryland Regional Medical Center	-14.31%	23	24.36%	41	-12.05%	39	63
University of Maryland Shore Medical Center at Easton	-21.35%	36	11.60%	18	-12.07%	38	64
Harford Memorial Hospital	-18.78%	31	21.74%	39	-18.97%	28	65
University of Maryland Medical Center Midtown Campus	-23.52%	40	19.01%	33	-23.21%	17	65
MedStar Good Samaritan Hospital	-19.03%	32	20.32%	36	-9.88%	41	71
Northwest Hospital Center	-21.69%	37	23.86%	40	-16.30%	33	74
Union Hospital of Cecil County	-24.87%	42	15.43%	26	-3.56%	42	75

- 11 hospitals identified in Worst Quartile with Peer Groups

Efficiency Rankings (Worst Quartile without Peer Groups)

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC Relative to Benchmark	2018 Medicare TCOC Rank (25%)	2018 Commercial TCOC Relative to Benchmark	2017 Commercial TCOC Rank (25%)	Total Rank Points (Low Score is Better)
Harford Memorial Hospital	-13.47%	27	21.74%	39	-18.97%	28	61
MedStar Union Memorial Hospital	-14.81%	32	13.87%	21	-13.68%	36	61
University of Maryland Shore Medical Center at Easton	-16.03%	33	11.60%	18	-12.07%	38	61
Carroll Hospital Center	-18.60%	37	15.88%	27	-21.25%	24	63
Northwest Hospital Center	-13.65%	28	23.86%	40	-16.30%	33	65
University of Maryland Shore Medical Center at Chestertown	-17.39%	35	13.29%	20	-12.02%	40	65
Western Maryland Regional Medical Center	-13.01%	26	24.36%	41	-12.05%	39	66
University of Maryland Medical Center Midtown Campus	-21.24%	42	19.01%	33	-23.21%	17	67
Union Hospital of Cecil County	-17.34%	34	15.43%	26	-3.56%	42	68
Sinai Hospital	-23.69%	43	20.99%	37	-14.56%	35	79

- 10 hospitals identified in Worst Quartile without Peer Groups; 8 of these hospitals were also identified in Worst Quartile with Peer Groups
- 2 newly identified hospitals: Union Memorial; Chestertown
- 3 hospitals fall out of penalty zone: Franklin Square; Good Samaritan, UMROI

Inflation Withhold (With and Without Peer Groups)

Hospital Name	\$ Reduction (no Peer Groups)	% Reduction (no Peer Groups)	\$ Reduction (no Peer Groups)	% Reduction (no Peer Groups)
MedStar Franklin Square Hospital Center	\$532,458	0.09%	\$0	0.00%
MedStar Good Samaritan Hospital	\$3,173,495	1.17%	\$0	0.00%
University of Maryland Medical Center Midtown Campus	\$0	0.00%	\$0	0.00%
University of Maryland Rehabilitation & Orthopedic Institute	\$238,556	0.19%	\$0	0.00%
Harford Memorial Hospital	\$658,221	0.61%	\$93,475	0.09%
MedStar Union Memorial Hospital	\$0	0.00%	\$369,458	0.09%
University of Maryland Shore Medical Center at Easton	\$1,275,973	0.56%	\$294,455	0.13%
Carroll Hospital Center	\$331,788	0.14%	\$612,532	0.26%
Northwest Hospital Center	\$3,964,205	1.45%	\$1,180,409	0.43%
University of Maryland Shore Medical Center at Chestertown	\$0	0.00%	\$242,269	0.47%
Western Maryland Regional Medical Center	\$1,579,412	0.47%	\$1,895,295	0.56%
Union Hospital of Cecil County	\$2,837,422	1.68%	\$1,236,825	0.73%
Sinai Hospital	\$3,126,121	0.37%	\$14,067,543	1.68%
Total	\$17,717,651		\$19,992,261	

- Potential maximum withhold is 1.68%
 - 73% (Commercial and Medicare Payer Share) of 2.30% (Inflation + Demographic Adjustment)
 - Subject to Commission's Approval of RY 2022 Update Factor

Draft Recommendations

- 1) Formally adopt policies to
 - Determine hospitals that are relatively inefficient;
 - Evaluate Global Budget Revenue enhancement requests using the criteria identified above;
- 2) Use the Inter-Hospital Cost Comparison, including its supporting methodologies to compare relative cost-per-case for the above evaluations;
 - Adopt a risk adjustment for indigent care cost variation that will be applied to all efficiency policies
- 3) Use Total Cost of Care measures with a geographic attribution to evaluate per capita cost performance for the above evaluations;
- 4) Withhold the Medicare and Commercial portion of the Annual Update Factor for relatively inefficient hospitals based on criteria described herein; and
- 5) Use set aside outlined in the Annual Update Factor and funding secured from withhold from outlier hospitals to fund potential Global Budget Revenue enhancement requests.



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Draft Recommendation on Integrated Efficiency Policy for RY 2022: Withholding Inflation for Relative Efficiency Outliers and Potential Global Budget Revenue Enhancements

April 14, 2021

This document contains the second draft staff recommendation for creating an Integrated Efficiency Policy for the purposes of withholding inflation for inefficient hospitals and awarding Global Budget Revenue enhancements for high performing hospitals. The Final Recommendation for this policy will be introduced at the June Commission Meeting. Since this represents the second iteration of this draft recommendation, staff did already address previously submitted comments in this report. In the Final Recommendation, staff will provide responses to previously submitted comments and any additional comments provided subsequent to this draft. Additional comments related to the second iteration of this draft policy are due by May 5, 2021.

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Key Methodology Concepts and Definitions

1. Equivalent Casemix Adjusted Discharges (ECMADS) – ECMADS are a volume statistic that account for the relative costliness of different services and treatments, as not all admissions or visits require the same level of care and resources.
2. Inter-hospital Cost Comparison (ICC) Standard – Each hospital's ICC revenue base is built up from a peer group standard cost, with adjustments for various social goods (e.g., trauma costs, residency costs, uncompensated care mark-up) and costs beyond a hospital's control (e.g. differential labor market costs) that are not included in the peer group standard. The revenue base calculated through the ICC does not include profits. Average costs are reduced by a productivity factor of 2 percent. The term "Relative efficiency" is the difference between a hospital's actual revenue base and the ICC calculated cost base.
3. Volume Adjusted Inter-hospital Cost Comparison (ICC) - A version of the ICC that incorporates hospitals' reduction in potentially avoidable utilization, as defined by the Potentially Avoidable Utilization Shared Savings Program and additional proxies for avoidable utilization. Volumes from this analysis, both negative and positive, amend a hospital's final ICC calculated cost base – not the peer group cost standard - as well as the hospital's position relative to the ICC Cost Standard.
4. Efficiency Matrix – A combined ranking of a hospital's performance in the Inter-hospital Cost Comparison and Total Cost Care. Total Cost of care is measured by comparing the per capita cost of care in a hospital's service area to matched national Medicare and Commercial benchmarks on a risk-adjusted basis. Both measures are weighting equally and hospitals are arrayed into quartiles to determine overall efficiency.

Policy Overview

Policy Objective	Policy Solution	Effect on Hospitals	Effect on Payers/Consumers	Effect on Health Equity
The GBR approach explicitly rewards hospitals by allowing them to retain revenue as volume declines. While this incentive remains fundamental to the model, it has the potential side effect of masking hospitals that operate inefficiently.	This policy penalizes significantly inefficient hospitals and rewards significantly efficient ones by evaluating them on a normalized cost per case basis. To avoid penalizing hospitals that are effectively reinvesting savings from lower utilization in improving population health, the cost per case measure is balanced with a measure of total cost of care.	Hospitals that run efficiently and effectively manage total cost of care in their service areas will be entitled to additional revenue. Those that are inefficient and are not effectively managing total cost of care will lose revenue. Only clear outliers will be impacted, most hospitals will not be affected.	By incenting both efficiency and effective total cost of care management, this policy will control unit level cost inflation faced by the direct healthcare consumer while also improving the effectiveness of the healthcare delivery for all residents.	Through this policy, hospitals are evaluated, in part, on total cost of care, thereby incentivizing hospitals to improve care coordination and non-hospital investments in their service area. An increased focus on total cost of care can help to improve access and quality of care for residents in the hospital's service area. Although this does not directly affect health equity, the investments that are made in the community can indirectly improve health disparities.

Recommendations

Since 2018, staff has been working with Commissioners and stakeholders to develop a formulaic and transparent methodology that identifies and addresses relative efficiency performance in order to bring hospitals closer to peer average standards over time. The purpose of this exercise is to update the HSCRC's efficiency measures to be in line with the incentives of Maryland's Total Cost of Care (TCOC) Model, so that objective standards are in place when the Commission adjusts hospitals' permanent rate structure and to address and correct maldistribution of global revenues.

In July 2019, a staff draft recommendation was brought before the Commission. During the course of review following the publication of the July draft recommendation, a number of concerns were identified by staff, Commissioners, and stakeholders regarding: a) the casemix adjustment for rehabilitation cases; b) use of a growth calculation in lieu of a benchmark attainment analysis for

total cost of care performance; c) the appropriateness of current peer groups in the hospital cost per case efficiency assessment and d) general concerns that the policy should identify larger amounts of inappropriately retained revenue.

Commissioners at the October and November 2020 Commission meetings also expressed concern that the designation of hospitals as outliers based on a one standard deviation hospital pricing rule created an undesirable cliff effect, especially when the penalty was not scaled to reflect gradations in hospital performance. Commissioners also noted a desire to expedite the use of staff's proposed Revenue for Reform concept that allows hospitals to have safe harbors for hospital revenue, i.e., revenue that is used for specific care transformation efforts at the hospital that could be excluded from efficiency analyses. Finally, staff also noted that an additional risk adjustment for hospitals deemed similar to critical access hospitals would be included in future iterations of the Integrated Efficiency Policy.

In light of all of these issues, staff has: a) implemented a change to its casemix adjustment that reduces the variability of rehabilitation case groupings; b) incorporated total cost of care benchmark performance into efficiency evaluations; c) reviewed the effectiveness of ICC peer groups and recommended an alternative approach; d) arrayed hospitals into quartiles instead of quintiles and incorporated Commercial benchmark performance to expand the extent of revenue redistributed through this policy; e) proposed a scaling approach in the newest revrehabised recommendation that penalizes all hospitals in the worst quartile but on a sliding scale basis; f) reflected a pilot Revenue for Reform safe harbor; and g) proposed a critical access hospital adjustment. As such, staff is presenting the following recommendations for Commission approval:

- 1) Formally adopt policies to
 - a. Determine hospitals that are relatively inefficient;
 - b. Evaluate Global Budget Revenue enhancement requests using the criteria identified above;
- 2) Use the Inter-Hospital Cost Comparison, including its supporting methodologies to compare relative cost-per-case for the above evaluations;
 - a. Adopt a risk adjustment for indigent care cost variation that will be applied to all efficiency policies
- 3) Use Total Cost of Care measures with a geographic attribution to evaluate per capita cost performance for the above evaluations;

- 4) Withhold the Medicare and Commercial portion of the Annual Update Factor for relatively inefficient hospitals based on criteria described herein; and
- 5) Use set aside outlined in the Annual Update Factor and funding secured from withhold from outlier hospitals to fund potential Global Budget Revenue enhancement requests.

Introduction

In response to Commissioner directives to incorporate per capita efficiency measures into overall efficiency analyses in line with the TCOC Model, staff developed an integrated efficiency methodology that uses and equally weights Volume Adjusted Interhospital Cost Comparisons (ICC) and Total Cost of Care benchmark performance, together referred to as the Efficiency Matrix. Incorporating the traditional cost-per-case analysis with total cost of care performance ensures that the HSCRC still adheres to its statutory mandate to ensure that total costs are reasonable and that aggregate charges are reasonably related to aggregate costs, while at the same time incorporating new population based measures of reasonable cost in line with the per capita goals of the TCOC Model.

While much work has been done to improve the Commission's efficiency methodologies, staff has not yet deployed them in an integrated and formulaic fashion across all hospitals. To date, the HSCRC has addressed efficiency concerns that excess revenues were being inappropriately retained by hospitals by making over \$80 million in adjustments for services that shifted to unregulated settings, including adjustments for oncology and infusion drugs shifted to unregulated settings. This figure also includes the first year of a negotiated revenue reduction plan for one outlier hospital, whose cost performance had been affected by service discontinuation and deregulation. Staff will continue to make adjustments for shifts to deregulated settings based on hospital disclosures and annual reviews. However, in order to expedite the process of adjusting revenues for high cost hospitals, the HSCRC staff proposes a more formulaic approach to reduce excessive revenue by limiting rate updates provided in the Annual Update Factor Policy.

To implement formulaic revenue reductions, staff proposes to withhold, on a sliding scale basis, the Medicare and Commercial portion of the RY 2022 Update Factor effective July 1, 2021 using Volume Adjusted ICC cost-per-case results and Medicare and Commercial Total Cost of Care benchmark performance, as evaluated through the Efficiency Matrix. It should be noted that only

Medicare fee-for-service and Commercial data was used in this evaluation as equivalent total cost of care data is not currently available for Medicaid. In acknowledgement of this limitation, staff proposes that any impact from this policy should be limited to the Medicare and Commercial portion of a hospital's revenue update (~73% statewide), but the modification to a hospital's global revenue will be shared among all payers.

To limit the extent of this policy to a select group of inefficient hospitals, staff proposes to only identify hospitals in the worst quartile of performance on these three metrics and to scale the inflation withhold based on a hospital's points distance from the 3rd quartile, thereby reducing cliff effects and better recognizing gradations in hospital performance in the worst quartile.

In response to concerns about requests for GBR modifications, staff also proposes in the policy to outline the metrics by which GBR enhancement requests will be evaluated. Staff proposes to similarly utilize the Efficiency Matrix to identify hospitals that perform the best in a combined evaluation of cost-per-case and Medicare and Commercial total cost of care benchmark performance. Specifically, staff proposes that hospitals will only be deemed eligible for potential GBR enhancements if they are in the best quartile of performance in the Efficiency Matrix and they perform better than one standard deviation from average Volume Adjusted ICC performance (1.05 times the ICC Standard), the latter of which is an indication of cost efficiency and potential hospital insolvency. In this capacity, the HSCRC will create a policy that clearly and prospectively outlines the standards by which hospitals may potentially receive additional funding outside of a full rate review so that efficient and effective hospitals can operate on a solvent basis.

This report outlines the ICC and TCOC methodology to be used in Integrated Efficiency Policy and the proposed approach to implement formulaic revenue reductions for inefficient hospitals as well as to identify hospitals eligible for potential GBR enhancements. This report also outlines the results of these methodologies that are to be considered for implementation in RY 2022. Due to concerns over existing peer groups in the ICC, staff has provided the results both with current peer groups and with an alternative approach that consolidates peer groups and directly risk adjusts for the added costs associated with serving lower socioeconomic patient populations, heretofore referred to as indigent care. Staff is requesting that Commissioners provide direction on what approach to use for addressing indigent care and would also ask that Commissioners adopt this

approach across all efficiency policies – Capital Financing Policy and Full Rate Application Policy.

As is consistent with other Commission policies, future work may present opportunities to further refine this policy, most notably incorporation of national inpatient analyses for academic medical center efficiency evaluations and potential changes to allowed medical residents costs, both of which may have an effect on hospitals' efficiency rankings.

Background

Efficiency Tools

While staff has utilized the ICC and various total cost of care analyses to support Commission proposals to modify hospitals' global revenues outside of a full rate application,¹ thereby implicitly approving these efficiency tools through adjudication, no formal policies that address scaling of inflation or global budget modifications are currently in place. It is important that formal policies reflective of all methodology enhancements are approved by the Commission to provide greater clarity to the industry and to allow for the Commission's methodologies to be more formulaic and uniform in their application.

In terms of the ICC, staff did not materially change the methodology from what was presented to the Commission in November of 2017. The ICC still currently places hospitals into peer groups based on socioeconomic factors and teaching status and then develops a peer group cost average, devoid of unique hospital cost drivers (e.g., labor market, casemix) and various social goods (e.g., residency programs), to ultimately build up hospital revenue for each hospital based on the calculated peer group cost average. The difference between a hospital's evaluated revenue and its revenue calculated from the ICC cost standard is the measure of a hospital's relative cost-per-case efficiency. As aforementioned, staff has also included in this report a slightly different ICC assessment that removes peer groups and directly risk adjusts for indigent care.

Additional modifications to the November 2017 ICC include modifying the casemix methodology that governs the singular volume statistic used in the ICC, creating a differential cost estimate for

¹ Anne Arundel Medical Center, Garret Regional Medical Center, UMMC Midtown Hospital, Bayview Hospital

indirect medical education costs of major academic medical centers versus other residency programs, limiting the resident and intern cost strip to the State average cost per resident, updating the input values to reflect RY 2020 revenue and RY 2019 casemix volume, and adjusting the ICC for changes in Volume, all of which will be discussed in greater detail in the *ICC Calculation* section below. As discussed in the *Introduction* section, consistent with the historical practice of continuing to refine methodologies, staff plans to potentially update the ICC further, including replacing the academic medical center inpatient evaluation with a national cost-per-case efficiency analysis and establishing a statewide physician supply and demand analysis that will would allow hospitals to request updates to allowed medical residents.

As for Medicare total cost of care, staff originally had two established tools for analysis: total cost of care growth relative to 2013 (the base year for the All-Payer Model) based on a strictly geographic attribution; and total cost of care growth relative to 2015 based on the attribution in the Medicare Performance Adjustment (MPA), which incorporates patient and physician matching. Although both of these approaches yield similar results when the performance period is the same, both have limitations in determining absolute efficiency because both are dependent upon the date by which growth is evaluated, i.e., the base year, and typically growth calculations are not as reliable year over year as attainment analyses. For these reasons, staff has developed total cost of care “attainment” benchmark calculations into the final efficiency determinations, inclusive of Commercial performance, that will be discussed in the Overview of the *Total Cost of Care Calculation* section.

Efficiency Implementation

Withholding Inflation from Outlier Hospitals

In prior applications of the HSCRC efficiency methodologies, hospitals’ revenues were reduced under spend-down agreements if they were deemed to have cost-per-case beyond a set level. In another application of efficiency measures, hospitals with favorable hospital cost-per-case positions were given higher annual updates than those hospitals with poor relative cost-per-case. However, all of these prior iterations of efficiency analyses were based on fee-for-service mechanisms and did not have to account for relative cost efficiency in a per capita system. In a per

capita system, a hospital aligned with the TCOC Model will reduce utilization by improving the health of the population, retain a portion of the revenue associated with the reduced utilization, and potentially appear to be less cost efficient in a cost-per-case analysis. Moreover, hospitals can confound this analysis in the global revenue era by reducing utilization through shifting services to non-hospital providers (referred to as deregulation), eliminating services outright, or by simply continuing to pursue additional volume growth beyond population and demographic driven changes. Despite these complexities, the HSCRC must still establish charges that are reasonably related to costs, which in turn should be reasonable themselves, while also properly incentivizing hospitals to reduce unnecessary utilization and total cost of care.

For these reasons, staff cannot evaluate hospital cost-per-case or total cost of care analyses independently, and any combination of tools will not precisely identify hospitals' efficiency ranking, especially near the mid-range of performance. Thus, staff will focus this policy on the worst quartile and recommend that hospitals in this quartile have a portion of their Annual Update Factor withheld, based on a 50/50 weighting of a Volume adjusted cost-per-case and geographic Medicare and Commercial total cost of care attainment calculations.

Staff notes that this policy would be the first broad scale, incremental step towards creating a formulaic use of efficiency methodologies in the per capita and global revenue era. Over time this policy will bring hospitals more in line with average cost-per-case and total cost of care performance.

Global Budget Revenue Enhancements

Staff's original efficiency proposals limited the application of the policy to poor performing outlier hospitals. Positive revenue adjustments would be addressed through an additional policy on the evaluation of rate applications once total cost of care benchmarks were developed. However, concerns regarding GBR enhancement requests have prompted staff to also outline a methodology for evaluating excellent performing hospitals and describe a process by which additional revenue may be requested outside of a full rate application.

Specifically, staff proposed that all GBR revenue enhancements outside of a full rate application be limited to hospitals that are among the best performers in cost-per-case, as measured by a

Volume Adjusted ICC, and Medicare and Commercial total cost of care, using a geographic benchmark attainment analysis. This evaluation mirrors the analysis performed for determining poor performing outliers. For hospitals to receive a GBR enhancement outside of a full rate review, they must be in the best quartile of performance as evaluated in the Efficiency Matrix and must be better than one standard deviation from average Volume Adjusted ICC performance (1.05 times the ICC standard), which indicates potential insolvency. Further, a hospital that qualifies for a GBR enhancement must submit a formal request to the HSCRC that outlines either: a) how a previous methodology disadvantaged the hospital; or b) a spending proposal that aligns with the aims of the Total Cost of Care (TCOC) Model. Total revenue enhancements will be capped by the funding made available by the set aside in the Annual Update Factor approved by the Commission each year (.25% or ~\$45 million in RY 2021) and the funding derived from withholding inflation from hospitals in the worst quartile.

This process and proposed budget cap does not restrict hospitals from submitting a formal rate application request.

Overview of Efficiency Calculations

Overview of ICC Calculation

The general steps for the ICC calculation, consistent with prior practices, are as follows:

1. Calculate approved permanent revenue for included volume as measured by Equivalent Case Mix Adjusted Discharges (ECMADs) that will be evaluated in the ICC methodology. This excludes the hospital revenues for one-time temporary adjustments and assessments for funding Medicaid expansion, Medicaid deficits and user fees, such as fees that support the operations of the HSCRC.
2. Permanent revenues are adjusted for social goods (e.g., medical education costs) and for costs that take into consideration factors beyond a hospital's control (e.g., labor market areas as well as markup on costs to cover uncompensated care and payer differential).

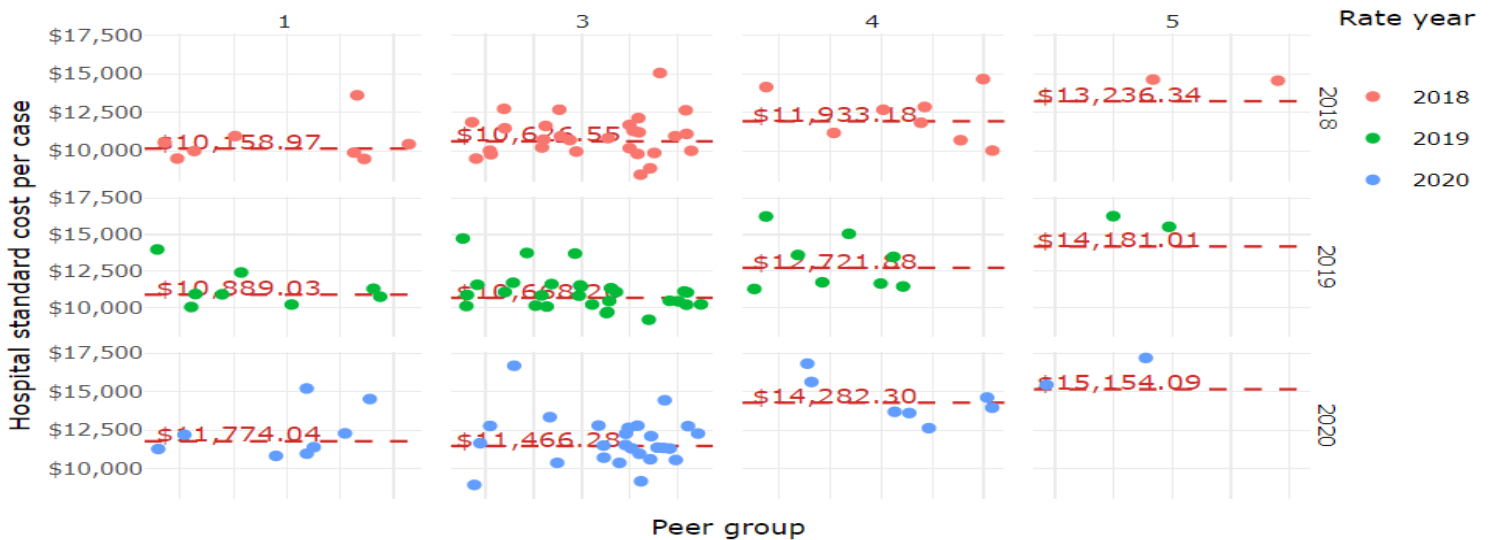
3. Hospitals are divided into peer groups for comparison, recognizing that specific adjustments may not fully account for cost differences. The adjusted revenue per ECMAD is compared to other hospitals within the peer group to assess relative adjusted charge levels. The peer groups are:

- Peer Group 1 (Non-Urban Teaching)
- Peer Group 3 (Suburban/Rural Non-Teaching)
- Peer Group 4 (Urban Hospitals)
- Peer Group 5 (Academic Medical Center Virtual, which overlaps with peer group 4)

Staff have also developed an alternative approach, whereby all peer groups, save Peer Group 5, are eliminated and instead direct adjustments are made through a regression to account for the intended purposes of the peer groups, most notably added costs related to teaching and to a greater extent serving a lower socioeconomic population or indigent care.

Staff arrived at this alternative approach due to many industry requests to assess the validity of the peer groups and because analysis of the peer groups indicated that there was greater variation in terms of cost per case within the peer group than across peer groups, which is not ideal for an adjustment that aims to align hospitals with similar characteristics and therefore similar cost profiles. This is best demonstrated graphically in Table 1 below, which shows that: a) hospital cost per case variation is greater in the smaller peer groups (Peer Group 1 and Peer Group 4); b) cost per case performance in many cases tends to be more similar across peer groups than within peer groups; and c) variation with the peer groups is growing larger over time, which is another imprecision associated with peer groups since they do not automatically update, and yet there are ongoing changes in the patient population and market.

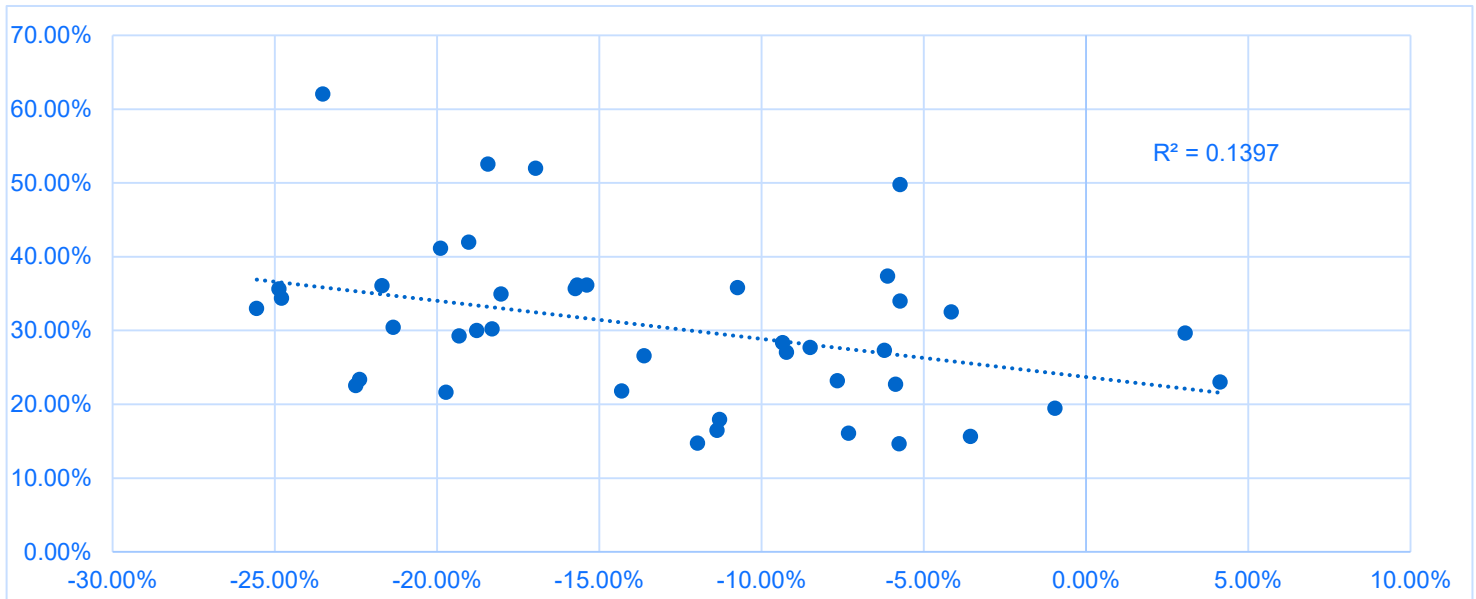
Table 1: Hospital Cost Per Case Variation (RY 2018 ICC – RY 2020 ICC)



The second concern about the current peer group design was that there remained a statistically significant relationship between levels of indigent care and ICC performance after application of the peer groups, indicating the peer groups had not fully addressed the residual cost variation for which they were intended. Specifically, staff noted that poor share (the percent of hospital revenue attributable to Medicaid, dual eligibles, and charity care) as well as the percent of revenue attributable to dual eligibles by itself had a small but not insignificant bearing on ICC performance when the historical peer groups were retained and indigent care was not adjusted for directly, as evidenced by a R2 of 0.1397 and a p value less than .05.²

² R2 denotes the extent to which a given set of variables in a regression explains variation in results or outcomes; the larger the R2 the higher the percentage of variation is explained. The complementary measures of p value indicate the extent to which the variables in the regression are not random. Typically p values less than .1 indicate the independent variables in the regression are not random and exert meaningful influence on the outcome.

Table 2: Correlation between Integrated Efficiency ICC Performance & Poor Share Percentage



Conversely, the alternative approach of consolidating Peer Groups 1, 3 and 4 and directly risk adjusting for indigent care resulted in an elimination of the statistically significant relationship between indigent care and ICC performance, which will be discussed in greater detail in subsection *D. Disproportionate Share Hospital (DSH) Adjustment.*

4. There are two additional steps to convert revenues to cost. The first additional adjustment is to remove profits from regulated services from the adjusted revenues (profit strip henceforth). The second is to make a productivity adjustment to the costs. These two adjustments are made to allow for consideration of efficient costs for purposes of rate setting.

5. After applying the calculated peer group cost average to each hospital, all costs that were removed in Step 2 (social goods and factors beyond a hospital's control) are added back to each hospital to build revenue up to the ICC calculated value. The profit strip and productivity adjustment outlined in Step 4 are not added back to a hospital's revenue. The difference between the ICC calculated value and the revenue included in the ICC evaluation, as described in Step 1, is the measure of a hospital's relative efficiency in relation to the ICC Cost Standard.

For a graphic outline of this process(not inclusive of staff's alternative approach outlined in Table 7 to directly risk adjust for indigent care in lieu of using peer groups), please see Tables 3a and 3b.

Table 3a: Overview of ICC Cost Comparison Calculation Determining Peer Group Cost-per-case (Stripping Down)

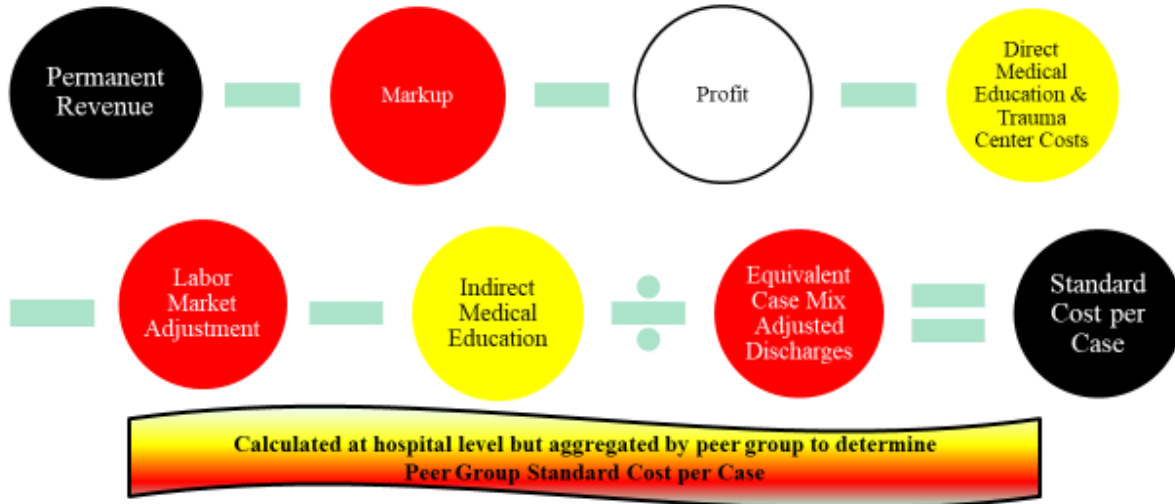
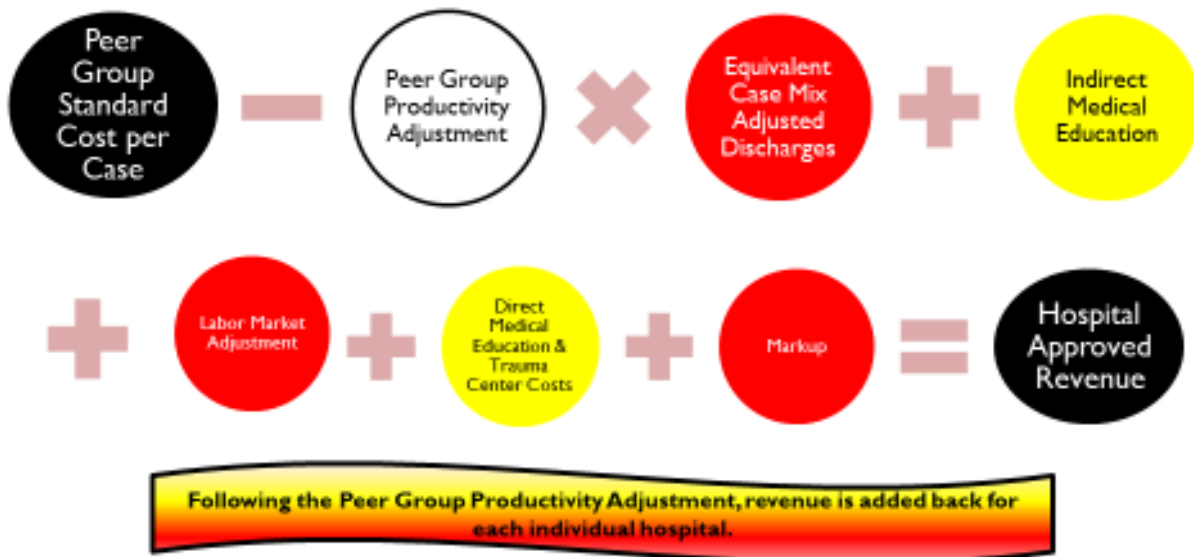


Table 3b: Overview of ICC Cost Comparison Calculation Determining Total Revenue (Building Back Up)



Proposed Changes to ICC Methodology

The following section outlines the proposed changes to the ICC relative to the methodology in effect in 2011.

Step 1- Calculate Permanent Revenue

A. Outpatient Drug Overhead Adjustment

As described in Appendix 1, staff has concluded its work in developing weights on outpatient cases, particularly cases that are subject to cycle billing and are ubiquitous across multiple outpatient settings. Staff did not develop usable weights for oncology and infusion drugs because these costs are highly variable by hospital due to various discounts that only certain hospitals receive, e.g., 340b discounts, and therefore do not offer a reliable efficiency comparison. As such, staff excluded oncology drugs from the cost-per-case/visit comparisons but retained the charges/cost constituting drug overhead, especially since the magnitude of drug overhead allocations are not uniform across hospitals. In the HSCRC rate setting calculations, a significant portion of costs continues to be allocated based on “accumulated costs.” This process is allocating too much overhead to outpatient biological drugs, and staff has concluded that this allocation distorts cost comparisons.³

B. Revenue for Reform Safe Harbor

In response to Commissioner requests to expedite the use of staff’s proposed Revenue for Reform concept, whereby hospital revenue is placed into safe harbors, i.e., it is not assessed in efficiency analyses if the revenue subsidizes care transformation, staff has put into the modelling for this iteration of the Integrated Efficiency Policy a pilot safe harbor for Chestertown Hospital. Specifically, a portion of revenue has been removed from the ICC and any potential scaling

³ Medicare adds six percent to average sales price to pay for overhead on physician administered drugs that are not bundled into a visit cost, while non-governmental payers use a somewhat higher overhead figure on top of average sales price in their payment formulation. It is likely that HSCRC will need to change its overhead allocation and rate setting formulation for these biological and cancer drugs in the near term as costs continue to escalate. In the meantime, staff recommends retaining the overhead related revenues/costs in revenues evaluated under ICC charge-per case/visit comparisons.

adjustments in the Efficiency Matrix in recognition of Chestertown's intent to divert inpatient hospital revenue to rural health transformation, including an Aging and Wellness Center.

Staff does not recommend including any additional safe harbors until the Revenue for Reform Policy is officially promulgated, at which point a reporting and auditing function for safe harbors will be outlined.

Step 2- Adjustments to Revenue

Adjustments to revenue along with changes to each adjustment methodology are proposed by staff below:

A. Medical Education Costs

Consistent with past practices, direct medical education costs, including nurse and other training as well as graduate medical education (GME) costs, are stripped from the permanent revenues using amounts reported in hospitals' annual cost filings. HSCRC policies limited recognition of growth in residencies beginning in 2002, unless increases in residencies were approved through a rate setting process, consistent with Medicare policies that also limit recognition of growth in residencies. For the proposed ICC formulation, the staff is limiting the counts and costs used in the GME calculations based on the number of residents and interns that were included in the 2011 regression. Moreover, staff is capping direct medical education costs for hospitals to no more than the average direct cost per resident statewide, which in the RY 2019 annual filing was \$132,803.

Over the years, the calculation of indirect medical education ("IME") costs has been difficult. In 2011, the HSCRC reached a calculation after much debate of an IME allowance per resident of \$230,746. Staff believed this figure was too high for those hospitals that are not major academic medical centers with high ratios of residents per bed. As such, staff worked with a contractor to create a nationally calibrated two-peer-group model to determine major academic indirect medical education costs versus the IME costs per resident of other teaching hospitals.⁴ The criteria staff used for defining these two peer groups were as follows:

⁴ Several studies also show that major teaching hospitals (sometimes, though not always, defined as academic medical centers or AMCs) have higher IME costs than non-major teaching hospitals. In its 2007 Report to Congress,

Table 4 Criteria used to define teaching intensity hospital peer groups

Teaching intensity	Major AMC	Number of beds	IRB ratio
High	Yes	500 or more	0.60 or higher
Moderate to Low	No	Fewer than 500	0.03 to 0.60

Source: AAMC website and HCRIS, 2013-2015.

AAMC = American Association of Medical Colleges; AMC = academic medical center; HCRIS = Hospital Cost Reporting Information System

IRB ratio=Number of Interns and Residents/beds

Using the most recent three years of national hospital data (2013–2015) from the Hospital Cost Reporting Information System⁵ and a regression that controlled for the other factors commonly associated with costs, such as hospitals’ average patient severity and indigent care burden⁶, it was determined that IME costs among high-teaching intensity hospitals are \$302,887 and \$110,875 for low- and moderate-teaching intensity hospitals combined. These values were inflated from the 2015 analysis to be equivalent to RY 2020 dollars.

Future development work may result in different allowed resident counts, but the methodologies for determining the cost per resident for direct and indirect medical education will remain the same.

Table 5 Estimated IME costs, by hospital peer group, 2013–2015

Teaching intensity	IME coefficient (\$)	Standard error	P-value	95 percent confidence interval	
All	230,675***	11,753	0.000	207,639	253,711

MedPAC (2007) reported separate IME cost estimates for AMCs and other teaching hospitals. The results showed a stronger relationship to cost in AMCs than in other teaching hospitals. The IME cost estimate for major AMCs (2.6 percent) was nearly double the estimate for other teaching hospitals (1.5 percent). Nguyen and Sheingold (2011) also reported that the impact of teaching intensity on costs was higher among large urban hospitals than other hospitals. They found that costs per case for large urban hospitals increased 1.4 percent for every 10 percent increase in the ratio of residents to beds, compared with a 1.1 percent increase over all teaching hospitals.

⁵ All Medicare-certified institutional providers are required to submit an annual cost report to a Medicare administrative contractor, which serves as the basis for the Hospital Cost Reporting Information System database. The cost report contains provider information such as facility characteristics, utilization data, cost and charges by cost center, in total and for Medicare.

⁶ Several variables (including hospitals’ case-mix index, wage index, census region, and urban or rural designation) were derived from the IPPS Impact File, which CMS uses to estimate payment impacts of various policy changes in the IPPS proposed and final rules.

High ^a	192,012***	41,873	0.000	109,942	274,082
Moderate and low (omitted group)	110,875***	17,216	0.000	77,132	144,619

Sources: HCRIS, 2013–2015; IPPS Impact File, 2013–2015.

Notes: The results are based on 124 hospitals in the high-teaching intensity group, 510 hospitals in the moderate-teaching intensity group, and 1,006 hospitals in the low-teaching intensity group.

^a To calculate the marginal effect for these groups, add the estimated IME coefficient with the estimated IME coefficient for the omitted group within a given model. Estimated IME costs for high-teaching intensity hospitals in the two-peer group model are \$302,887.

***Significantly different from zero at the .01 level, two-tailed t-test.

HCRIS = Hospital Cost Reporting Information System; IPPS = inpatient prospective payment system.

B. Labor Market Adjustment

In the prior ICC, the labor market adjustment was constructed using an HSCRC wage and salary survey that was based on two weeks of pay and included fringe benefits and contract labor. Each hospital was provided with a unique labor market adjustor that was more indicative of a hospital's ability or decision to pay salaries as opposed to the cost pressures hospitals face in various labor markets, and there were concerns about the consistency and accuracy of reported benefit levels and their impact on the measured wage levels. Staff suspended the wage and salary survey submission for 2017 and intends to replace this survey data with data that better accounts for labor costs hospitals cannot control. One potential solution is to utilize CMS's nationally reported data. Although this national CMS data is available historically, HSCRC staff has not had the opportunity to audit the data, and there may be reporting errors. Staff and MHA have stressed the importance of accurate data in the 2017 reports to Medicare.

While staff will continue to use the HSCRC wage and salary survey in its formulation of the ICC until a new labor data source is available, it proposed in the 2018 ICC formulation to eliminate hospital specific adjustments for most hospitals. Specifically, the ICC will use two sets of hospital groupings, with the first set of grouping for Prince George's County and Montgomery County where wages are higher than Maryland's average, and a second grouping of all other hospitals.

C. Capital Cost Adjustment

Previously, there was a capital cost adjustment for differences in capital costs, which was being phased out over time. The time has elapsed, and there is no longer an adjustment for capital cost differences.

D. Disproportionate Share Hospital (DSH) Adjustment

In the 2011 analysis, staff made an adjustment to charges for patients considered to be poor, in consideration of the cost burden that those patients may place on hospitals with higher levels of indigent care. Prior calculations utilized the percentage of Medicaid, charity pay, and self-pay, referred to as poor share, as an independent variable in a multi-variate regression to determine this cost burden.

Staff discontinued this adjustment and instead retained peer groups, most notably Peer Group 4 (the urban peer group), because the peer group design and direct risk adjustment for indigent care were duplicative and disadvantaged hospitals, not part of the urban peer group, with similar levels of indigent care. Since this discontinuation, stakeholders have continued to raise concerns that while the peer group assignments and indigent care are duplicative, there is variation in patient populations outside of the urban peer group that are not adequately addressed with the current ICC evaluation.

As such, staff engaged Mathematica Policy Research in developing a new DSH adjustment once it was determined that the peer groups in their current configuration (and in many other configurations based on cluster analyses) did not adequately address residual cost variation related to indigent care. The alternative approach built off the discontinued regression that utilized poor share as an independent variable because it demonstrated the greatest influence on ICC performance once peer groups were removed. Staff further added to the regression by controlling for Baltimore city hospitals, as staff was concerned that indigent care, as the last remaining adjustment in the ICC, was capturing other cost variation, likely due to actual inefficiency, e.g. excess capacity. Finally, staff identified slight volatility in the regression's annual coefficients and thus advanced the idea of using a regression that calculated indigent care cost per 1% of poor share over a three year ICC assessment, thereby smoothing out any instability in the DSH adjustment.

Table 6 DSH Adjustment Based on 3 Year ICC Assessment Poor

	<u>RY18-RY20</u>
Poor Share (DSH Adjustment)	6,914.33***
Metropolitan Indicator	1,070.08**
Constant	9,067.09***
Observations	41
R2	0.52

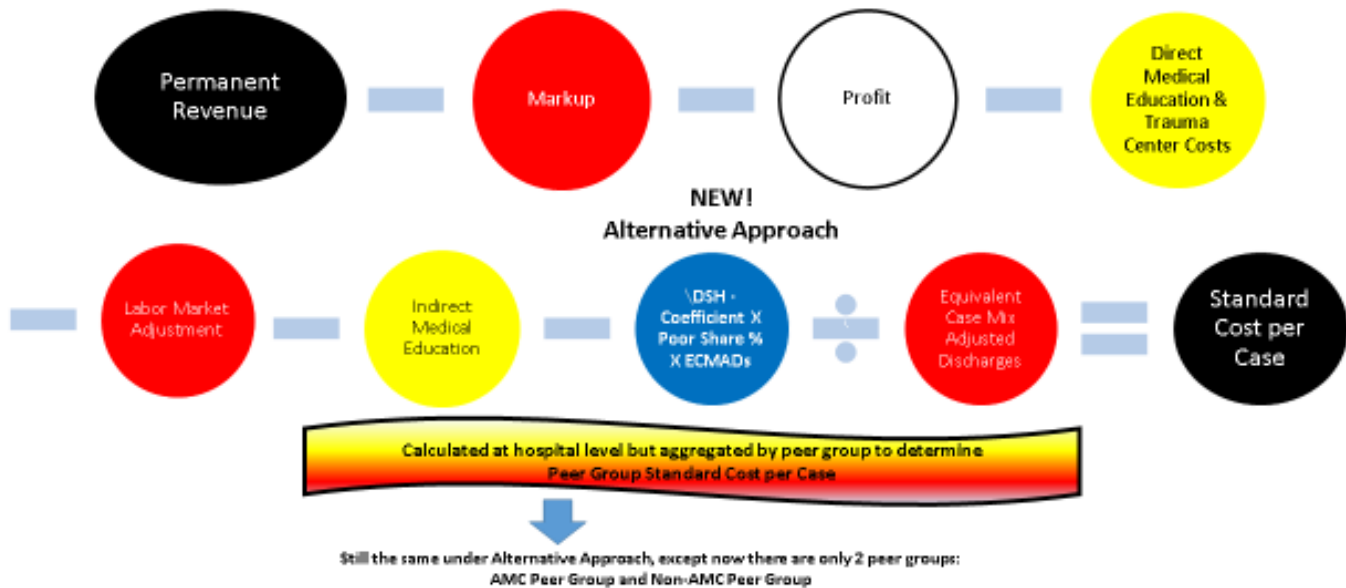
After calculating the poor share coefficient of \$6,914, staff incorporated it directly into the ICC by multiplying it by a hospital's poor share percentage and its ECMADS when developing the peer

Note:

* p<0.1; ** p<0.05; *** p<0.01

group cost per case, which is a statewide peer group, save the academic medical centers, in the alternative approach. For a graphical demonstration of this see table 7 below:

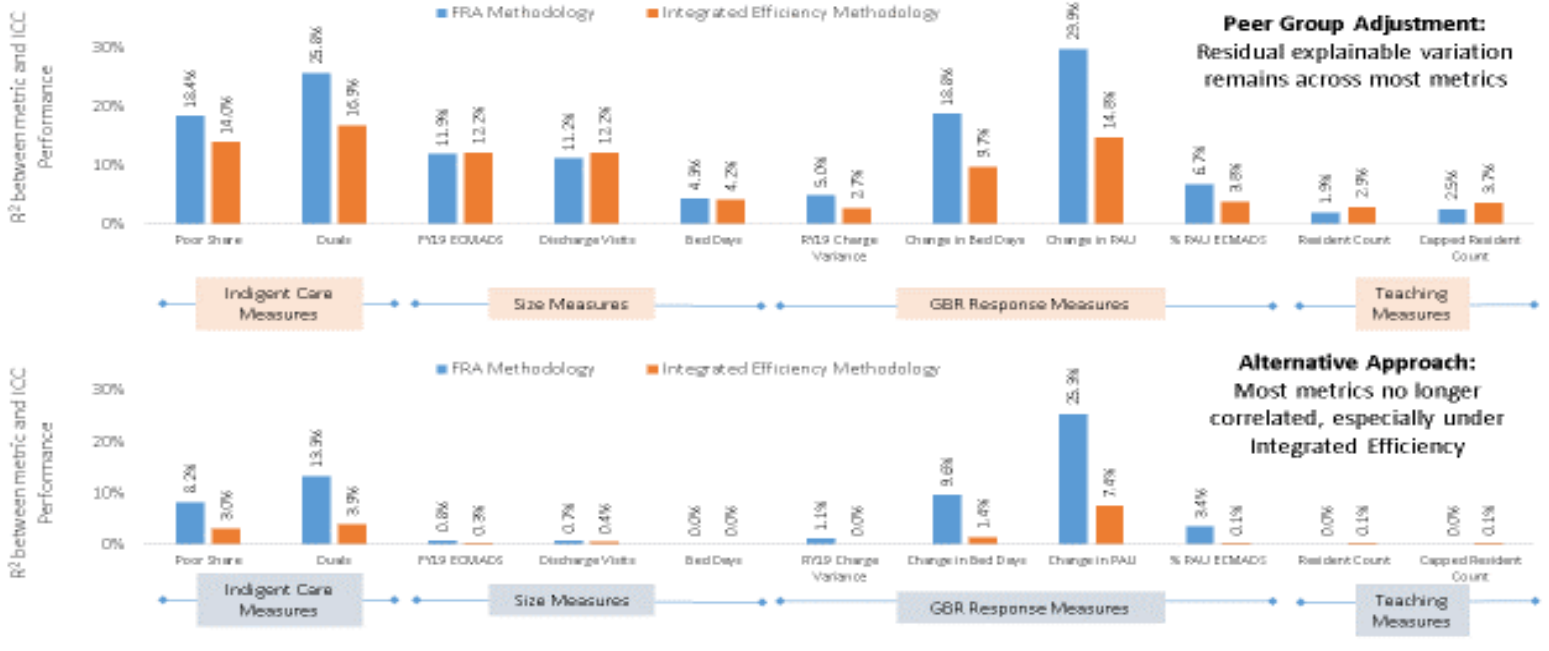
Table 7: Overview of ICC Cost Comparison Calculation Determining Peer Group Cost-per-case with DSH Cost Strip (Stripping Down)



Similar to other cost strips (e.g., labor market, indirect medical education), the DSH adjustment is built back into a hospital's revenue base once the standard cost per case is developed.

Finally, to determine the efficacy of the alternative approach, staff ran final correlations to evaluate if the relationship between indigent care and ICC performance was reduced, ideally to a point where it was no longer statistically significant. In this exercise, staff also evaluated other hospital characteristics that stakeholders expressed concern over, most notably charge variance – the degree to which a hospital must change its charges to align the GBR to current service volume and which serves as a measure of TCOC Model incentives. In all cases, the relationship between indigent care and these other statistics of interest weakened under the alternative approach, and in the ICC used in the Integrated Efficiency Methodology the relationship between indigent care and ICC performance was not statistically significant:

Table 9: Residual Variation As Measured by R² with Other Metrics



Due to the sensitivity of the peer group risk adjustment, staff has reflected in the *Efficiency Assessment* section results of the Integrated Efficiency Methodology with peer groups and with the alternative approach, and will ask Commissioners to provide direction on what approach to adopt, both in the Integrated Efficiency Policy and all other efficiency policies.

Step 3 Productivity and Cost Adjustments

A. Profits

Staff has retained the same adjustment used to remove profits from the ICC costs, which has been used historically. Consistent with the statutory authority of HSCRC, the Commission does not regulate professional physician services. The adjustment removes profits for regulated services and does not incorporate subsidies or losses for professional physician services.

B. Productivity Adjustment

In prior iterations of this policy, staff recommended using an alternative approach to calculate the productivity adjustment. The excess capacity adjustment, which was formulated based on the

declines in patient days (including observation cases >23 hours) from 2010 through 2018 in each peer group as well as the change in outpatient surgery days with a length of stay greater than 1 from 2013 to 2017, produced varying levels of required increased productivity for each peer group, which staff believed was a methodological improvement to the historical 2 percent productivity adjustment employed across the board. However, given further review based on the final promulgation of the Major Capital Financing policy that also uses this calculation on a hospital specific basis, staff has determined that the excess capacity calculation should not be used to determine a peer group productivity adjustment due to the 85 percent variable cost factor in place from 2010 to 2014, which made the calculation overestimate the level of productivity expected of each peer group. Thus, staff is recommending returning to the historical 2 percent productivity adjustment. This approach varies from the final approved policy for Full Rate Applications, which temporarily discontinued the use of a productivity adjustment, but because the Integrated Efficiency Policy is a relative ranking methodology and all hospitals incur the same productivity adjustment, the retention of a 2 percent productivity adjustment does not affect results.

Step 4- Building Up a Hospital's Permanent Revenue

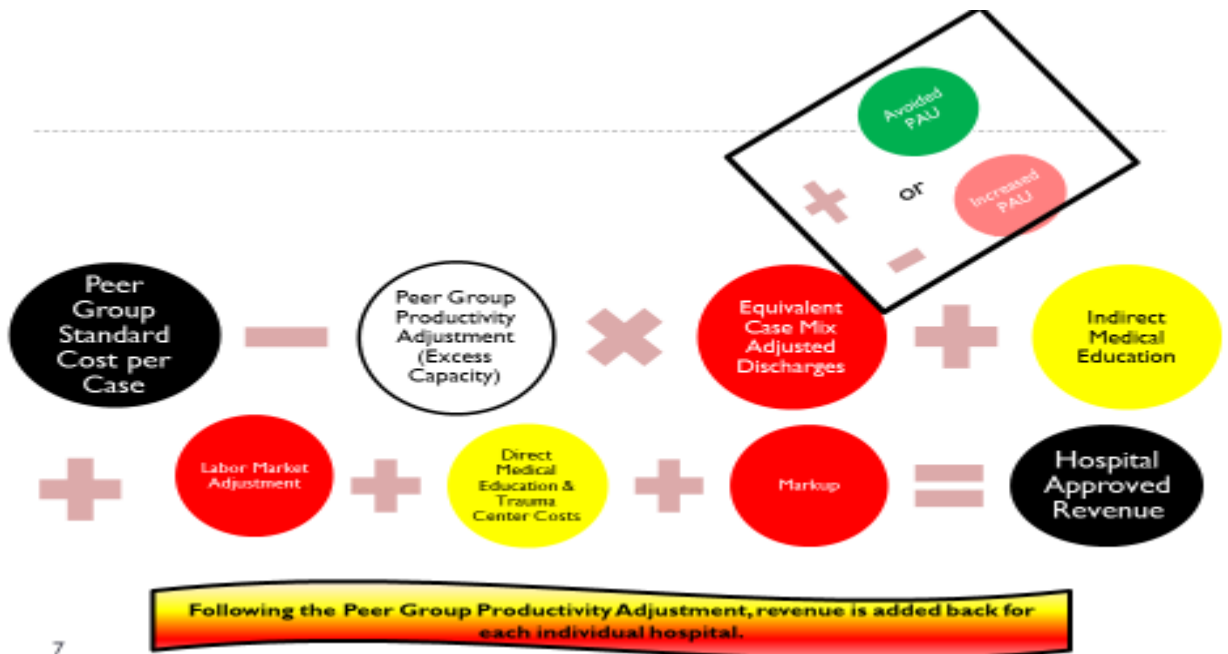
A. Volume Adjustment

In iterations of the ICC that relatively rank hospitals for the purpose of identifying inefficient hospitals, staff proposes to volume adjust the ICC because there exists an inverse correlation of (.53), whereby reductions in potentially avoidable utilization result in worse ICC performance. To correct for this, growth rates for potentially avoidable utilization, as defined by the PAU Shared Savings program,⁷ will be assessed from CY 2013 to RY 2019. The inverse of PAU growth rates, both positive and negative, will be multiplied by a hospital's PAU ECMADS, thereby adding or subtracting volume used in the final calculation of a hospital's ICC approved revenue. That is, if a hospital reduced PAU over the course of the All-Payer Model, the volume will be added to its evaluation, thereby making the hospital appear more efficient in a cost-per-case analysis.

⁷ In the PAU Shared Savings program, there are two volume measurements: readmissions that are specified as 30-day, all-payer, all-cause readmissions at the receiving hospital with exclusions for planned admissions; and hospitalizations for ambulatory-care sensitive conditions as determined by the Agency for Health Care Research and Quality's Prevention Quality Indicators (PQIs).

Conversely, if a hospital increased PAU, volume will be removed from the ICC evaluation, thereby making the hospital less efficient.

Table 10: Overview of ICC Cost Comparison Calculation Determining Total Revenue (Building Back Up) with Volume Adjustment



This PAU volume adjustment in concert with the alternative approach to ICC peer groups is also what ensures that there is no statistically significant relationship between indigent care and ICC performance, as evidenced by Table 9.

B. Critical Access Hospital (CAH) Adjustment

In recognition of the costs required to provide hospital care in rural areas, HSCRC staff proposes to add an additional risk adjustment for hospitals that would otherwise qualify as critical access hospitals. Based on analyses of hospital size, driving distance to the nearest facility, and low volume with short length of stay, staff has concluded that Chestertown Hospital should be

provided a Critical Access Hospital (CAH) Adjustment, i.e., an adjustment that benchmarks Chestertown Hospital's costs to similar national CAH's.^{8 9}

Following selection of peer hospitals, the CAH adjustment is based on straight average of cost centers from Medicare Cost Reports, excluding cost centers that represent services not provided (e.g., Psych, SNF). Casemix adjusted inpatient and outpatient discharges are then utilized to recognize differences in acuity and to scale the straight average method to the hospital's volume, which effectively weights the comparison. Then to convert the analysis to all-payer, a ratio of non-Medicare casemix index to Medicare casemix index is utilized, all of which will yield a predicted total cost standard based on national CAH benchmarks. Finally, staff adjusted the hospital's approved cost structure at the end of the ICC methodology so as not to affect Maryland peer group cost average, i.e., it functions as a final credit in ICC.

Overview of Medicare Total Cost of Care Calculations

Consistent with the Total Cost of Care (TCOC) Model, the cost used in this evaluation will include all types of medical costs (including both hospital and non-hospital services) with the exception of retail pharmacy.

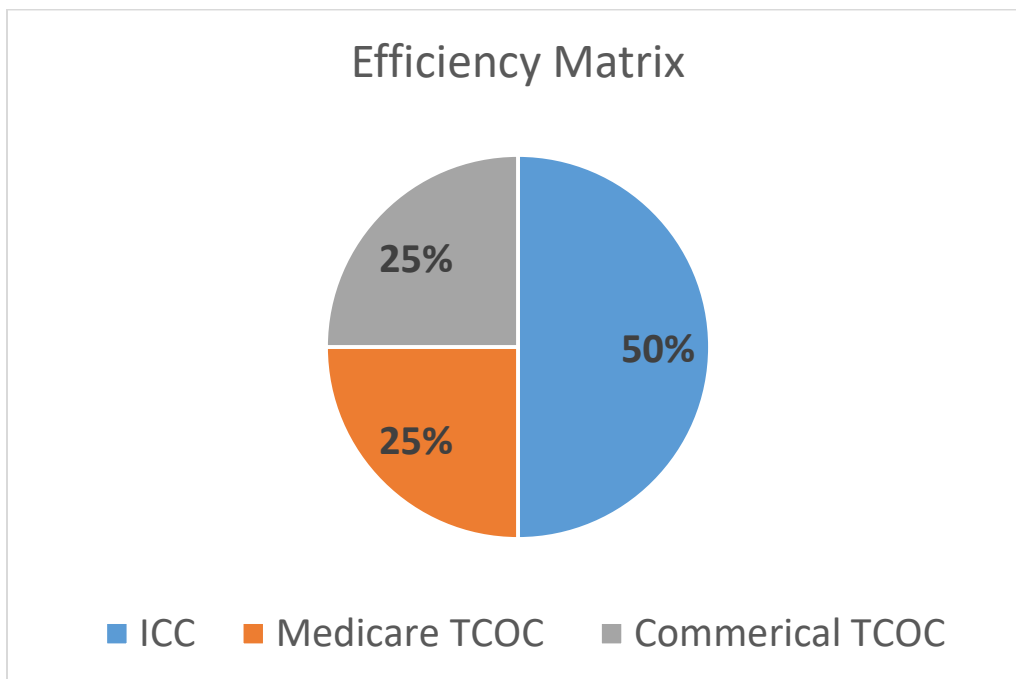
Hospitals' TCOC performance will be ranked by percentage variance from the Medicare benchmark performance (or average of similar demographic national peers), and this same approach will be applied to Commercial performance. The score from this ranking will be added to the ranking from the ICC and will comprise 50% of the evaluation – Medicare and Commercial

⁸ Qualification for CAH classification nationally requires: a) Having 25 or fewer acute care inpatient beds; b) Being located more than 35 miles from another hospital; c) Maintaining an annual average length of stay of 96 hours or less for acute care patients; and d) Providing 24/7 emergency care services. Sixty-two percent of rural hospitals are paid as Critical Access Hospitals (CAH), comprising 35% of rural hospital payment for Medicare

⁹ The criteria used for choosing peer CAH hospitals were as follows: flagged CAH's in national cost report database (~1,300 hospitals); established selection criteria, including: similar size; high quality; not financially distressed; private, not for profit hospitals; similar wage levels--wage index of .85 or higher; and heavy Medicare mix--Medicare revenue is 30% or higher (24 hospitals); removed hospitals not available in American Hospital Directory data and hospitals that once swing beds were removed were too small for comparison (15 hospitals).

performance will comprise an even share of the total cost of care evaluation (25% each) as both represent approximately the same share of hospital payments statewide. This statewide weighting approach ensures that total of care is heavily influential to the efficiency analysis and ensures that hospitals with more favorable payer mixes, i.e., more commercial purchasers, are not artificially advantaged.

Table 11: Efficiency Matrix Weighting



Geographic Attribution Approach

For the purpose of this calculation, a hospital's attributed beneficiaries will be determined based on the Primary Service Area-Plus (PSAP) method used for the geographic attribution layer of the Medicare Performance Adjustment attribution approved by the Commission in November 2017. Under this approach, beneficiaries are attributed based on their zip code of residence. Zip codes are attributed to hospitals through three steps:

1. Costs and beneficiaries in zip codes listed as Primary Service Areas (PSAs) in the hospitals' GBR agreements are assigned to the corresponding hospitals. Costs and beneficiaries in zip codes claimed by more than one hospital are allocated according to the hospital's share on equivalent case-mix adjusted discharges (ECMADs) for inpatient and

outpatient discharges among hospitals claiming that zip code. ECMADs are calculated from Medicare FFS claims for the federal fiscal years 2014 and 2015.

2. Zip codes not claimed by any hospital are assigned to the hospital with the plurality of Medicare FFS ECMADs in that zip code, if such zip code does not exceed 30 minutes' drive time from the hospital's PSA. Plurality is identified by the ECMAD of the hospital's inpatient and outpatient discharges during the attribution period.
3. Zip codes still unassigned will be attributed to the nearest hospital based on drive-time.

Medicare and Commercial Benchmark Methodologies

A Medicare and a Commercial benchmark was calculated for each hospital. Each benchmark was developed in a three step process. Step 1 was to identify benchmark groups for each Maryland geography. Step 2 was to translate the geographic benchmarks into hospital-level benchmarks. Step 3 was to complete the cost comparison adjusting for beneficiary risk and demographics.

Detailed methodologies for each payer and additional data files related to the benchmarking process can be found in the Resources section of the Total Cost of Care Workgroup page on the HSCRC's website. The following is an abbreviated overview of these materials.

Step 1: Identify Benchmark Groups for each Maryland Geography

For Medicare benchmarking the geographic unit was a county. Due to limitations of the commercially available national data, the benchmark geographic unit was a Metropolitan Statistical Area. (MSA) However, in Maryland where more granular data is available through the Maryland Health Care Commission's Medical Claims Database (MCDB), Maryland counties were reorganized into a group of MSA-like cohorts such that all Maryland counties were included and no non-MD counties were included (this is not the case with standard MSAs).

Potential comparison geographies for each Maryland geography were narrowed based on population density and size. Various demographic factors were then calculated for every geographic unit within this narrowed selection. The demographic values used were intended to capture the health needs and economic situation of the geography. Factors related to health

system design like physician supply or provider concentration were explicitly excluded to avoid creating results that were biased by the nature of the delivery system.

A benchmark cohort was then developed for each Maryland geographic units (1 for Medicare and 1 for Commercial). The cohort was established based on selecting the 20 or 50 most statistically similar national geographies for each Maryland geography. The cohort includes 20 members for all Commercial areas and for 5 large Maryland counties for Medicare. (Anne Arundel, Baltimore City, Baltimore County, Montgomery County and Prince George’s County). 50 member cohorts were used for Medicare for the remaining Maryland counties.

The cohort sizes were selected to balance the relative similarity of the included national geographies against the need for stable results over time. Medicare and Commercial benchmark cohorts are not identical as the same geographic unit was not used, but there is substantial overlap, and the selection metrics were identical except that payer mix was used in the Commercial selection but not in the Medicare selection.

Step 2: Translate Geographic Benchmarks into Hospital benchmarks

As the policy requires measuring performance at a hospital level, it was necessary to develop a hospital specific benchmark. This was done in three steps:

- A. Calculate Maryland per capita total cost of care for each Maryland hospital based on its Primary Service Area Plus (PSAP). The PSAP is the service area selected by the hospital in their GBR agreement with any shared zip codes split based on ECMAD share and any unassigned zip codes assigned to a hospital based on travel distance. With these modifications, the PSAP methodology attributes 100% of Maryland’s population to a hospital.
- B. Calculate the benchmark by blending the relevant geographic benchmarks based on the distribution of the beneficiaries within the hospital’s PSAP. For example, a hospital with 60% of its beneficiaries in geographic unit A and 40% in geographic unit B has a benchmark per capita total cost of care equal to 60% A and 40% B.
- C. Adjust the Maryland and benchmark values using the adjustments described in Step 3 below to adjust for differences between the Hospital’s PSAP demographics and those in the geographic units in its benchmark.

Step 3: Complete the Cost Comparison adjusting for Beneficiary Risk and Demographics

Per capita total cost of care is calculated for each Maryland hospital and its benchmark. For Medicare the paid amounts are used and for Commercial the allowed amount was used. For Medicare, the paid amount was utilized, as that is the amount for which Maryland is accountable under the Total Cost of Care Model. For Commercial, the allowed amount was utilized to remove the impact of varying cost sharing amounts across different commercial populations. The raw amounts are then adjusted as follows:

- A. Medical Education costs were stripped from all values. Medical Education was removed so that Maryland hospitals would not be harmed or helped versus their benchmark cohort based on the level of medical education provided.
- B. Risk adjustment is applied. Medicare risk adjustment is applied using Medicare Hierarchical Conditioning Categories (HCCs). Commercial risk adjustment is applied using HHS-HCC Platinum Risk Scores. Both these methodologies are publicly available validated risk adjustment methodologies. Age and sex are incorporated in these methodologies and therefore were not separately addressed.
- C. (Commercial Only) Benefit adjustment is applied. While the use of allowed amounts removes the cost impact of member cost shares, it does not remove the utilization impact of varying cost shares. Generally, a plan with richer benefits will result in higher utilization. The benefit adjustment is intended to eliminate this impact from the comparison, so Maryland is not harmed or helped because of its commercial health plans having poorer or richer benefits. The adjustment resulted in a scaled index for each MSA reflecting the relative richness of benefits. This value is then used to remove the impact of benefit differential from the per capita total cost of care.
- D. Demographic Adjustment was applied. A demographic adjustment was developed to better standardize for demographic factors beyond the control of the health system that impact cost of care. The adjustment was calculated separately for Medicare and Commercial, but in both cases was based on a regression of the risk and benefit adjusted total per capita cost of care against Median Income and Deep Poverty as reported by zip code in census data. The resulting regression coefficients were used to create a predicted value for each county, and the ratio of the actual value to the predicted value was used to adjust the risk and benefit-adjusted per capita total cost of care.

The values calculated can then be used to compare each hospital's per capita total cost of care to their peer average (or other comparison points derived from the benchmark cohort, e.g. 75th percentile) while removing the impact of medical education, beneficiary risk, benefits and demographics from the comparison.

Efficiency Assessment

Withholding Inflation from Outlier Hospitals

In this section, staff provides the results of the Volume Adjusted ICC for RY 2020 permanent revenue as well as results for 2018 Medicare and Commercial Total Cost of Care benchmark performance. Using these three statistics and weighting them respectively as 50%, 25%, and 25%, hospitals are arrayed into quartiles, such that hospitals in the bottom quartile will be considered to be the most costly relative to hospital peers. Based on this analysis, staff ultimately recommends that the remaining hospitals that are in worst quartile of performance, as outlined above should have a portion of their Medicare and Commercial RY 2022 update factor withheld, effective July 1, 2021.

Global Budget Revenue Enhancements

In this section, the best performing quartile for Volume Adjusted ICC and Medicare Total Cost of Care growth from 2013 to 2018 is also listed. Staff removed hospitals that are not better than one standard deviation from average Volume Adjusted ICC performance or 1.05 times the ICC Cost Standard. The remaining hospitals will be considered favorably when submitting requests for GBR enhancements.

ICC Results

As noted above, the difference between the Volume Adjusted ICC evaluated revenue figure, the revenue that was actually inputted into the ICC methodology, and the Volume Adjusted ICC calculated value is a hospital's measure of efficiency relative to the ICC cost standard. Table 12a (with peer groups) and Table 12b (without peer groups) below demonstrate this measure of efficiency as a percentage variance from the ICC standard. The table is ranked in order of most favorable to least favorable. Please note the results in table 12a have changed slightly because: a) staff has updated RY 2020 permanent revenue figures for hospitals that modifications to their rate structure after February of 2020; b) all revenue at Sinai Hospital associated with the Bon Secours transition was removed from the analysis, as this represented a prospective budget amount with no

associated volume – future years will include this revenue minus the agreed upon safe harbors; and
 c) staff included a critical access hospital adjustment and a pilot safe harbor for rural care transformation at Chestertown Hospital.

Table 12a: RY 2020 Volume Adjusted ICC Efficiency Rankings (Percentage and Dollar)* Inclusive of Historical ICC Peer Groups

	<u>Relative Efficiency to ICC Standard %</u>		<u>Relative Efficiency to ICC Standard %</u>
Garrett County Memorial Hospital	4.14%	Western Maryland Regional Medical Center	-14.31%
Mercy Medical Center	3.06%	St. Agnes Hospital	-15.38%
Atlantic General Hospital	-0.95%	MedStar Franklin Square Hospital Center	-15.68%
Suburban Hospital	-3.56%	Sinai Hospital	-15.74%
MedStar Union Memorial Hospital	-4.16%	Prince Georges Hospital Center	-16.96%
MedStar Harbor Hospital Center	-5.73%	University of Maryland Shore Medical Center at Chestertown	-18.01%
Fort Washington Medical Center	-5.73%	Shady Grove Adventist Hospital	-18.30%
Anne Arundel Medical Center	-5.76%	University of Maryland Shore Medical Center at Dorchester	-18.43%
Howard County General Hospital	-5.87%	Harford Memorial Hospital	-18.78%
Johns Hopkins Bayview Medical Center	-6.12%	MedStar Good Samaritan Hospital	-19.03%
Johns Hopkins Hospital	-6.22%	Doctors Community Hospital	-19.32%
Holy Cross Hospitals	-6.43%	Carr oll Hospital Center	-19.73%
Greater Baltimore Medical Center	-7.32%	Washington Adventist Hospital	-19.89%
Peninsula Regional Medical Center	-7.66%	University of Maryland Shore Medical Center at Easton	-21.35%
University of Maryland Baltimore Washington Medical Center	-8.50%	Northwest Hospital Center	-21.69%
MedStar St. Mary's Hospital	-9.24%	Calvert Memorial Hospital	-22.39%
Meritus Medical Center	-9.35%	MedStar Montgomery Medical Center	-22.51%
University of Maryland Medical Center	-10.74%	University of Maryland Medical Center Midtown Campus	-23.52%
Upper Chesapeake Medical Center	-11.30%	University of Maryland Rehabilitation & Orthopaedic Institute	-24.80%
University of Maryland St. Joseph Medical Center	-11.37%	Union Hospital of Cecil County	-24.87%
Frederick Memorial Hospital	-11.97%	MedStar Southern Maryland Hospital Center	-25.56%
University of Maryland Charles Regional Medical Center	-13.62%		

*Highlighted values represent hospitals that have an ICC calculated value better than one standard deviation of average performance, which would qualify these hospitals for a global budget revenue enhancement.

Table 12b: RY 2020 Volume Adjusted ICC Efficiency Rankings (Percentage and Dollar)* Inclusive of Alternative Peer Groups Approach

	<u>Relative Efficiency to ICC Standard %</u>		<u>Relative Efficiency to ICC Standard %</u>
Garrett County Memorial Hospital	6.49%	Upper Chesapeake Medical Center	-12.05%
Fort Washington Medical Center	2.75%	Shady Grove Adventist Hospital	-12.85%
Atlantic General Hospital	-0.87%	University of Maryland St. Joseph Medical Center	-12.92%
University of Maryland Shore Medical Center at Dorchester	-1.85%	Western Maryland Regional Medical Center	-13.01%
Holy Cross Hospitals	-2.36%	Harford Memorial Hospital	-13.47%
Howard County General Hospital	-3.91%	Northwest Hospital Center	-13.65%
Meritus Medical Center	-4.39%	Johns Hopkins Bayview Medical Center	-14.15%
MedStar St. Mary's Hospital	-4.94%	Doctors Community Hospital	-14.39%
Peninsula Regional Medical Center	-5.49%	Frederick Memorial Hospital	-14.45%
University of Maryland Baltimore Washington Medical Center	-6.17%	MedStar Union Memorial Hospital	-14.81%
Suburban Hospital	-7.97%	University of Maryland Shore Medical Center at Easton	-16.03%
Johns Hopkins Hospital	-8.03%	Union Hospital of Cecil County	-17.34%
MedStar Harbor Hospital Center	-8.41%	University of Maryland Shore Medical Center at Chestertown	-17.39%
Anne Arundel Medical Center	-8.47%	Prince Georges Hospital Center	-18.42%
Washington Adventist Hospital	-9.15%	Carroll Hospital Center	-18.60%
St. Agnes Hospital	-9.27%	MedStar Southern Maryland Hospital Center	-19.31%
MedStar Franklin Square Hospital Center	-9.50%	University of Maryland Rehabilitation & Orthopaedic Institute	-20.08%
University of Maryland Medical Center	-9.60%	Calvert Memorial Hospital	-20.46%
University of Maryland Charles Regional Medical Center	-9.79%	MedStar Montgomery Medical Center	-20.98%
Mercy Medical Center	-10.11%	University of Maryland Medical Center Midtown Campus	-21.24%
MedStar Good Samaritan Hospital	-10.43%	Sinai Hospital	-23.69%
Greater Baltimore Medical Center	-11.25%		

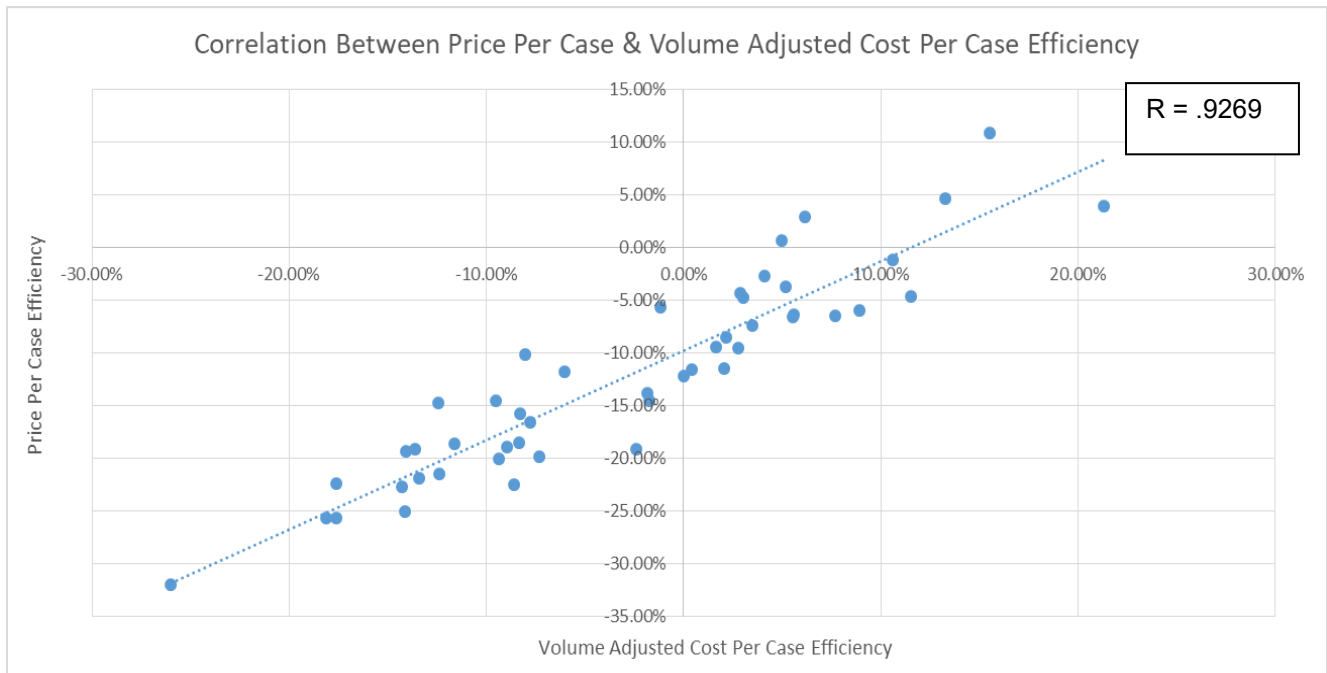
As shown in Table 12a and Table 12b, only two hospitals are deemed more efficient than the ICC cost standard, i.e., have a positive percentage variance, but it is important to note that this is because the ICC standard has become more difficult to attain, since hospital profits have improved under the All-Payer Model and Total Cost of Care Model. It is also important to note that this does not preclude best performing hospitals from qualifying for a GBR enhancement under the Integrated Efficiency Policy, as the standard for qualification based on ICC performance is being better than one standard deviation from average performance – 5 hospitals meet the one standard

deviation ICC rule in the version with peer groups and 7 hospitals meet the standard without peer groups.

While total profit margins are lower because of unregulated losses, most notably physician subsidies, staff has not made adjustments to the profits stripped from hospitals' revenue base to account for these losses. This is consistent with the statutory authority of HSCRC, as the Commission does not regulate professional physician services. Future work outlined in the *Future Policy Considerations* section below does indicate that staff will attempt in subsequent iterations of the ICC to credit unregulated losses that are in line with the incentives of the Total Cost of Care Model, but at this point staff will make no modifications.

Critics of the ICC have noted that not accounting for unregulated losses does not accurately portray the new costs associated with providing care in a population-based per capita model. Staff agrees with this concern but notes that this is why the implementation of the efficiency policy incorporates total cost of care performance and only removes funding from hospitals in the worst quartile. Regardless of any imprecision in the ICC methodology, hospital prices per case grew in the global revenue era as volumes have declined or remained static. This is an expected outcome similar to the rise in per diem payments when length-of-stay initially fell under the DRG system. To ensure that charges do not become unreasonably high, especially given Medicare outpatient coinsurance that is already high due to the all-payer rate setting nature of the system, staff recommends using the combination of cost-per-case analyses and total cost of care. Moreover, staff notes that there is a high degree of correlation between high priced hospitals and high cost hospitals, as determined by the ICC ($R=.9269$). This suggests that the hospitals identified in the outlier analysis are not just inefficient in costs relative to their peers, but that they are also receiving reimbursement commensurate with their higher costs (see Table 13 below for the correlation analysis).

Table 13: Correlation between Hospital ICC Cost Efficiency and ICC Price Efficiency



TCOC Results

Using the geographic attribution described in the *Efficiency: Overview of Total Cost of Care Calculations* section, staff has determined that 7 hospitals perform better than their national geographic peers in Medicare total cost of care; 10 hospitals perform worse than national peers but better than average statewide performance relative to national benchmarks (11.5% statewide unweighted); and 26 hospitals perform worse than average statewide performance relative to national benchmarks. As one would expect due to the all-payer rate setting nature of the Maryland system, the results are quite different relative to national peers for commercial, as 40 hospitals perform better than national benchmarks, but quite interestingly the results on the two total cost of care metrics are correlated but not strongly ($R = .5165$). Table 14 below shows hospital total cost of care performance relative to national benchmarks, both in terms of percentage variance and statewide ranking based on percentage variance.

Table 14: Hospital Attributed Total Cost of Care Growth Performance

<u>Hospital Name*</u>	<u>2018 Medicare TCOC Relative to Benchmark</u>	<u>2018 Medicare TCOC Rank</u>	<u>2018 Commercial TCOC Relative to Benchmark</u>	<u>2017 Commercial TCOC Rank</u>
Suburban Hospital	-10.14%	1	-36.06%	1
MedStar Southern Maryland Hospital Center	-6.70%	2	-28.54%	7
Doctors Community Hospital	-4.86%	3	-31.06%	6
Fort Washington Medical Center	-3.80%	4	-21.35%	23
Howard County General Hospital	-2.22%	5	-32.32%	3
Shady Grove Adventist Hospital	-2.05%	6	-31.64%	4
Anne Arundel Medical Center	-1.33%	7	-31.15%	5
Washington Adventist Hospital	2.03%	8	-26.22%	11
MedStar Montgomery Medical Center	2.69%	9	-32.46%	2
Calvert Memorial Hospital	2.86%	10	-26.77%	9
Holy Cross Hospitals	2.89%	11	-28.02%	8
MedStar St. Mary's Hospital	5.28%	12	-13.24%	37
Prince Georges Hospital Center	5.39%	13	-22.23%	20
University of Maryland Charles Regional Medical Center	6.02%	14	-21.83%	22
Garrett County Memorial Hospital	7.79%	15	3.01%	43
University of Maryland Baltimore Washington Medical Center	10.19%	16	-24.27%	15
Frederick Memorial Hospital	10.22%	17	-25.04%	14
University of Maryland Shore Medical Center at Dorchester	11.60%	18	-23.21%	17
University of Maryland Shore Medical Center at Easton	11.60%	18	-12.07%	38
University of Maryland Shore Medical Center at Chestertown	13.29%	20	-12.02%	40
MedStar Union Memorial Hospital	13.87%	21	-13.68%	36
St. Agnes Hospital	14.13%	22	-23.55%	16
Greater Baltimore Medical Center	14.37%	23	-20.28%	26
Johns Hopkins Hospital	14.42%	24	-20.79%	25
Meritus Medical Center	14.45%	25	-16.75%	32
Union Hospital of Cecil County	15.43%	26	-3.56%	42
Carroll Hospital Center	15.88%	27	-21.25%	24
University of Maryland St. Joseph Medical Center	16.58%	28	-18.03%	29
University of Maryland Rehabilitation & Orthopaedic Institute	16.60%	29	-26.77%	9
University of Maryland Medical Center	16.60%	29	-25.70%	12
Johns Hopkins Bayview Medical Center	17.46%	31	-17.82%	30

Mercy Medical Center	17.56%	32	-19.96%	27
University of Maryland Medical Center Midtown Campus	19.01%	33	-23.21%	17
MedStar Franklin Square Hospital Center	19.24%	34	-16.15%	34
Upper Chesapeake Medical Center	19.30%	35	-22.89%	19
MedStar Good Samaritan Hospital	20.32%	36	-9.88%	41
Sinai Hospital	20.99%	37	-14.56%	35
Peninsula Regional Medical Center	21.47%	38	-21.99%	21
Harford Memorial Hospital	21.74%	39	-18.97%	28
Northwest Hospital Center	23.86%	40	-16.30%	33
Western Maryland Regional Medical Center	24.36%	41	-12.05%	39
MedStar Harbor Hospital Center	27.59%	42	-25.13%	13
Atlantic General Hospital	29.41%	43	-17.29%	31

*Dorchester Hospital receives the same TCOC performance as Easton; UMROI receives the same TCOC performance as Midtown Hospital.

Implementation of Efficiency Results

Withholding Inflation from Outlier Hospitals

Staff recognizes that any combination of cost-per-case and total cost of care tools does not precisely identify a hospital's efficiency rank order, especially near the median of performance, and staff believes that implementation of an efficiency policy should align with historical HSCRC policies to focus on the tail ends of the distribution. Moreover, a central limitation in these analyses is that the total cost of care tools are Medicare and Commercial only.

Therefore, staff recommends weighting equally the two rankings from the Volume Adjusted ICC and geographic total cost of care benchmark performance to array hospitals into quartiles, such that hospitals in the bottom quartile will be considered the least efficient and hospitals in the top quartile will be considered the most efficient relative to hospital peers. Finally, staff recommends that the remaining hospitals, deemed inefficient as outlined above, should have the Medicare and Commercial portion of their annual update factor withheld on a sliding scale to recognize gradations in performance.

In reviewing the array of hospitals according to a 50/50 ranking of Volume Adjusted ICC and geographic total cost of care benchmark performance ranking, staff identified eleven hospitals when using an ICC that maintained historical peer groups and ten hospitals when using staff's

proposed alternative approach to adjusting for indigent care that would be subject to an inflation factor reduction¹⁰ See Table 15a and 15b for results:¹¹

Table 15a: Inefficient Hospitals as Determined by ICC & Geographic TCOC Rankings (inclusive of existing peer groups) – Efficiency Matrix

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC Relative to Benchmark	2018 Medicare TCOC Rank (25%)	2018 Commercial TCOC Relative to Benchmark	2017 Commercial TCOC Rank (25%)	Total Rank Points (Low Score is Better)
MedStar Franklin Square Hospital Center	-15.68%	25	19.24%	34	-16.15%	34	59
Carroll Hospital Center	-19.73%	34	15.88%	27	-21.25%	24	60
University of Maryland Rehabilitation & Orthopedic Institute	-24.80%	41	16.60%	29	-26.77%	9	60
Sinai Hospital	-15.74%	26	20.99%	37	-14.56%	35	62
Western Maryland Regional Medical Center	-14.31%	23	24.36%	41	-12.05%	39	63
University of Maryland Shore Medical Center at Easton	-21.35%	36	11.60%	18	-12.07%	38	64
Harford Memorial Hospital	-18.78%	31	21.74%	39	-18.97%	28	65
University of Maryland Medical Center Midtown Campus	-23.52%	40	19.01%	33	-23.21%	17	65
MedStar Good Samaritan Hospital	-19.03%	32	20.32%	36	-9.88%	41	71
Northwest Hospital Center	-21.69%	37	23.86%	40	-16.30%	33	74
Union Hospital of Cecil County	-24.87%	42	15.43%	26	-3.56%	42	75

Table 15b: Inefficient Hospitals as Determined by ICC & Geographic TCOC Rankings (inclusive of alternative approach for indigent care) – Efficiency Matrix

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC	2018 Medicare TCOC	2018 Commercial TCOC	2017 Commercial	Total Rank Points
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¹⁰ As is always the case, a hospital has a legal opportunity to contest a rate order through the Full Rate Review process, pursuant to Health-General Article §19-222 and COMAR 10.37.10.03 et seq.

¹¹ For the complete array of hospitals based on ICC ranking and TCOC ranking, see Appendix 5

			Relative to Benchmark	Rank (25%)	Relative to Benchmark	TCOC Rank (25%)	(Low Score is Better)
Harford Memorial Hospital	-13.47%	27	21.74%	39	-18.97%	28	61
MedStar Union Memorial Hospital	-14.81%	32	13.87%	21	-13.68%	36	61
University of Maryland Shore Medical Center at Easton	-16.03%	33	11.60%	18	-12.07%	38	61
Carroll Hospital Center	-18.60%	37	15.88%	27	-21.25%	24	63
Northwest Hospital Center	-13.65%	28	23.86%	40	-16.30%	33	65
University of Maryland Shore Medical Center at Chestertown	-17.39%	35	13.29%	20	-12.02%	40	65
Western Maryland Regional Medical Center	-13.01%	26	24.36%	41	-12.05%	39	66
University of Maryland Medical Center Midtown Campus	-21.24%	42	19.01%	33	-23.21%	17	67
Union Hospital of Cecil County	-17.34%	34	15.43%	26	-3.56%	42	68
Sinai Hospital	-23.69%	43	20.99%	37	-14.56%	35	79

Of these hospitals, one was removed from consideration because it already had a preexisting arrangement with the HSCRC to address its cost inefficiencies: University of Maryland Medical Center Midtown Campus. Also of note, seven of the eleven hospitals in Table 15a are deemed inefficient in Table 15b, suggesting rather strong alignment in the results. In fact, the correlation across all quartiles between both ICC assessments (without and without peer groups) is .70 and stronger still when the efficiency matrix scores inclusive of TCOC assessments are considered (R=.83).

For the remaining hospitals in Tables 15a and 15b, staff calculated a withholding from the RY 2022 Update Factor on a sliding scale basis. The withholding is calculated by multiplying the inflationary factor of 2.30 percent ¹² by the statewide share of hospital's revenue attributable to Medicare fee for service and commercial (73 percent) and then prorated by a hospital's point distance from the 3rd quartile. Under the peer group approach this would remove \$17.7 million in

¹² Current calculations for RY 2022 Update Factor indicate that general inflation for hospitals will be 2.14% and the Demographic Adjustment will be 0.16%, the latter of which is a placeholder from last year due to anticipated delays in population estimates from the Maryland Department of Planning

inflation funding; the withhold increases slightly to \$19.9 million under the alternative approach to adjusting for indigent care in lieu of peer groups.

Staff has included in the tables below a comparison between the new proposed scaling and the old scaling logic that removed the entire update factor for all hospitals in the worst quartile and worse than one standard deviation in the ICC. Please note this is only for illustrative purposes, as the actual dollar amount will change when staff updates the scaling to the approved RY 2022 Update Factor, which will be the first time this policy goes into effect.

Table 16a: RY 2022 Update Factor Withhold for Inefficient Hospitals inclusive of existing Peer Groups – Total Potential Withhold of 1.7% (2.3% Update Factor X 73% of Revenue Attributable to Medicare and Commercial Payer Mix)

Worst Quartile Hospitals	Total Points (Efficiency Matrix)	Prior Scaling Policy (No Sliding Scale & One Standard Deviation Rule)	Prior Policy % Withhold	Prior Policy Withhold as % of RY 2019 Margin	New Scaling Policy (Scaling Entire Worst Quartile with Sliding Scale)	New Policy % Withhold	New Policy Withhold as % of RY 2019 Margin
MedStar Franklin Square Hospital Center	59.0	\$0	0.0%	0.0%	\$532,458	0.1%	1.0%
Carroll Hospital Center	59.5	\$0	0.0%	0.0%	\$331,788	0.1%	1.5%
UMROI	60.0	\$2,147,007	1.7%	61.4%	\$238,556	0.2%	6.8%
Sinai Hospital	62.0	\$0	0.0%	0.0%	\$3,126,121	0.4%	3.9%
Western Maryland Regional Medical Center	63.0	\$0	0.0%	0.0%	\$1,579,412	0.5%	4.5%
Easton Hospital	64.0	\$3,827,918	1.7%	8.8%	\$1,275,973	0.6%	2.9%
Harford Memorial Hospital	64.5	\$0	0.0%	0.0%	\$658,221	0.6%	8.3%
Midtown Hospital	65.0	\$0	0.0%	0.0%	\$0	0.0%	0.0%
MedStar Good Samaritan Hospital	70.5	\$0	0.0%	0.0%	\$3,173,495	1.2%	64.1%
Northwest Hospital Center	73.5	\$4,603,593	1.7%	11.3%	\$3,964,205	1.4%	9.7%
Union Hospital of Cecil County	76.0	\$2,837,422	1.7%	20.5%	\$2,837,422	1.7%	20.5%
Total		\$13,415,941			\$17,717,651		

Table 16b: RY 2022 Update Factor Withhold for Inefficient Hospitals with Alternative Approach to Peer Groups – Total Potential Withhold of 1.7% (2.3%

Update Factor X 73% of Revenue Attributable to Medicare and Commercial Payer Mix)

Worst Quartile Hospitals	Total Points (Efficiency Matrix)	Prior Scaling Policy (No Sliding Scale & One Standard Deviation Rule)	Prior Policy % Withhold	Prior Policy Withhold as % of RY 2019 Margin	New Scaling Policy (Scaling Entire Worst Quartile with Sliding Scale)	New Policy % Withhold	New Policy Withhold as % of RY 2019 Margin
Harford Memorial Hospital	60.5	\$0	0.0%	0.0%	\$93,475	0.1%	1.2%
MedStar Union Memorial Hospital	60.5	\$0	0.0%	0.0%	\$369,458	0.1%	1.6%
Easton Hospital	61.0	\$0	0.0%	0.0%	\$294,455	0.1%	0.7%
Carroll Hospital Center	62.5	\$3,981,459	1.7%	18.0%	\$612,532	0.3%	2.8%
Northwest Hospital Center	64.5	\$0	0.0%	0.0%	\$1,180,409	0.4%	2.9%
Chestertown Hospital	65.0	\$0	0.0%	0.0%	\$242,269	0.5%	19.6%
Western Maryland Regional Medical Center	66.0	\$0	0.0%	0.0%	\$1,895,295	0.6%	5.4%
University of Maryland Medical Center Midtown Campus	67.0	\$0	0.0%	0.0%	\$0	0.0%	0.0%
Union Hospital of Cecil County	68.0	\$0	0.0%	0.0%	\$1,236,825	0.7%	8.9%
Sinai Hospital	79.0	\$14,067,543	1.7%	17.6%	\$14,067,543	1.7%	17.6%
Total		\$18,049,001			\$19,992,261		

Global Budget Revenue Enhancements

As noted above, this recommendation also outlines the process by which hospitals will be evaluated when GBR enhancement requests are submitted to HSCRC staff. Specifically, for a hospital to receive a GBR enhancement, it must be in the best quartile of performance as evaluated in the Efficiency Matrix; it must be better than one standard deviation from average Volume Adjusted ICC performance (1.05 times the ICC standard); and it must submit a formal request to HSCRC staff that outlines either: a) how a previous methodology disadvantaged the hospital; or b) a spending proposal that aligns with the aims of the Total Cost of Care Model.

Because this recommendation still requires hospitals to submit a formal proposal to successfully receive a GBR enhancement, staff will not outline the exact amounts a hospital may receive under such a policy. However, in Tables 17a and 17b below, staff does identify the hospitals that currently would be eligible for a GBR enhancement:

Table 17a: Hospitals Eligible for a GBR Enhancement in RY 2021 (with existing ICC peer groups)

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC Relative to Benchmark	2018 Medicare TCOC Rank (25%)	2018 Commercial TCOC Relative to Benchmark	2017 Commercial TCOC Rank (25%)	Total Rank Points (Low Score is Better)
Suburban Hospital	-3.56%	4	-10.14%	1	-36.06%	1	5
Garrett County Memorial Hospital	4.14%	1	7.79%	15	3.01%	43	30
Mercy Medical Center	3.06%	2	17.56%	32	-19.96%	27	32
MedStar Union Memorial Hospital	-4.16%	5	13.87%	21	-13.68%	36	34

Table 17b: Hospitals Eligible for a GBR Enhancement in RY 2021 (with alternative proposal to adjusting for indigent care)

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC Relative to Benchmark	2018 Medicare TCOC Rank (25%)	2018 Commercial TCOC Relative to Benchmark	2017 Commercial TCOC Rank (25%)	Total Rank Points (Low Score is Better)
Howard County General Hospital	-3.91%	6	-2.22%	5	-32.32%	3	10
Holy Cross Hospitals	-2.36%	5	2.89%	11	-28.02%	8	15
Fort Washington Medical Center	2.75%	2	-3.80%	4	-21.35%	23	16
University of Maryland Shore Medical Center at Dorchester	-1.85%	4	11.60%	18	-23.21%	17	22
Garrett County Memorial Hospital	6.49%	1	7.79%	15	3.01%	43	30

Stakeholder Comments and Staff Response

Staff received comment letters from five stakeholders and several verbal comments from Commissioners. Most comments were focused on the following topics and will be discussed together:

Implementation Timeline	Concern over 50/50 weighting of Medicare and Commercial TCOC
Benchmarking (Appropriate Vetting, Proprietary Information, Winners and Losers – Rural/Urban//Border)	Benchmarking moving away from All-Payer focus
Inclusion of Price in Benchmarking may Skew Results	Revenue Neutrality
Inclusion of Attainment and Improvement for TCOC Analyses	Rebasing Global Budget Volumes
Scaling vs Standard Deviation Approach	Enhanced Review of Hospital Overhead and TCOC Model Investments

CareFirst addressed separate topics and will be discussed individually:

- Concern over hospitals potentially being stuck in the penalty zone
- Coding improvements influencing hospital's position in the efficiency analysis

Topic	MHA, UMMS, Luminis, Commissioners	CareFirst
Delay Implementation	<ul style="list-style-type: none"> - Various hospitals and the Maryland Hospital Association expressed concern over implementing the Integrated Efficiency Policy in January due to the ongoing public health emergency and because stakeholders need additional time to validate the TCOC benchmarking methodology. - MHA also requested delay so that HSCRC staff may continue its work in assessing the validity of peer groups and the allowed medical residents in the ICC methodology. - Commissioners supported a delayed implementation in the November Commission meeting by requesting that staff bring forward another Draft Recommendation for the Integrated Efficiency Policy in December with a planned implementation for July 1, 2021. 	CareFirst noted that an efficiency methodology be implemented as soon as possible to ensure that individual hospital costs do not become unreasonable relative to their competitors.

Staff brought forward the Integrated Efficiency policy with an implementation date of January 1, 2021 so that Commissioners had the option to promulgate the policy in RY 2021. In light of the Commissioner's directive to delay implementation to July 1, 2021, staff's Final Recommendation for the Integrated Efficiency Policy will be introduced in April 2021 and will affect inflation for RY 2022 - modelling results will change based on approved RY 2022 inflation.

Delay provides benefits to policy development including: revised scaling approach; future removal of unreliable RY 2020 volume; and additional work on peer group and allowed medical residents in ICC methodology.

Topic	Maryland Hospital Association	Johns Hopkins Health System	University of Maryland Medical System	Luminis Health
Appropriate Vetting	Hospitals support an attainment measure. However, MHA recommends delaying its use. Implementing inflation withholds on or after July 1, 2021 will allow hospitals adequate time to consider the benchmarking methodology.	The benchmarking methodology needs further evaluation by the hospital industry and Commissioners, including the longer-term cost savings target proposed by staff.	Hospitals need more time to evaluate and understand such a complex analysis.	The open and transparent workgroup process has eroded over time as much of the detail for developing and applying methodologies is not publicly documented and requires persistent discussion with the staff to obtain the details of relevant calculations when a hospital wishes to replicate the work
Proprietary Information		The Commercial benchmarks that are being used are based on Milliman data, a proprietary source that cannot be recreated by the hospitals or broader industry to validate without purchasing the data. This is contrary to the transparency of other HSCRC and industry supported methodologies.		Construction of policies based on confidential data so that stakeholders cannot replicate the policies or test the sensitivity of models to methodology choices.
Winners and Losers			Hospitals located in wealthier jurisdictions tend to have better TCOC results while hospitals serving poor rural or urban jurisdictions perform poorly Border hospitals tend to perform better in the Medicare benchmarking due to the number of patients who seek care outside Maryland at lower payment rates	This policy has clear winners (Montgomery, Howard, Anne Arundel County) and losers (Baltimore City/County, Eastern Shore, other rural areas). Hospitals that are primarily compared to counties and MSAs on the East or West coast do relatively well, while hospitals compared to those in the rest of the country fare far worse.

Staff recognized that the release of the final benchmarks was delayed as part of the slowdown due to the COVID crisis. However, the fundamental process has been discussed for almost 2 years, and peer groups and preliminary results were released in late 2019. Peer groups have not changed, and results were similar to those in the final version, which was released August 31st including extensive supporting data.

In the two months since the data release, no specific technical issues have been raised, and HSCRC did not receive any comments on peer groups or the approach used following data shared in late 2019.

Moreover, due to the delay in Integrated Efficiency policy, per Commissioners' directive, revenue

adjustments based on this methodology will be made in July of 2021, giving hospitals sufficient time to understand the payment implications of the benchmarking.

In terms of proprietary information, the source of the national commercial TCOC data is Milliman, which is recognized as an industry leader. The hospitals have free access to extensive detail behind the commercial benchmarks and to date staff has received no specific questions.

Finally, staff would note that it agrees that unintentionally punishing poorer areas is not a desirable outcome. However, the benchmarking methodology includes extensive risk/demographic adjustments, and claiming that the risk/demographic adjustment is insufficient because it results in an unfavorable comparison for some urban hospitals is assuming a conclusion with no substantive evidence.

Topic	University of Maryland Medical System	Luminis
Price Inclusion in TCOC Benchmarks	<p>The inclusion of price in the benchmark analysis skews results and tends to place urban and suburban areas at a disadvantage.</p> <p>Utilization performance should be considered as an alternative to measuring performance to eliminate some of the price disparity caused by our all-payer model</p>	<p>The benchmark comparison should be limited to utilization variances since price is addressed through the ICC calculation. Measuring only utilization would eliminate price differences due to the Maryland All Payer model.</p> <p>Limiting price considerations in the benchmarks may also eliminate some of the inequities resulting from the construction of the national peer groups.</p>

Staff does not agree with the Luminis comment that price is addressed through the ICC calculation. While it is true that the ICC measures cost per hospital case and is therefore a good proxy for hospital prices, it does not address pricing variation for total cost of care. Moreover, measuring price in the context of TCOC differentiates between: a) good price inefficiency that lowers TCOC by reinvesting retained revenue in efforts to reduce TCOC; and b) bad price inefficiency, which results from a failure to capture and reinvest costs released by lower volumes. The ICC methodology by itself does not differentiate between the two and risks rewarding the latter behavior.

Topic	University of Maryland Medical System	Johns Hopkins Health System	Luminis
Including Attainment and Improvement	TCOC measure should include both attainment and improvement, similar to the approach taken with the quality policies	Only measuring growth or only measuring attainment could disadvantage hospitals with very low TCOC relative to peers or hospitals that have shown reductions to TCOC but have not yet reached a benchmark.	Any benchmarking methodology needs to provide for both an attainment and improvement measure. This is consistent with the approach of other HSCRC programs such as the Readmissions Reduction Incentive Program

Staff remains concerned about the reliability of TCOC improvement statistics to determine relative efficiency for the following reasons: a) Improvement analysis is inappropriate in a relative efficiency analysis that redistributes revenue among hospitals; b) Hospitals with smaller attributed TCOC dollars have very unstable growth statistics; c) They add additional complexity that may not differentiate hospitals' rank order substantively; and d) Inclusion of TCOC growth would likely require additional, perhaps arbitrary weighting in the Efficiency Matrix.

Staff notes that penalties in this policy are now scaled so a poor attainment hospital receives a penalty that is likely minimal versus its attainment shortfall, and as long as the hospital improves, it will have ample time to avoid the penalty before the impact becomes material.

Finally, staff offers for Commissioner consideration, that in lieu of relative efficiency assessment, improvement could be considered as an exemption from a penalty.

Topic	Maryland Hospital Association	Luminis	CareFirst	Commissioners
Scaling Approach	MHA agrees with HSCRC staff's conclusion that the policy should apply to hospitals that are clearly outliers so as not to counteract utilization management incentives.	A continuous scaling logic (rather than just addressing outliers) may better address the apparent inequity between rural/urban hospitals, may reduce the extent to which this policy penalizes smaller hospitals that operate on thin margins, and more appropriately penalize hospitals with retained revenue that do not look inefficient largely due to geographic location, while also more aggressively addressing the variation in the system.	The approach of quartiles and one standard deviation on the ICC is called into question given the small size of the revenue withheld from hospitals in this policy. While the ICC distribution does represent a normal distribution, that does not imply that costs below the mean plus one standard deviation are reasonable. Therefore, CareFirst recommends that these thresholds continue to be evaluated over time to ensure that they are truly capturing the outlier hospitals.	Commissioners likewise share CareFirst's concerns that the policy does not remove more revenue and believe hospitals are inappropriately incentivized by the policy to maintain cost per case variation up to one standard deviation from average performance. Moreover, Commissioners expressed concerns about the cliff effect of using a one standard deviation rule and withholding the same revenue percentage among all outlier hospitals despite gradations in performance in the worst quartile.

Staff still holds that the policy should focus on outliers and believes that the measure of an effective efficiency policy is not how much revenue is withheld from hospitals. Given concerns over the cliff effect and the lack of recognition of performance variation in the worst quartile, staff has presented in the revised draft recommendation a continuous scaling approach that will withhold revenue for all hospitals in the worst quartile. Staff still notes that there is a cliff effect between the 3rd and 4th quartile in this proposal.

Topic	Johns Hopkins Health System	Luminis
50/50 Weighting of Med/CO TCOC	Not considering the significant payor mix differences in Maryland's hospitals could have an unintended consequence of disadvantaging a hospital based on payor mix	Concerned that the policy assumes a 50/50 attainment measurement mix between Medicare and Commercial payers, not taking into account the significant payer mix differences in Maryland's hospitals.

Staff's weighting of Medicare and Commercial TCOC performance at 50 percent each for the 50 percent TCOC component of the policy (i.e., 25 percent for each TCOC assessment) was purposeful. Given the all-payer nature of Maryland hospital rate setting that advantages commercial payers relative to national peers, and disadvantages Medicare, and the fact that price is not removed from the benchmarks, the 50/50

weighting for all hospitals ensures that no hospital has an advantage due to its unique payer mix in an all-payer state

Specifically, hospitals with larger commercial shares are not artificially advantaged. One potential downside to this approach is that if a hospital has a low, unrepresentative share of an individual payer that then comprises 25% of the efficiency assessment. However, analysis of CY 2019 Hospital Payer Mix indicates that no hospitals fall below 2 standard deviations in Medicare or Commercial payer shares relative to the statewide average, and very low coefficient of variation for Medicare (.28) and Commercial (.16) payer mix corroborate the idea there is limited variation.

Topic	Johns Hopkins Health System	Luminis	Commissioners
Diminished All Payer Focus	The goal of driving Medicare to national benchmarks while preserving Commercial rates that are nearly 25% below the nation is counter to the All Payer Model and reduces the value of the Waiver. Methodologies that would eliminate the difference would preserve the problems of the national Medicare fee-for-service system while constraining hospitals from charging rates to commercial payers in line with the nation.	The benchmarks focus on Medicare and not All Payer targets: The goal of driving Medicare to national benchmarks while preserving Commercial rates that are nearly 25% below the nation is counter to the All Payer Model and eliminates the value of the Waiver. Methodologies that would eliminate the difference would preserve the problems of the Medicare fee-for-service system (inpatient rates barely above breakeven and outpatient rates that do not cover costs) while constraining hospitals from charging rates to commercial payers in line with the nation.	Some Commissioners have noted generally that the all-payer aspect of the Model, which has been a hallmark of the hospital payment system in Maryland for over forty years, must be underscored in all policies.

Staff agrees that the TCOC Model and all its supporting methodologies/policies should reflect an all-payer perspective. Staff notes, however, that comparing hospitals to a TCOC benchmark average and then relatively ranking hospitals based on percentage variation from that benchmark in order to scale inflation does not eliminate the higher governmental reimbursement for hospitals in Maryland.

Future policies that use TCOC benchmark performance as a defined attainment standard will need additional scrutiny to ensure the all-payer tenets of the Model are not compromised. It should also be noted

that currently it is not possible to create an all-payer total cost of care assessment due to the dearth of national Medicaid cost data.

Staff still holds that the policy is not the means by which system savings should be generated. Its purpose

Topic	Maryland Hospital Association	Johns Hopkins Health System	CareFirst	Commissioners
Revenue Neutrality	We agree that if revenues are reduced for high-cost hospitals (as HSCRC defines such), the full sum of this reduction should be available to be redistributed within the system. None should be withheld.	JHHS believes that the efficiency policy should be revenue neutral on a statewide basis. If high cost hospital's revenues are reduced, the full sum of this reduction should be available within the system and no portion should be withheld.	Dollars derived from withholding the update factor from poor performing outlier hospitals should be passed along as savings to purchasers of hospital care who have been paying more for those inefficient services.	Various Commissioners have noted that staff should consider using the efficiency assessments and the associated policy to accrue system savings.

is to correct maldistribution of global budget revenue in the Model, i.e., to redistribute all revenue removed from inefficient hospitals to efficient hospitals. Savings have been realized and should continue to be generated through the Annual Update Factor Policy, which on a statewide basis holds hospitals accountable for Medicare total cost of care and hospital affordability, while not upending the central incentive of the Model to reduce avoidable utilization.

Staff remains concerned about purchasers paying more for inefficient services but would note that the current cost sharing concern for purchasers is restricted to Medicare Outpatient coinsurance, as that is the only purchaser scenario with cost sharing arrangements resulting in higher required payments relative to national peers. Future policy development should focus on alleviating cost sharing concerns by revising reimbursement methodologies that do not upend the central incentive of the Model to reduce avoidable utilization.

Staff, therefore, strongly recommends maintaining revenue neutrality in this policy. If Commissioners do not concur with staff's recommendation, staff would ask Commissioners to consider savings generated by this policy in the various total cost of care and affordability tests employed in the Annual Update Factor Policy.

Topic	Maryland Hospital Association	Johns Hopkins Health System
Rebasing Global Budget Volumes	MHA asks the HSCRC to set annual unit rates using volumes from the most recent 12-month period preceding the rate order, citing the complexity of measuring monthly rate compliance and adjusting unit rates, as well as the reduced need for maintaining 2013 volumes once the efficiency policy is implemented.	JHHS believes that if the staff recommendation is approved that staff should set annual unit rates using volumes from the most recent 12-month period preceding the rate order. We appreciate the need to hold hospitals accountable to GBR targets, and the efficiency policy will reduce overall GBR revenues for outlier hospitals

Staff is supportive of rebasing global budget volumes should an efficiency policy be implemented for the following reasons:

- Stakeholders are correct about administrative concerns regarding corridor compliance
- Rebasing volumes will increase the incentive to reduce avoidable utilization, especially for hospitals that are at or are approaching corridor limits

Topic	Maryland Hospital Association	CareFirst	Commissioners
Overhead and Investment Review	<p>HSCRC's intent to quantify investments in unregulated settings in order to provide credit to hospitals in the ICC is appropriate.</p> <p>However, hospitals have serious concerns about HSCRC staff judging which hospital investments are worthwhile. As the regulator, the commission should set broad goals and targets that satisfy our Model agreement and meet the triple aim</p>	<p>The rapid growth in unregulated costs and losses over the course of the past five years is unsustainable and continues to be funded by increased regulated profits. Increased reporting requirements and transparency are critical so that HSCRC Staff can ascertain which unregulated operations are contributing to the goals of the model.</p> <p>Hospitals cannot be given credit for the work they are doing in their unregulated operations until the full picture is understood, especially since they are now a major cost driver in the system.</p>	<p>Various Commissioners have expressed concerns that the largest source of unregulated losses, physician subsidies, are necessary to operate a hospital, and the current regulatory authority of the HSCRC has prevented the Commission from appropriately accounting for a key component of hospital operations.</p> <p>Other Commissioners have also expressed a desire to quantify what regulated margins are subsidizing, especially with regards to potential safe harbors in the Revenue for Reform concept.</p> <p>Finally, several Commissioners have urged staff to establish evaluations of appropriate levels of overhead.</p>

Staff remains committed to establishing a reporting and auditing function for quantifying costs intrinsic to a hospital's operations and in line with the TCOC Model (both regulated and unregulated). The degree to

which these costs are deemed appropriate and therefore eligible for credit in an efficiency assessment will need to need to be determined with industry input and with directives from Commissioners.

Initial thinking on this subject suggests staff would work with stakeholders to establish criteria for ICC credit (required hospital physician services, highlighted in a Community Health Needs Assessment, indicative of an evidence-based model, etc.) in lieu of Commission staff evaluating each unregulated investment. Staff believes that while establishing methodologies for capturing appropriate levels of overhead is necessary and important, it cannot be done "...until the full picture is understood."

Topic	CareFirst Comment	Staff Response
Stuck Phenomenon	<p>In the past, similar threshold policies [worst quartile and an outlier on price] created a "stuck hospital" phenomenon where there was little opportunity for hospitals to get to the next level. As part of an ongoing evaluation, Staff should consider whether this phenomenon is occurring under the new policy.</p>	<p>Staff concur that future iterations of the Integrated Efficiency Policy should address the extent to which hospitals can improve such that they are not penalized. In any relative ranking methodology, this is a possible outcome and is partially why staff advocated for an exemption to the policy if a hospital fell below a pricing outlier threshold, i.e. one standard deviation from average performance on the ICC.</p> <p>Given the significant stakeholder support expressed for using both TCOC attainment and improvement in the efficiency assessment (which staff believes is difficult to do in a relative ranking methodology) staff would like to suggest for Commissioner consideration the idea that successful TCOC growth (i.e. improvement) allow a hospital to be exempted from penalties in the Integrated Efficiency Policy threshold to be determined. This would provide a way for a hospital to avoid getting stuck in a penalty zone by virtue of sorting in a relative ranking methodology that assesses attainment only. Staff would note that the tradeoff for this proposal is it will reduce the dollar impact in the policy.</p>
Coding Improvements	<p>Staff should consider whether coding improvement is influencing hospitals' positions in the results of the efficiency outlier methodology.</p>	<p>Staff agree that analyses of coding should occur to establish if efficiency assessments are yielding artificial results. Staff would note though that for the ICC possible coding improvement is restricted to the volume statistic (ECMADS), and this is regularly audited as it has significant impact on other methodologies, most notably Market Shift and the Demographic Adjustment.</p> <p>For TCOC assessments, the analysis is restricted to costs per population and is therefore not manipulable.</p>

Future Policy Considerations

While staff believes the efficiency methodologies and implementation proposal are sound, staff acknowledges that additional work could further refine the ICC and total cost of care analyses. Staff describes below various work streams to improve the efficiency methodologies.

- 1) Medium term - Staff will work to include national analyses that were completed for inpatient efficiency evaluations of the State's two major academic medical centers. Staff plans to complement these analyses by incorporating them into an outpatient-only ICC that will effectively evaluate the State's two academics both on a national level for inpatient services and on a Maryland peer group level for outpatient services. Completion of this task is contingent upon submission from Johns Hopkins Hospital and University of Maryland Medical Center, per the agreement proposed in the Innovation Policy and prior Update Factor recommendations.
- 2) Medium term – Staff is also engaging an outside contractor to review the adequacy of current physician supply by specialty by region. This analysis will incorporate out year demand projections, inclusive of Maryland's role as a net exporter of medical professionals, and will be used to determine the allowed residents in the ICC analysis. This task should be completed in January of 2021.
- 3) Long term - Staff will continue the work to quantify the investments hospitals are making in unregulated settings that are in line with the incentives of the Total Cost of Care Model, thereby providing a path for hospitals to acquire credit in the ICC evaluation when retained revenues are used to improve health outcomes.

In terms of total cost of care, staff will focus on maintaining the total cost of care analyses and updating them each year with new data. Additionally, staff will explore developing Medicaid benchmark analyses, but it should be noted that data nationally on Medicaid total cost of care is far less robust than Medicare and commercial data.

Short and medium term adjustments to the ICC may have effects on hospitals' current efficiency rankings and whether a hospital is eligible for revenue adjustments in the Integrated Efficiency policy, although it should be noted that prior modernization efforts, such as the overhaul of the casemix methodology, did not substantially alter results. Nevertheless, Commissioners should consider this when determining the implementation date for the Integrated Efficiency policy.

Recommendations

- 1) Formally adopt policies to
 - a. Determine hospitals that are relatively inefficient;
 - b. Evaluate Global Budget Revenue enhancement requests using the criteria identified above;
- 2) Use the Inter-Hospital Cost Comparison, including its supporting methodologies to compare relative cost-per-case for the above evaluations;
 - b. Adopt a risk adjustment for indigent care cost variation that will be applied to all efficiency policies
- 3) Use Total Cost of Care measures with a geographic attribution to evaluate per capita cost performance for the above evaluations;
- 4) Withhold the Medicare and Commercial portion of the Annual Update Factor for relatively inefficient hospitals based on criteria described herein; and
- 5) Use set aside outlined in the Annual Update Factor and funding secured from withhold from outlier hospitals to fund potential Global Budget Revenue enhancement requests.

Appendix 1: Revised Casemix Methodology Discussion

Fundamental to a sound efficiency methodology is a reliable volume statistic that accounts for acuity and expected cost differences, as not all services require the same level of care and resources. The HSCRC historically has had a reliable inpatient casemix adjusted volume statistic that outputs relative weights to measure the relative cost or resources needed to treat a mix of patients at a given Maryland hospital using specific APR-DRG/severity of illness levels.¹³

The calculation of relative weights used by Maryland hospitals, which in many respects is just creating ratios based on average charges (adjusted for price differences among hospitals), has been the following since the adoption of the APR-DRG Grouper in 2004 for all hospitals:

- 1) Use the outlier trim methodology to adjust charges for outlier cases so that the maximum charge equals the trim limit.
- 2) Calculate an average charge per case in each APR-DRG/severity category.
- 3) Calculate a statewide average charge per case (CPC).
- 4) Divide the cell average by the statewide average to generate the cell weight.
- 5) Calculate hospital-specific relative weights as follows:
 - a) For each hospital i , calculate the average charge per case-mix adjusted discharge: $C(i)$.
 - b) For the state as a whole, calculate the average charge per case-mix adjusted discharge: C .
 - c) For each hospital, calculate a standardizing factor: $S(i) = C(i) / C$.
 - d) For each hospital, adjust its charges to the state level by dividing by $S(i)$.
 - e) Recalculate the case-mix weights using the standardized charges.

¹³ At a summary level, the case-mix index (CMI), which is the average value of the relative weights for the patients at a given hospital, identifies how resource needs vary across groups of patients and hospitals.

- f) Go back to step 6a and repeat until the changes in weights are minimal or non-existent.
- 7) Calculate the average weight per APR-DRG/severity category.
- 8) Adjust the weights in low volume cells (cells with less than 30 cases) by blending the average weight per APR-DRG/severity category in step 7 with the 3M National Relative Weights.
- 9) Adjust the weights to be monotonically increasing by severity of illness.
- 10) Normalize the weights to a statewide CMI of 1.00.

Despite the general consensus that the inpatient casemix methodology is sufficient, the HSCRC historically has had a less reliable outpatient casemix methodology. The first reason for this is because of cycle billed claims where unique hospital billing practices created inconsistent data for determining relative weights across hospitals. Additionally, procedures that can occur in multiple outpatient settings and are different in service intensity¹⁴ were not separated from one another in weight development, thereby creating weights not indicative of the intensity of resources that must be applied in an emergency room versus a clinic..

These concerns mattered less for the first few years of the All-Payer model because the principal use of outpatient weights in HSCRC methodologies was the Market Shift Adjustment, a methodology that evaluates growth. If the inconsistent measurement were present in both the base and performance period for the Market Shift, the issue was of less concern as long as the billing method did not change at a hospital. However, because efficiency methodologies evaluate a single period of time and inter-hospital comparisons, the concerns over inconsistent and unreliable outpatient weights became more pressing once the moratorium on rate reviews was lifted in November of 2017.

¹⁴ In the past, HSCRC applied special weighting differences on the coded severity levels 1 through 5 of an emergency room visits. However, multiple studies have documented coding variations and upcoding in the emergency room. As a result, HSCRC is using the standard method included in the outpatient grouper, which takes into account diagnoses and other coded information to assign emergency room cases to an EAPG. The EAPG grouper assigns medical cases based on diagnosis. In the most recent casemix iteration, HSCRC has separated emergency room and clinic cases to provide higher weights to emergency room cases given the higher resources that must be provided to patients presenting in the emergency room.

The Commission prioritized the need to develop a sufficient outpatient methodology for purposes of evaluating hospital cost efficiency and evaluating ongoing volume changes. Staff worked with industry and additional stakeholders to create a new outpatient weighting approach that utilized a similar methodology to the inpatients weighting system but also did the following:

- (1) All claims, including cycle-billed claims (i.e., accounts where patients are billed monthly) were parsed out into visits, which allows accurate and consistent visit weights to be applied to oncology services, clinics, outpatient psychiatry, and physical therapy;
- (2) Emergency room and clinic visits were given different weights, with higher weights allotted to emergency room patients, replacing an approach that used the same weight regardless of hospital site of service;
- (3) All coded claims lines (i.e., all claims lines with a CPT or HCPCS code) were used to ensure more accurate weight development, replacing an approach where only 45 claim lines were used in weight development and Enhanced Ambulatory Patient Grouping (“EAPG”)¹⁵ assignment – possible because of enhanced computing power;
- (4) Outpatient services within 5 days of one another that had similar care profiles were repackaged into visit episodes to ensure that all charges associated with an episode of care (e.g., supply charges for surgery) were not weighted independently of one another.
- (5) Oncology and infusion drugs were removed from the oncology services portion of the claim, allowing oncology services to be weighted independent of oncology drugs, thereby allowing oncology services to be evaluated through Market Shift and oncology and infusion drugs to continue be evaluated through the CDS-A process.¹⁶

During the process of assessing the construct validity of new casemix methodology, the HSCRC employed Mathematica Policy Research (MPR). MPR concluded that improvements to the

¹⁵ EAPGs are a 3M product, which results from the assignment of encounters to clinically meaningful outpatient groupings, similar to inpatient DRG groupings.

¹⁶ The CDS-A accounts for usage changes in high cost oncology and infusion drugs, and provides a hospital specific adjustment based on 50 percent of estimated growth. The remainder of drug cost growth is provided through a targeted inflation adjustment. For additional detail on the new casemix methodology, please see Appendix 2.

casemix methodology resulted in better recognition of clinical severity, as evidenced by improved monotonicity and goodness of fit.

Specifically, to evaluate monotonicity, which means services of increasing complexity are assigned weights of increasing magnitude, MPR employed a clinical expert to conduct a review of the 564 EAPGs. The EAPGs were categorized and combined into 25 different clinically compatible service areas such as general medicine, gastroenterology, general surgery, and oncology. Within each service area, the EAPGs were then ranked by level of clinical complexity on a scale of 1 to 5, where 1 is least complex and 5 is most complex. For example, in the category of general medicine, a level one ranking includes vaccine administration and a level 5 ranking includes the treatment of AIDS. The rankings in each service area were then reviewed by another clinical expert to reach consensus. Then using a fixed effects regression, MPR evaluated the weighting difference from level 5 to level 1. Table A below demonstrates that for each level the weight is significantly higher than the weight in the level below:¹⁷

Table A. Regression results for association between procedure groups and severity levels of ECMADs on EAPG weight (all ECMADs)

EAPG Weight	Number of EAPGs	Coefficient	Std Err	t	Difference	T of difference
Level 5 (omitted)	79	-	-	-	-	-
Level 4	110	-0.435*	0.133	3.27	-0.435*	3.27
Level 3	149	-0.936*	0.127	7.36	-0.501*	4.09
Level 2	179	-1.506*	0.125	12.02	-0.570*	4.66
Level 1	189	-1.873*	0.123	15.20	-0.367*	3.28

EAPG = enhanced ambulatory patient grouping; ECMAD = equivalent casemix adjusted discharge; Std Err = standard error; T = T-statistic

* Significantly different than 0, $p < .05$

Finally, to evaluate goodness of fit or the predictive accuracy of the outpatient weights, MPR evaluated Winsorized charges, i.e., removing charges below the 5th percentile and above the 95th

¹⁷ MPR also estimated the proportion of EAPGs with weights within the range predicted by their severity level (1-5). The weight falls in the correct range when the ECMAD for a given EAPG is within the bounds of the predicted severity level. They found that 45.5 percent of EAPG high type combinations were within those bounds. They found that 70.7 percent were within the ECMAD range including EAPGs one level lower and one level higher.

percentile, and determined that the R2 was .726, suggesting that the new weighting system had a very high degree of explanatory power.

Appendix 2. Outpatient Casemix Methodology Steps

A. Group and Assign Outpatient Records a Principal EAPG Type & APG High Type

- Step 1: Group Data**
 - Outpatient data grouped using the EAPG grouper version 3.12 (change from the EAPG grouper version 3.8 previously used)
 - An EAPG is identified for every CPT that is coded in the record
 - Medical visits also use ICD-10 diagnosis codes for grouping
 - Each record can contain hundreds of EAPGs
- Step 2: Exclude Observation Cases**
 - If the Observation Rate Center units in any outpatient visit record are greater than 23 hours, the entire record is excluded from the outpatient weight assignment calculation.
 - Future consideration may be given to maintaining outpatient visits greater than 23 hours in the outpatient data set when developing weights for purposes of the ICC
- Step 3: Assign Principal Record Type**
 - A principal EAPG Type is assigned to all records
 - HSCRC applies a hierarchy based on EAPG Type
 - Each CPT code is linked to an EAPG, and each EAPG is linked to an EAPG Type
 - The records are categorized by APG High Type and assigned in hierarchy as follows:
 - Type 2: Oncology Related Services
 - Type 8: Oncology Drugs
 - Type 5: Rehab and Therapy
 - Type 6: Psychiatric Visits
 - Type 4: ED Visits
 - Type 1: Significant Procedures
 - Type 3: Non-ED Visits

- Type 7: Other Visits

- Step 4: Consolidating cases into records - for APG High Type Oncology Related Services (ORS)**
 - All aggregated outpatient records per APG High Type are unbundled and parsed out by service dates
 - Each identified EAPG within the APG High Type has its own service date
 - Visits with a length of stay (LOS) 5 days or less are assigned the same service date as their corresponding APG High Type
 - Consolidate into one record all EAPGs associated with ORS occurring on the same service date
 - Determine the EAPG with the highest weight within the record (Previously calculated weights are used as the preliminary weight for assigning the high weight)
 - The high weight EAPG is the High Weight EAPG (HIWTAPG)
 - Consolidate into the record any ancillary EAPGs occurring on the same service date as the EAPG with the highest weight within the ORS
 - Any ancillary EAPGs not occurring within the same service date as the high weight EAPG within the ORS is appended back into the outpatient records

- Step 5: Calculate the total charge**
 - The sum of all EAPG charges in the ORS record
 - The HIWTAPG assumes all charges associated with that record i.e. the total charge

- Step 6: Apply the Trim Logic to the APG High Type by HIWTAPG (Expected Charge)**
 - Trim logic = (the statewide average expected charge by HIWTAPG * 2) or the (the statewide average expected charge by HIWTAPG + 10,000); whichever is greater
 - The expected charge is usually the total charge except where a trim is applied, then the trim charge becomes the expected charge
 - (Step 1-6 is repeated for each APG High Type)

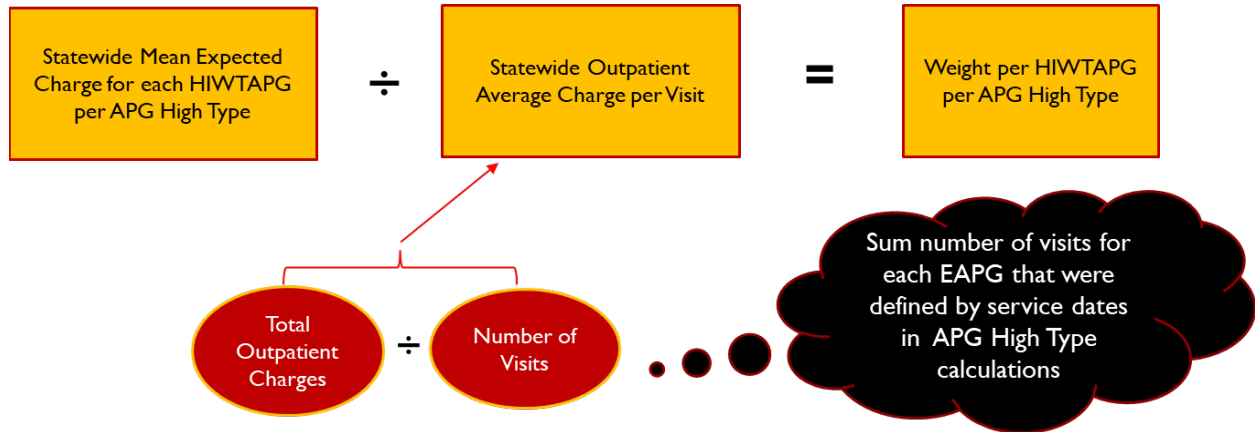
B. Merge all datasets and Calculate expected charges to outpatient categories

- Step 7: Merge all eight APG High Types and begin the iterative process of determining weights**
 - Step a: Calculate the statewide average charge per visit**
 - The mean of all trimmed charges as determined by the trim logic

 - Step b: Calculate the Mean Statewide Expected Charge by APG High Type and HIWTAPG**

- The mean of expected charges across all hospitals by APG High Type and HIWTAPG

□ **Step 8: Calculate initial weights for each APG High Type and HIWTAPG**



□ **Step 9: Normalize the Hospital HIWTAPG Expected Charge about the Mean Expected Charge Per Hospital**

- Calculate Hospital Specific Average charge and casemix index (CMI) and hospital specific charge adjustment factor

- Hospital Specific average charge divided by the hospital specific average CMI = Hospital specific expected charge
- Hospital specific expected charge divided by the statewide average charge (as determined in step 7a) = Hospital Specific adjustment factor
- Recalculate the total charge by dividing the initial trim charge by the hospital charge adjustment factor

- Perform 31 Iterations as shown above until convergence (hospital specific adjustment factor equals 1.00)

- The final iteration determines the statewide expected charge (as described in step 7b) used for the **final weight calculation** (repeat step 8)

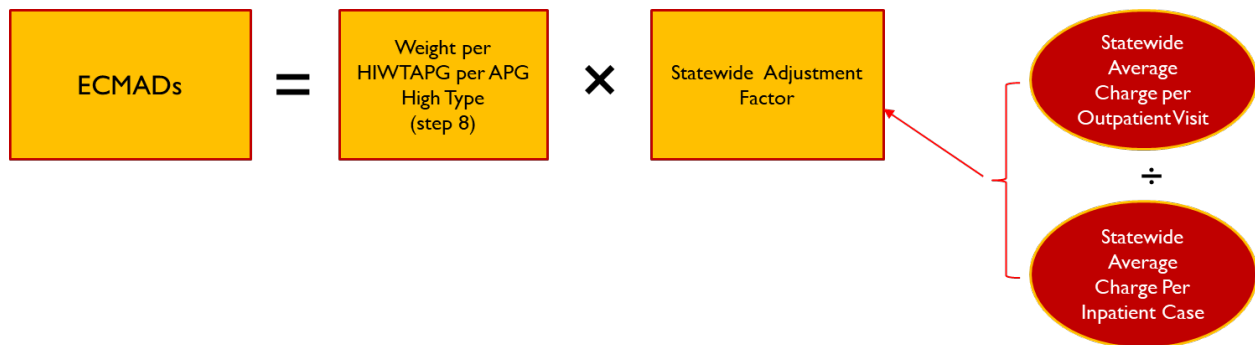
□ **Step 10: Assign Principal Record Type by High Weighted EAPG**

- This overrides step number 3 because in many instances lower acuity services or ancillaries will garner all of the charges associated with that record, most notably within the Significant Procedures High Type.

- Because weights are reassigned, they have to be checked again for monotonicity and normalized to 1.0.

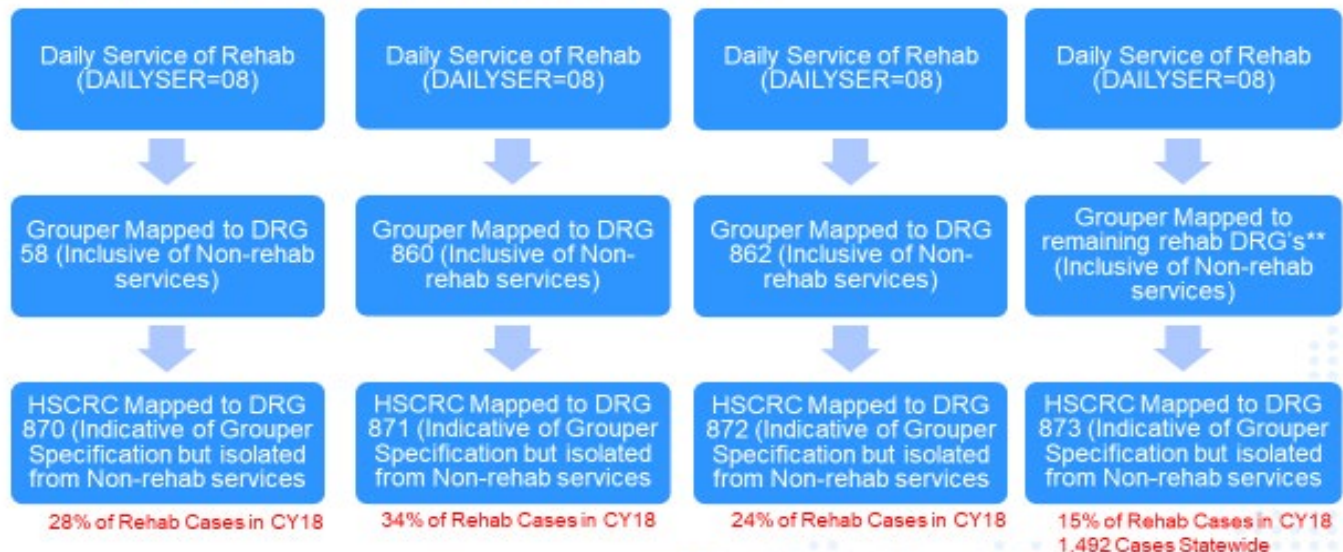
C. Calculate ECMAD

- **Step 11: Calculate the Statewide Adjustment Factor = Outpatient Charge per visit divided by Average charge per Inpatient case**
 - ECMAD is defined as the normalized weight from Step 16 multiplied by the Statewide Charge Ratio Adjustment Factor



Appendix 3: Rehab Casemix Mapping and Reliability Results

New: Definition of Rehab APR DRGs*



*All DRG's met the 30 case minimum cell size

**See List of DRG's in Appendix C

DRG	Severity Level	# of Cases	Average LOS	Average Charge	Coefficient of Variation
58 - OTHER DISORDERS OF NERVOUS SYSTEM	1	354	12	\$24,147	0.52
58 - OTHER DISORDERS OF NERVOUS SYSTEM	2	1,331	14	\$28,866	0.57
58 - OTHER DISORDERS OF NERVOUS SYSTEM	3	958	17	\$35,309	0.61
58 - OTHER DISORDERS OF NERVOUS SYSTEM	4	93	18	\$40,232	0.74
860 - REHABILITATION	1	214	8	\$18,310	0.51
860 - REHABILITATION	2	1,403	9	\$20,070	0.54
860 - REHABILITATION	3	1,376	13	\$28,295	0.71
860 - REHABILITATION	4	340	19	\$41,478	0.84
862 - OTHER AFTERCARE & CONVALESCENCE	1	404	11	\$21,732	0.46
862 - OTHER AFTERCARE & CONVALESCENCE	2	1,197	12	\$26,037	0.59
862 - OTHER AFTERCARE & CONVALESCENCE	3	657	13	\$30,003	0.71
862 - OTHER AFTERCARE & CONVALESCENCE	4	77	15	\$35,958	0.64

Appendix 5a. Efficiency Matrix with Existing ICC Peer Groups

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC Relative to Benchmark	2018 Medicare TCOC Rank (25%)	2018 Commercial TCOC Relative to Benchmark	2017 Commercial TCOC Rank (25%)	Total Rank Points (Low Score is Better)
Suburban Hospital	-3.56%	4	-10.14%	1	-36.06%	1	5
Howard County General Hospital	-5.87%	9	-2.22%	5	-32.32%	3	13
Anne Arundel Medical Center	-5.76%	8	-1.33%	7	-31.15%	5	14
Fort Washington Medical Center	-5.73%	7	-3.80%	4	-21.35%	23	21
Holy Cross Hospitals	-6.43%	12	2.89%	11	-28.02%	8	22
Garrett County Memorial Hospital	4.14%	1	7.79%	15	3.01%	43	30
University of Maryland Baltimore Washington Medical Center	-8.50%	15	10.19%	16	-24.27%	15	31
Mercy Medical Center	3.06%	2	17.56%	32	-19.96%	27	32
MedStar Union Memorial Hospital	-4.16%	5	13.87%	21	-13.68%	36	34
MedStar Harbor Hospital Center	-5.73%	6	27.59%	42	-25.13%	13	34
Shady Grove Adventist Hospital	-18.30%	29	-2.05%	6	-31.64%	4	34
Johns Hopkins Hospital	-6.22%	11	14.42%	24	-20.79%	25	36
Frederick Memorial Hospital	-11.97%	21	10.22%	17	-25.04%	14	37
Greater Baltimore Medical Center	-7.32%	13	14.37%	23	-20.28%	26	38
Doctors Community Hospital	-19.32%	33	-4.86%	3	-31.06%	6	38
University of Maryland Medical Center	-10.74%	18	16.60%	29	-25.70%	12	39
Atlantic General Hospital	-0.95%	3	29.41%	43	-17.29%	31	40
University of Maryland Charles Regional Medical Center	-13.62%	22	6.02%	14	-21.83%	22	40
Johns Hopkins Bayview Medical Center	-6.12%	10	17.46%	31	-17.82%	30	41
MedStar St. Mary's Hospital	-9.24%	16	5.28%	12	-13.24%	37	41
St. Agnes Hospital	-15.38%	24	14.13%	22	-23.55%	16	43
Peninsula Regional Medical Center	-7.66%	14	21.47%	38	-21.99%	21	44
Prince Georges Hospital Center	-16.96%	27	5.39%	13	-22.23%	20	44
Washington Adventist Hospital	-19.89%	35	2.03%	8	-26.22%	11	45
MedStar Montgomery Medical Center	-22.51%	39	2.69%	9	-32.46%	2	45
Meritus Medical Center	-9.35%	17	14.45%	25	-16.75%	32	46
Upper Chesapeake Medical Center	-11.30%	19	19.30%	35	-22.89%	19	46
University of Maryland Shore Medical Center at Dorchester	-18.43%	30	11.60%	18	-23.21%	17	48
Calvert Memorial Hospital	-22.39%	38	2.86%	10	-26.77%	9	48
MedStar Southern Maryland Hospital Center	-25.56%	43	-6.70%	2	-28.54%	7	48
University of Maryland St. Joseph Medical Center	-11.37%	20	16.58%	28	-18.03%	29	49
University of Maryland Shore Medical Center at Chestertown	-18.01%	28	13.29%	20	-12.02%	40	58
MedStar Franklin Square Hospital Center	-15.68%	25	19.24%	34	-16.15%	34	59
Carroll Hospital Center	-19.73%	34	15.88%	27	-21.25%	24	60
University of Maryland Rehabilitation & Orthopaedic Institute	-24.80%	41	16.60%	29	-26.77%	9	60
Sinai Hospital	-15.74%	26	20.99%	37	-14.56%	35	62
Western Maryland Regional Medical Center	-14.31%	23	24.36%	41	-12.05%	39	63
University of Maryland Shore Medical Center at Easton	-21.35%	36	11.60%	18	-12.07%	38	64
Harford Memorial Hospital	-18.78%	31	21.74%	39	-18.97%	28	65
University of Maryland Medical Center Midtown Campus	-23.52%	40	19.01%	33	-23.21%	17	65
MedStar Good Samaritan Hospital	-19.03%	32	20.32%	36	-9.88%	41	71
Northwest Hospital Center	-21.69%	37	23.86%	40	-16.30%	33	74
Union Hospital of Cecil County	-24.87%	42	15.43%	26	-3.56%	42	76

Appendix 5b. Efficiency Matrix with Alternative Proposal to Adjust for Indigent Care

Hospital Name	Volume Adjusted ICC Result	ICC Rank (50%)	2018 Medicare TCOC Relative to Benchmark	2018 Medicare TCOC Rank (25%)	2018 Commercial TCOC Relative to Benchmark	2017 Commercial TCOC Rank (25%)	Total Rank Points (Low Score is Better)
Howard County General Hospital	-3.91%	6	-2.22%	5	-32.32%	3	10
Suburban Hospital	-7.97%	11	-10.14%	1	-36.06%	1	12
Holy Cross Hospitals	-2.36%	5	2.89%	11	-28.02%	8	15
Fort Washington Medical Center	2.75%	2	-3.80%	4	-21.35%	23	16
Anne Arundel Medical Center	-8.47%	14	-1.33%	7	-31.15%	5	20
University of Maryland Shore Medical Center at Dorchester	-1.85%	4	11.60%	18	-23.21%	17	22
Washington Adventist Hospital	-9.15%	15	2.03%	8	-26.22%	11	25
University of Maryland Baltimore Washington Medical Center	-6.17%	10	10.19%	16	-24.27%	15	26
Shady Grove Adventist Hospital	-12.85%	24	-2.05%	6	-31.64%	4	29
Garrett County Memorial Hospital	6.49%	1	7.79%	15	3.01%	43	30
MedStar St. Mary's Hospital	-4.94%	8	5.28%	12	-13.24%	37	33
Doctors Community Hospital	-14.39%	30	-4.86%	3	-31.06%	6	35
St. Agnes Hospital	-9.27%	16	14.13%	22	-23.55%	16	35
Meritus Medical Center	-4.39%	7	14.45%	25	-16.75%	32	36
Johns Hopkins Hospital	-8.03%	12	14.42%	24	-20.79%	25	37
University of Maryland Charles Regional Medical Center	-9.79%	19	6.02%	14	-21.83%	22	37
Peninsula Regional Medical Center	-5.49%	9	21.47%	38	-21.99%	21	39
University of Maryland Medical Center	-9.60%	18	16.60%	29	-25.70%	12	39
Atlantic General Hospital	-0.87%	3	29.41%	43	-17.29%	31	40
MedStar Harbor Hospital Center	-8.41%	13	27.59%	42	-25.13%	13	41
MedStar Southern Maryland Hospital Center	-19.31%	38	-6.70%	2	-28.54%	7	43
Greater Baltimore Medical Center	-11.25%	22	14.37%	23	-20.28%	26	47
Frederick Memorial Hospital	-14.45%	31	10.22%	17	-25.04%	14	47
MedStar Montgomery Medical Center	-20.98%	41	2.69%	9	-32.46%	2	47
Mercy Medical Center	-10.11%	20	17.56%	32	-19.96%	27	50
Calvert Memorial Hospital	-20.46%	40	2.86%	10	-26.77%	9	50
Upper Chesapeake Medical Center	-12.05%	23	19.30%	35	-22.89%	19	50
MedStar Franklin Square Hospital Center	-9.50%	17	19.24%	34	-16.15%	34	51
Prince Georges Hospital Center	-18.42%	36	5.39%	13	-22.23%	20	53
University of Maryland St. Joseph Medical Center	-12.92%	25	16.58%	28	-18.03%	29	54
University of Maryland Rehabilitation & Orthopaedic Institute	-20.08%	39	16.60%	29	-26.77%	9	58
MedStar Good Samaritan Hospital	-10.43%	21	20.32%	36	-9.88%	41	60
Johns Hopkins Bayview Medical Center	-14.15%	29	17.46%	31	-17.82%	30	60
Harford Memorial Hospital	-13.47%	27	21.74%	39	-18.97%	28	61
MedStar Union Memorial Hospital	-14.81%	32	13.87%	21	-13.68%	36	61
University of Maryland Shore Medical Center at Easton	-16.03%	33	11.60%	18	-12.07%	38	61
Caroll Hospital Center	-18.60%	37	15.88%	27	-21.25%	24	63
Northwest Hospital Center	-13.65%	28	23.86%	40	-16.30%	33	65
University of Maryland Shore Medical Center at Chestertown	-17.39%	35	13.29%	20	-12.02%	40	65
Western Maryland Regional Medical Center	-13.01%	26	24.36%	41	-12.05%	39	66
University of Maryland Medical Center Midtown Campus	-21.24%	42	19.01%	33	-23.21%	17	67
Union Hospital of Cecil County	-17.34%	34	15.43%	26	-3.56%	42	68
Sinai Hospital	-23.69%	43	20.99%	37	-14.56%	35	79



Maryland
Hospital Association

November 5, 2020

Adam Kane
Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Chairman Kane:

On behalf of Maryland's 61 member hospitals and health systems, the Maryland Hospital Association (MHA) appreciates the opportunity to comment on the Health Services Cost Review Commission's (HSCRC) proposed integrated efficiency policy.

Inflation withholds should apply on or after July 1, 2021.

We agree with HSCRC staff's conclusion that the policy should apply to hospitals that are clearly outliers so as not to counteract utilization management incentives. We respectfully ask HSCRC to apply inflation withholds no sooner than July 1, 2021. We understand HSCRC postponed its planned July 1, 2020 implementation as a result of COVID-19. Hospitals continue to face significant financial uncertainty due to the pandemic, largely because of anticipated final guidance on federal relief funds, reporting COVID expenses in January 2021, and impact of relief funds and expenses on rates.

In addition to COVID uncertainty, one-half of the efficiency policy is based on HSCRC's proposed benchmarking of commercial and Medicare spending per beneficiary. HSCRC has been creating the methodology for some time. However, the formal release of information did not occur until August, and many hospitals have not had adequate opportunity to give attention to review and validate the information while addressing other financial challenges during the pandemic. Implementing inflation withholds on or after July 1, 2021 will allow hospitals adequate time to consider the benchmarking methodology.

HSCRC also plans to review peer groups, including for Johns Hopkins Hospital and University of Maryland Medical Center, along with resident counts in graduate medical education adjustments. Changes to these factors may alter the results. These tasks are slated to be complete in January 2021. A July 1, 2021 or later implementation date would allow for these changes.

If adopted, HSCRC should set unit rates under global budgets using the most recent volumes.

We respectfully ask HSCRC staff to set annual unit rates using volumes from the most recent 12-month period preceding the rate order. Measuring monthly rate compliance and adjusting unit rates, with the process of requesting adjustments outside certain corridors, imposes a heavy burden on hospital reimbursement staff, with very little net value. We appreciate the need to hold hospitals accountable to revenue targets, and the efficiency policy will lessen allowable revenues for outlier hospitals. Connecting unit rates to GBRs will reduce the burden on HSCRC staff and hospitals.

Chairman Adam Kane

November 5, 2020

Page 2

The efficiency policy should be revenue neutral statewide.

We agree that if revenues are reduced for high-cost hospitals (as HSCRC defines such), the full sum of this reduction should be available to be redistributed within the system. None should be withheld. We appreciate HSCRC staff's consideration that allows low-cost outliers to apply for increases and other proposed uses of savings, including capital funding, etc.

HSCRC's intent to credit investments is appropriate. Judging which hospital investments align with the Total Cost of Care Model is concerning.

One of HSCRC's long term policy considerations is to "quantify investments...in unregulated settings...in line with the incentives of the Total Cost of Care Model." A byproduct would be to credit hospitals in the ICC evaluation for retained revenues. The intent is appropriate because Maryland's Total Cost of Care Model holds the state accountable for more than just hospital spending. HSCRC enforces accountability via the efficiency adjustment and the annual payment update by accounting for total spending growth.

However, hospitals have serious concerns about HSCRC staff judging which hospital investments are worthwhile. As the regulator, the commission should set broad goals and targets that satisfy our Model agreement and meet the triple aim. Hospitals should be accountable to achieve both state and hospital specific targets. Hospitals need latitude to choose and to demonstrate their investments. Some may fail, but that is acceptable within the parameters of the Model.

This policy consideration should be removed from the efficiency policy and become the subject of strategic conversations between HSCRC commissioners and staff and the hospital field, before determining a course of action.

Adjustments may be required if applying the policy in full rate applications.

The efficiency methodology will be used in the full-rate application process. When the methodology is developed, it will likely remain in place for several years. As the full-rate application methodology is proposed, MHA will comment on efficiency policy calculations in a full-rate application and how it may differ from annual inflation adjustments.

Thank you again for your careful consideration of these matters. If you have any questions, please contact me.

Sincerely,



Brett McCone
Senior Vice President, Health Care Payment

cc: Joseph Antos, Ph.D., Vice Chairman
Victoria W. Bayless
Stacia Cohen, RN
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November 6, 2020

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

Dear Chairman Kane:

CareFirst submits the following comments related to the “Draft Recommendation Integrated Efficiency Policy for RY 2021: Withholding Inflation for Relative Efficiency Outliers and Potential Global Budget Revenue (GBR) Enhancements”.

CareFirst appreciates the time and effort required to develop this elaborate and thoughtful methodology. Elements of the methodology cross virtually all Centers within the HSCRC, and the outcome reflects a high-level, albeit complex, quantitative approach to re-establishing efficiency fairness within the all-payer system. The former Interhospital Cost Comparison (ICC) approach has been obsolete since the implementation of GBRs and Maryland’s All Payer Model in 2014. Therefore, to ensure that individual hospital costs do not become unreasonable relative to their competitors, CareFirst supports implementing an efficiency methodology as soon as possible.

As with any important complex methodology it is essential that stakeholders remain open to refinement over time to ensure that it remains fair and equitable. We agree with several comments made by Commissioners during the October 14 public meeting regarding areas of potential refinement moving forward.

Use of Quartiles and One Standard Deviation as Thresholds

As raised at the public meeting, given the absence of a comprehensive efficiency adjustment for more than six years (and longer for rural hospitals), we too were surprised that the adjustment was not larger. This calls into the question the use of quartiles and whether one standard deviation of average Volume Adjusted ICC performance (or 1.22 times the ICC cost standard) are the right thresholds. We understand that the ICC distribution represents a normal distribution, but that does not imply that costs below the mean plus one standard deviation are reasonable. Therefore, we recommend that these thresholds continue to be evaluated over time to ensure that they are truly capturing the outlier hospitals.

In addition, in the past, similar threshold policies created a “stuck hospital” phenomenon where there was little opportunity for hospitals to get to the next level. As part of an ongoing evaluation, Staff should consider whether this phenomenon is occurring under the new policy.

In addition, Staff should consider whether coding improvement is influencing hospitals’ positions in the results of the efficiency outlier methodology.

“Right-Sizing” GBRs

Further commentary at the public meeting related to fixed costs not really being fixed in the long run. While this point can be interpreted to address the need to reevaluate capacity in the system over time, we also think it addresses the issue that current GBRs are all still based on FY2013 utilization and underlying costs may have changed over time. The impact of hospital-driven care transformation necessitates a more comprehensive look at whether the current GBRs are still reasonably reflective of hospital cost, particularly as more services are appropriately moved to lower cost, non-hospital settings under the TCOC model. As such, we see this recommendation as a reasonable first step in a progression to right-sizing GBRs. We understand Staff’s position that we don’t want to introduce a counterincentive to reducing utilization, but we ought to look at whether the readmission and PAU policies adequately address the risk of increased unnecessary utilization.

Potential for System Savings

There was an interest from a number of commissioners in utilizing the efficiency calculation as a means to accrue system savings, rather than reallocating revenue in a neutral manner. CareFirst believes that this methodology provides such an opportunity with only minor tweaks to its application. We support the Staff recommendation that all revenue enhancement under this policy be capped by a set aside in the Annual Update Factor. However, dollars derived from withholding the update factor from poor performing outlier hospitals should be passed along as savings to purchasers of hospital care who have been paying more for those inefficient services.

Future Policy Enhancements related to Overhead and ICC Profit/Productivity Strips

Staff also discussed the prospect of enhancing data definitions that could allow for the addition of an overhead cap and a potential adjustment to the ICC profit and productivity strips to better reflect creditable costs. Staff has been working diligently to refine definitions and reporting regarding overhead and unregulated costs/losses that could be deemed creditable or not creditable for an overhead policy and potential changes to the profit or productivity strip. The rapid growth in unregulated costs and losses over the course of the past five years is unsustainable and continues to be funded by increased regulated profits. Increased reporting requirements and transparency are critical so that HSCRC Staff can ascertain which unregulated operations are contributing to the goals of the model. Hospitals cannot be given credit for the work they are doing in their unregulated operations until the full picture is understood, especially since they are now a major cost driver in the system. We support these efforts and will continue to be available to assist in that process.

Thank you for this opportunity to share our support of this policy, and to inject our thoughts and comments regarding elements of it. We look forward to working with you on the future development of the efficiency policy.

Sincerely,



Maria Harris Tildon

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

November 6, 2020

Mr. Adam Kane
Chairman
Health Services Cost Review Commission

Dear Chairman Kane,

Thank you for the opportunity to provide written comments on the Integrated Efficiency Policy from Health Services Cost Review Commission (HSCRC) staff. While we support aspects of the policy, we remain concerned with certain specific provisions including the process by which they were developed.

TCOC Benchmarking

HSCRC staff has developed a methodology to benchmark geographies in Maryland against national peers for both Medicare and Commercial TCOC per beneficiary. The goal is to use these metrics to introduce a Medicare TCOC attainment as a metric into and the CY2021 Medicare Performance Adjustment (MPA).

Major components of the national benchmarking methodology include setting TCOC benchmarks per beneficiary for a hospital's Primary Service Area against "like populations" nationwide (adjusting for case mix, teaching, and socioeconomic factors). These benchmarks are set differently for the hospital's Medicare and commercial populations. The Medicare calculation is a county-level TCOC per beneficiary calculation based on county-level comparisons. The commercial benchmark is based on metropolitan statistical areas (MSAs).

We have several concerns regarding this benchmarking approach and methodology:

1. The decision to make a long-term goal of the Waiver to be for Medicare expenditures in Maryland to be comparable to the nation is a fundamental shift, requiring further and extensive discussion between CMMI, the State, and hospital stakeholders on the purpose and future of the Waiver.
2. The benchmarks focus on Medicare and not All Payer targets:
 - a. The goal of driving Medicare to national benchmarks while preserving Commercial rates that are nearly 25% below the nation is counter to our All Payer Model and eliminates the value of the Waiver.
 - b. Methodologies that would eliminate the difference would preserve the problems of the Medicare fee-for-service system (inpatient rates barely above breakeven and outpatient rates that do not cover costs) while constraining hospitals from charging rates to commercial payers in line with the nation.

3. TCOC attainment includes price and utilization:
 - a. The benchmark comparison should be limited to utilization variances since price is addressed through the ICC calculation. Measuring only utilization would eliminate price differences due to the Maryland All Payer model.
 - b. Limiting price considerations in the benchmarks may also eliminate some of the inequities resulting from the construction of the national peer groups.
 - i. It is notable that this policy has clear winners (Montgomery, Howard, Anne Arundel County) and losers (Baltimore City/County, Eastern Shore, other rural areas).
 - ii. Hospitals that are primarily compared to counties and MSAs on the East or West coast do relatively well, while hospitals compared to those in the rest of the country fare far worse.
4. Any benchmarking methodology needs to provide for both an attainment and improvement measure. This is consistent with the approach of other HSCRC programs such as the Readmissions Reduction Incentive Program.

Stakeholder Process

The HSCRC has typically not been required to follow the burdensome process of promulgating detailed regulations that required months of prolonged comment periods and regulatory steps to put regulations into COMAR. Instead, the Commission has engaged stakeholders through workgroups that discussed HSCRC policies with public votes by the Commission to adopt the policy. The policy papers and minutes of the Commission meetings served to document what the current state of policy was for many of the detailed methodologies, with only general administrative requirements in regulation.

This open and transparent process has eroded over time as much of the detail for developing and applying methodologies is not publicly documented and requires persistent discussions with the staff to obtain the details of relevant calculations when a hospital wishes to replicate the work. Thoughtful comments from stakeholders is difficult in this process for several reasons:

1. The short timeframe provided for the public to read and attempt to understand complex methodologies.
2. Construction of policies based on confidential data so that stakeholders cannot replicate the policies or test the sensitivity of models to methodology choices.
3. Policy goals are not clearly stated or generally accepted in the policy process.

Without the need to seek Commission approval of a policy, the staff may change the calculations used for adjustments as staff members decide that the results require modification. These changes are not widely discussed or promulgated, but they have consequences for hospital revenue and budgets.

The most recent policies proposed by HSCRC staff have been worked on for substantial periods of time, beginning last year or earlier, but the staff introduced these policies to the industry in a few workgroup meetings in September and immediately requested input on these proposals. The time for stakeholders to consider these issues has been short, and the opportunity for the hospital industry to consider the implications of the policy and to examine potential alternatives has been truncated.

While we greatly appreciate the staff's willingness to meet to discuss the policies and provide clarification, a more robust and transparent stakeholder process needs to be in place.

Integrated Efficiency Policy

The HSCRC staff's Integrated efficiency metric would identify outliers (based on a blend of price efficiency and TCOC performance) for potential rate adjustments. The draft recommendation proposes adjustments to be effective July 1, 2020 but implemented January 1, 2021 (meaning full-year impact would apply in FY2021).

As a general approach, this is not good policy. This approach creates unnecessary instability in hospital revenue with retrospective changes in rates, while hospital budgets were built on expectations of policies in place prior to the beginning of the fiscal year. This retrospective adjustment compounds the instability associated with COVID-19 pandemic. As a general principle, Commission rate setting has been prospective, and it should remain prospective to maximize predictability and stability within the system.

Major Components of this policy:

- Rank hospitals on three metrics
 - 50% price: hospitals ranked based on ICC result
 - 25% Medicare TCOC benchmark attainment
 - 25% Commercial TCOC benchmark attainment
- Select 4-5 inefficient outliers based on the relative performance under the ICC calculation weighted with the Medicare and Commercial TCOC benchmarks; identified hospitals must be
 - A statistical outlier on price and
 - in the bottom quartile on overall hospital ranking
- At risk is the Commercial and Medicare update factor (~2/3 of annual update).
- For the 4-5 efficient outliers identified by the policy, the hospital must be
 - A statistical outlier on price and
 - In the top quartile on overall hospital ranking

As a reward for performance under this methodology, the hospital can request Global Budget Revenue (GBR) enhancements, limited on an annual basis by the combined total of the annual set aside and amounts withheld from inefficient outliers.

Our concerns with the proposed policy include:

- The policy creates an inherent inequity between rural/urban and suburban hospitals
 - Unfairly penalizes smaller hospitals who operate on thin margins and will be crushed by the elimination of the update factor
 - The current methodology allows for the continuation of retained revenue by certain hospitals largely due to geographic location, not relative efficiency
- The policy assumes a 50/50 attainment measurement mix between Medicare and Commercial payers, not taking into account the significant payer mix differences in Maryland's hospitals
- The Commercial benchmarks that are being used are based on Milliman data, a proprietary source that cannot be recreated by the hospitals or broader industry to validate. This is contrary to the transparency of other HSCRC and industry supported methodologies.
- A continuous scaling logic (rather than just addressing outliers) may better address the above issues and more aggressively address the variation in the system
- The revenue should not be removed in FY2021, which would effectively eliminate the FY2021 update factor mid-year in a COVID year

Conclusion

We continue to be supportive of the HSCRC Commissioners' and staffs' efforts to develop financial and quality policies that incentivize care delivery changes while maintaining a reasonable price structure for the populations that we serve. We remain concerned, however, with the process used to develop these most recent policies and some of the specific methodologies as proposed. We would welcome additional discussion regarding ways to improve them as we share the same overall goals.

Thank you for the opportunity to provide comments on this policy.

Sincerely,



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November 6, 2020

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

Dear Ms. Wunderlich:

On behalf of the Johns Hopkins Health System (JHHS), we appreciate the opportunity to comment on the commission's Draft Recommendation on Integrated Efficiency Policy for RY 2021.

JHHS supports the proposal to adjust hospital revenues for efficiency. We also believe that it is appropriate to have both a Price Efficiency metric as well as a Total Cost of Care (TCOC) metric included as part of the methodology. Measuring efficiency in a fixed revenue environment is challenging, and we appreciate the HSCRC staff's approach to balance price efficiency with hospital specific, per capita TCOC performance.

JHHS also believes that the efficiency policy should be revenue neutral on a statewide basis. If high cost hospital's revenues are reduced, the full sum of this reduction should be available within the system and no portion should be withheld. We appreciate the HSCRC staff's consideration that allows low cost outliers to apply for increases and other proposed uses of savings. This does not however preclude hospitals from pursuing a full rate application if they feel that the adjustments from the efficiency methodology are not adequate to meet the hospitals financial needs. Nor does it preclude the HSCRC from reviewing a hospital's rate structure and rebasing a hospital's GBR if they feel that too much revenue has been retained by a hospital with large declines in volumes. We believe that both of these important components of the rate setting system need to be maintained and utilized when appropriate.

Benchmarking Methodology

JHHS has some concerns with the benchmarking methodology. The benchmarking methodology needs further evaluation by the hospital industry and Commissioners. The goal of driving Medicare to national benchmarks while preserving Commercial rates that are nearly 25% below the nation is counter to the All Payer Model and reduces the value of the Waiver. Methodologies that would eliminate the difference would preserve the problems of the national Medicare fee-for-service system while constraining hospitals from charging rates to commercial payers in line with the nation.

The recommendation assumes a 50/50 attainment measurement mix between Medicare and Commercial payers, not considering the significant payor mix differences in Maryland's hospitals. This could have

an unintended consequence of disadvantaging a hospital based on payor mix. Additionally, the Commercial benchmarks that are being used are based on Milliman data, a proprietary source that cannot be recreated by the hospitals or broader industry to validate without purchasing the data. This is contrary to the transparency of other HSCRC and industry supported methodologies.

Total Cost of Care

JHHS agrees that TCOC is an important measure in the efficiency policy because the system incentives are population based. However, only measuring growth or only measuring attainment could disadvantage hospitals with very low TCOC relative to peers or hospitals that have shown reductions to TCOC but have not yet reached a benchmark. We believe that it would be appropriate to take both measures into consideration in this efficiency policy.

Establishment of Unit Rates

JHHS believes that if the staff recommendation is approved that staff should set annual unit rates using volumes from the most recent 12-month period preceding the rate order. We appreciate the need to hold hospitals accountable to GBR targets, and the efficiency policy will reduce overall GBR revenues for outlier hospitals. Connecting unit rates to GBRs will reduce the burden on HSCRC staff and hospitals.

Finally, we believe that this and all methodologies need to be reviewed and revisited on a regular basis to assure that the underlying methodologies are keeping in sync with the goals of the new model and to provide refinements where needed.

Thank you again for your consideration and thanks to the HSCRC staff for all of their efforts in crafting a policy on this very complex matter. If you have any questions, please feel free to contact me.

Sincerely,

Ed Beranek

Ed Beranek
Vice President, Revenue Management and Reimbursement



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November 6, 2020

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

RE: UMMS Comment Letter for the Integrated Efficiency Policy

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 Integrated Efficiency Policy.

We support the Staff's proposal to implement a standardized approach for evaluating hospital efficiency and adjusting hospital revenue. An efficiency policy is necessary to ensure that hospital costs remain reasonable and that health care is affordable in the state of Maryland. We believe the Inter-hospital Cost Comparison (ICC) and a per capita comparison measure are appropriate measures of efficiency.

The industry understands that this and other methodologies were placed on hold earlier this spring due to the emerging COVID-19 pandemic. UMMS does appreciate the respite from changes in these policies which allowed us to focus on taking care of the residents of Maryland during a time of great crisis. We do have concerns, however, that this pause has now caused an acceleration of the process, which has resulted in the lack of proper vetting of this and other methodologies.

UMMS would like to offer the following specific concerns regarding the Integrated Efficiency Methodology:

The inflation withhold should be delayed until July 1, 2021

We support MHA's position to delay an inflation withhold until July 1, 2021. Hospitals continue to face significant financial uncertainty due to the pandemic. Retracting an update factor amount that was provided at the beginning of the fiscal year will create more financial struggles when those are funds the hospitals have already spent to continue operations.

TCOC Benchmark should be further evaluated

As mentioned earlier, the short reprieve to workgroups has placed a tight time constraint on hospital vetting opportunities. The HSCRC staff has worked on the benchmark methodology and corresponding policy for substantial periods of time, beginning last year or earlier, but the staff introduced these policies to the industry in a few workgroup meetings in August and quickly looked for hospital understanding on the proposals. This short time period has not allowed hospitals adequate time to evaluate and understand such a complex analysis and we feel that more time is warranted to vet the methodology. During the course of our high level and quick review of the proposed methodology, UMMS has identified areas of concern and a few suggestions we would like to explore further with the HSCRC Staff:

- Hospitals located in wealthier jurisdictions tend to have better TCOC results while hospitals serving poor rural or urban jurisdictions perform poorly
- The inclusion of price in the benchmark analysis skews results and tends to place urban and suburban areas at a disadvantage
- Utilization performance should be considered as an alternative to measuring performance to eliminate some of the price disparity caused by our all-payer model
- Border hospitals tend to perform better in the Medicare benchmarking due to the number of patients who seek care outside Maryland at lower payment rates
- TCOC measure should include both attainment and improvement, similar to the approach taken with the quality policies

We support the concept of a National Peer Group for the AMCs

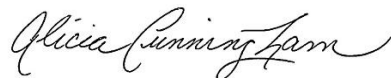
UMMS supports the incorporation of an inpatient national peer group for both Maryland academic hospitals. Using a Maryland peer group of non-academic teaching hospitals for the AMCs has not provided the appropriate comparison of costs for these institutions. They are very unique in their cost structure and should be compared to other institutions with the similar costs. While we support the concept of national data for the AMCs, there are still many technical issues to be addressed in the methodology. We are committed to working through those issues with commission staff, but we are unable to do so for the final Staff Recommendation. We will, however, work with Staff to target a July 1, 2021 timeframe.

A disproportionate number of 'outlier' hospitals are small, rural or unique facilities and should be studied further

UMMS is concerned over the large number of unique and smaller facilities (e.g. UM Rehab, Union of Cecil and Chestertown) being identified as outliers. These facilities often face unique challenges due to circumstances such as size, type of services and/or location. Often a 'one size fits all' approach within a methodology is not necessarily appropriate. UMMS feels that the identification of several small and rural hospitals as outliers is not consistent with the intent of the policy. We therefore recommend the HSCRC staff evaluate the circumstances contributing to the outlier status of these small facilities and consider making adjustments to recognize their unique nature and circumstances.

We appreciate the HSCRC's goal to continually evaluate and improve methodologies and hope to have the opportunity to provide additional input into both the MPA as well as the Efficiency Measure methodologies. Thank you for the opportunity to provide feedback.

Sincerely,



Alicia Cunningham
Senior Vice President, Corporate Finance & Revenue Advisory Services

cc: Adam Kane, Chairman
HSCRC Commissioners
Mohan Suntha, MD, UMMS CEO
Michelle Lee, UMMS CFO



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Maternal and Child Health Funding

Draft Recommendation

April 14, 2021

Overview

- This draft recommendation seeks to direct the reserved \$10 million from the Regional Partnership Catalyst Program to fund investments for the third SIHIS population health priority area: maternal and child health.
- In November 2019, HSCRC Commissioners approved five years of funding through the Regional Partnership Catalyst Program to support a third population health priority area under the Statewide Integrated Health Improvement Strategy (SIHIS).
 - The first year of that funding was re-directed to address the public health emergency through the COVID-19 Long-Term Care Partnership Grant.
- In Fall 2020, the State identified maternal and child health as the third population health priority area under SIHIS.
- The State submitted two maternal and child health goals in the SIHIS proposal to CMMI which was recently approved.
 - Reducing severe maternal morbidity (SMM) rate
 - Reducing asthma-related emergency department (ED) visit rates for ages 2-17

Funding

- Staff recommends directing the third funding stream to support interventions led by Medicaid/Managed Care Organizations (MCOs) and the Public Health and Promotion Administration (PHPA) under the Maryland Department of Health (MDH).
 - MDH is already implementing statewide evidence-based interventions that additional funding will help scale.
 - Funding will support new services not previously offered to Medicaid beneficiaries.
 - Funding will also support continued efforts to reduce healthcare disparities.
 - This would also create an opportunity for the State to receive federal match funding to nearly double the investment.
- There would be an allocation of \$10 million annually to the third population health funding stream for four years.
 - FY 2022 (July 2021 – June 2022)
 - FY 2023 (July 2022 – June 2023)
 - FY 2024 (July 2023 – June 2024)
 - FY 2025 (July 2024 – June 2025)
- Funding would be applied to annual hospital rates through a broad-based, uniform assessment on hospitals for transfer to the Maternal and Child Health Population Health Improvement Fund which will sunset in 2025.
- HSCRC would develop a Memorandum of Understanding (MOU) with MDH to establish the terms and conditions for administration of the Fund.

Annual Funding Distribution

- Staff proposes an 80/20 funding split between Medicaid and PHPA, under which \$8 million would be issued to Medicaid and Managed Care Organizations (MCOs) and \$2 million would be issued to PHPA annually.

Program/Initiative		Annual Funding Distribution
Medicaid	Home Visiting Services Pilot	\$8 Million
	Reimbursement for Doula Services	
	CenteringPregnancy	
	HealthySteps	
	Maternal Opioid Misuse (MOM) Model Expansion / Enhanced Case Management	
PHPA	Asthma Home Visiting Program	\$1.25 Million
	Eliminating Disparities in Maternal Health Initiative	\$750,000
Total		\$10 Million

Medicaid Innovation for Improving Maternal and Child Health

The Medicaid program proposes a suite of evidence-based and promising practices to improve maternal and child health outcomes in partnership with its MCOs, including:

- Home Visiting Services pilot expansion;
- Reimbursement for doula services;
- CenteringPregnancy, a clinic-based group prenatal care model;
- Healthy Steps, a clinic-based intensive prenatal and postpartum case management framework; and
- Maternal Opioid Misuse (MOM) model expansion / enhanced case management

PHPA Initiatives for Improving Maternal and Child Health

PHPA proposes directing funding to evidence-based and promising practices to improve maternal and child health outcomes through two main initiatives:

- Asthma Home Visiting Program
 - Expansion of State's existing home-visiting program (Medicaid-only)
 - Community-based asthma interventions (e.g. mobile asthma treatment) for all payer types
- Eliminating Disparities in Maternal Health Initiative
 - Evidence-Based and Promising Practices
 - CenteringPregnancy
 - Home Visiting Programs
 - These investments would be mutually reinforcing with similar Medicaid investments, focusing on developing new programs and expanding access for non-Medicaid patients.

Sustainability and Impact

- **Sustainability**

- While identifying the initiatives presented in this recommendation, HSCRC staff prioritized the selection of programs and interventions that could be sustained after the funding expires.
- Our State partners have identified pathways to sustainable funding for initiatives deemed successful (e.g. §1115 waiver coverage).

- **Monitoring and Impact Measures**

- HSCRC staff will work with Medicaid and PHPA to monitor program performance annually
- HSCRC staff is collaborating with State partners to develop impact measurement frameworks to ensure accountability in use of funds (e.g. process measures, outcome measures and scale targets).

Recommendations

- Approve the use of the \$10 million in reserved annual Regional Partnership Catalyst Program funding to support the third SIHIS population health priority area, maternal and child health, for four years (FY 2022 – FY 2025).
- Approve the use of \$8 million annually by Medicaid and MCOs to support the following initiatives and programs:
 - Home Visiting Services pilot expansion;
 - Reimbursement for doula services;
 - CenteringPregnancy, a clinic-based group prenatal care model;
 - Healthy Steps, a clinic-based intensive prenatal and postpartum case management framework; and
 - Maternal Opioid Misuse (MOM) model expansion / enhanced case management
- Approve the use of \$2 million annually by PHPA to support the following initiatives and programs:
 - Asthma Home Visiting Program
 - Eliminating Disparities in Maternal Health Initiative
- Authorize funding to be applied to annual hospital rates through a broad-based, uniform assessment on hospitals for transfer to the Maternal and Child Health Population Health Improvement Fund which will sunset in 2025.
- Authorize HSCRC staff to enter a MOU with MDH to establish the terms and conditions for administration of the Maternal and Child Health Population Health Improvement Fund.



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Draft Recommendation on Use of Maternal and Child Health Funding

April 2020

This is a draft recommendation. Written comment letters should be sent to erin.schurmann@maryland.gov by
April 21, 2020.

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Policy Overview

Policy Objective	Policy Solution	Effect on Hospitals	Effect on Payers/Consumers	Effect on Health Equity
This draft recommendation seeks to direct the reserved \$10 million from the Regional Partnership Catalyst Program to fund investments the third SIHIS population health priority area: maternal and child health.	Direct \$10 million annually (FY22-2025) to Medicaid and the Prevention and Health Promotion Administration under the Maryland Department of Health to support statewide expansions of evidence-based and promising practices to promote maternal and child health.	HSCRC would issue a uniform, broad-based assessment on all hospitals. Hospitals would transfer funds received through rates to the Maternal and Child Health Population Health Improvement Fund.	The funds were included in the calculations for the FY 2021 annual update factor and thus does not increase the overall total cost of care. Consumers will benefit from additional community programs focused on maternal and child health.	These funds will support interventions that will build critical healthcare infrastructure to assist in improving access to services that address severe maternal morbidity and childhood asthma which disproportionately affect minority communities.

Overview

The Maryland Health Services Cost Review Commission (“HSCRC,” or “Commission”) staff have prepared the following recommendation to authorize the remaining funding under the Regional Partnership Catalyst Program to be directed to fund maternal and child health interventions. The program would fund maternal and child health programs and initiatives led by Medicaid and the Prevention and Health Promotion Administration (PHPA) under the Maryland Department of Health (MDH), in conjunction with the Medicaid HealthChoice MCOs. When the Regional Partnership Catalyst Program was approved in November 2019, 20 percent of the funding (\$10 million annually) was set aside for future investment in the then to-be-determined third population health priority area under the Statewide Health Improvement Strategy (SIHIS). In fall of 2020, maternal and child health was formally selected as the State’s third population health priority area and submitted as part of the now-approved SIHIS proposal to the Center for Medicare and Medicaid Innovation (CMMI). While HSCRC staff developed a competitive hospital bid process for the diabetes and behavioral health funding streams under the Regional Partnership Catalyst Program, staff recommends directing the third funding stream to Medicaid and PHPA investments in evidence-based programs and promising practices to promote maternal and child health that can be implemented in conjunction with the Medicaid HealthChoice MCOs. Directing these reserved dollars to fund maternal and child health investments would satisfy a key requirement under SIHIS. HSCRC staff believes these expansive investments will help the State achieve not only statewide improvements, but also reduce significant

healthcare disparities in maternal and child health. If this recommendation is approved, staff would execute an MOU with MDH and the funding would be directed to Medicaid and PHPA to fund specific maternal and child health initiatives beginning July 1, 2021 for four years.

Background

In 2019, the State of Maryland collaborated with the Center for Medicare and Medicaid Innovation (CMMI) to establish the domains of healthcare quality and delivery that the State could impact under the Total Cost of Care (TCOC) Model. The collaboration also included an agreed upon process and timeline by which the State would submit proposed goals, measures, milestones, and targets to CMMI. In December 2020, the State submitted its proposal for a Statewide Integrated Health Improvement Strategy (SIHIS) which aligns statewide efforts across three domains: hospital quality, care transformation across the system, and total population health. Under the third domain, total population health, the State identified three key health priority areas for improvement: diabetes, opioid use, and maternal and child health. CMMI approved the State's proposal on March 17, 2021.

While the State identified diabetes and opioid use as key population health priority areas over a year ago, the third priority area was not selected until later in 2020. In fall of 2020, the State formally selected maternal and child health as the third population health priority under SIHIS. Consistent with the State's guiding principle to select goals, measures, and targets that are all-payer in nature, maternal and child health was deliberately considered as a priority area even though it is not Medicare focused. The selection of maternal and child health as a priority area reflects its importance in the State, and acknowledges both the longstanding history of disparities, as well as the large potential for improvement.

The U.S. faces higher maternal and infant mortality rates compared to other industrialized countries, with large racial/ethnic disparities for each outcome; Maryland's maternal mortality rate from 2013 to 2017 (24.8 maternal deaths per 100,000 live births) ranks 22nd among states, with the rate for African Americans almost four times that of Whites (44.7 maternal deaths vs. 11.3 per 100,000 live births).^{1,2}

In addition, pediatric asthma contributes to increased healthcare utilization and spending, missed school days, and sub-optimal overall health and well-being in Maryland children. Pediatric asthma also has a

¹ America's Health Rankings analysis of CDC WONDER Online Database, Mortality files 2017, United Health Foundation, AmericasHealthRankings.org, Accessed February 9, 2020.

² Maryland Department of Health. Maryland Maternal Mortality Review 2019 Annual Report. <https://phpa.health.maryland.gov/mch/Documents/Health-General%20Article.%20C2%A713-1207.%20Annotated%20Code%20of%20Maryland%20-%202019%20Annual%20Report%20%E2%80%93%20Maryland%20Maternal%20Mortality%20Review.pdf> Accessed May 19, 2020.

significant impact on parental productivity. In Maryland, approximately 9.7 percent of children have asthma.³

As part of the SIHIS proposal, the State identified two goals to improve maternal and child health:

- Reduce the severe maternal morbidity rate
- Reduce asthma-related emergency department (ED) visit rates for ages 2-17

Additionally, the State proposed the use of the reserved Regional Partnership Catalyst Program funding for maternal and child health as a 2021 milestone under both SIHIS goals. Directing these reserved dollars to fund maternal and child health investments would satisfy a key requirement under SIHIS.

Table 1. SIHIS Goal: Maternal Health

Goal: Reduce severe maternal morbidity rate	
Measure	Severe Maternal Morbidity Rate per 10,000 delivery hospitalizations
2018 Baseline	242.5 SMM Rate per 10,000 delivery hospitalizations
2021 Year 3 Milestone	Re-launch the Perinatal Quality Collaborative. Pilot a Severe Maternal Morbidity Review Process with eight Birthing hospitals Complete Maryland Maternal Strategic Plan. Launch Regional Partnership Catalyst Grant for MCH, if funding is available.
2023 Year 5 Target	219.3 SMM Rate per 10,000 delivery hospitalizations
2026 Year 8 Final Target	197.1 SMM Rate per 10,000 delivery hospitalizations

Table 2. SIHIS Goal: Child Health

Goal: Decrease asthma-related emergency department visit rates for ages 2-17	
Measure	Annual ED visit rate per 1,000 for ages 2-17
2018 Baseline	9.2 ED visit rate per 1,000 for ages 2-17
2021 Year 3 Milestone	Obtain Population Projections. Development of Asthma Dashboard. Launch Regional Partnership Catalyst Grant for MCH, if funding available.

³ Children's Environmental Health Advisory Council. 2017 Legislative Report of the Maryland Asthma Control Program. <https://phpa.health.maryland.gov/Documents/Maryland-Asthma-Control-Program-2017-Legislative-Report.pdf>. Accessed November 15, 2020

	Asthma-related ED visit is a Title V State Performance Measure and shift some of the Title V funds for Asthma-related interventions.
2023 Year 5 Target	Achieve a rate reduction from 2018 baseline to 7.2 in 2023 for ages 2-17
2026 Year 8 Final Target	Achieve a rate reduction from the 2018 baseline to 5.3 in 2026 for ages 2-17

Funding

In November 2019, the Commission approved a five-year investment of 0.25 percent of statewide all-payer hospital revenue (approximately \$45 million annually) to support the population health goals of SIHIS through the Regional Partnership Catalyst Program. Eighty percent of this approved amount was allocated to two funding streams dedicated to the State’s identified key population health priorities: diabetes and opioid use. The State had not yet selected its third population health priority, so 20 percent (\$10 million annually) of the approved funding was set aside for a future funding stream. Given that the State had not yet selected a third population health priority, the first year of funding was re-directed to address the public health emergency through the COVID-19 Long-Term Care (LTC) Partnership Program which ends June 30, 2021.

Staff recommends issuing the remaining 20 percent allocated to the third population health funding stream for maternal and child health investments. While HSCRC staff developed a competitive bid process for the diabetes and behavioral health funding streams under the Regional Partnership Catalyst Program, staff recommends directing the third funding stream to investments led by Medicaid and PHPA, in conjunction with the Medicaid HealthChoice MCOs. This funding will scale existing statewide evidence-based programs and promising practices and support the expansion of new services for mothers and children. Additionally, using the funding in this manner would also create an opportunity for the State to receive federal match funding to nearly double the investment. Funds would be added to hospital annual rates as temporary adjustments through a uniform, broad-based assessment for four years.

- FY 2022 (July 2021 – June 2022)
- FY 2023 (July 2022 – June 2023)
- FY 2024 (July 2023 – June 2024)
- FY 2025 (July 2024 – June 2025)

Hospitals would transfer funds to the Maternal and Child Health Population Health Improvement Fund. The Maternal and Child Health Population Health Improvement Fund, created through the 2021 Budget

Reconciliation and Financing Act (BRFA), may receive funding from hospital rates to invest in maternal and child health initiatives, as approved by Commissioners. The Fund would sunset in 2025. HSCRC staff would establish a Memorandum of Understanding (MOU) with MDH to establish terms and conditions for the administration of the Maternal and Child Health Population Health Improvement Fund.

Programs and Interventions

While identifying the initiatives presented in this recommendation, HSCRC staff prioritized the selection of programs and interventions that could be sustained after the funding expires. For the initiatives listed below, our State partners have identified pathways to sustainable funding for initiatives deemed successful. Additionally, our State partners are developing impact measurement frameworks to ensure accountability in use of funds.

The table below lists the proposed programs and initiatives that would receive support under this recommendation. Staff proposes an 80/20 funding split between Medicaid and PHPA under which \$8 million would be issued to Medicaid and \$2 million would be issued to PHPA annually.

Table 3. Proposed Medicaid and PHPA Programs and Interventions

	Program/Initiative	Annual Funding Distribution
Medicaid	Home Visiting Services Pilot Expansion	\$8 Million
	Reimbursement for Doula Services	
	CenteringPregnancy	
	HealthySteps	
	Maternal Opioid Misuse (MOM) Model Expansion	
PHPA	Asthma Home Visiting Program	\$1.25 Million
	Eliminating Disparities in Maternal Health Initiatives	\$750,000
	Total	\$10 Million

Medicaid Innovation for Improving Maternal and Child Health

The Medicaid program proposes a suite of evidence-based and promising practices to improve maternal and child health outcomes in partnership with its managed care organizations (MCOs), including:

1. Home Visiting Services pilot expansion
2. Reimbursement for doula services
3. CenteringPregnancy, a clinic-based group prenatal care model;
4. Healthy Steps, a clinic-based intensive prenatal and postpartum case management framework;
and
5. Maternal Opioid Misuse (MOM) model expansion.

Appendix 1 shows the impact that additional HSCRC funding would have on enrollment in the proposed programs.

Home Visiting Services (HVS) Pilot Expansion

Medicaid has operated a Home Visiting Services pilot since 2017 through its §1115 waiver, which has enabled an expansion of evidence-based home visiting services to Medicaid eligible high-risk pregnant individuals and children up to age two. The HVS pilot program is aligned with two evidence-based models focused on the health of pregnant individuals. The Nurse Family Partnership (NFP) model is designed to reinforce maternal behaviors that encourage positive parent-child relationships and maternal, child and family accomplishments. The Healthy Families America (HFA) model targets parents facing issues such as single parenthood, low income, childhood history of abuse, substance use disorder, mental health issues or domestic violence. The current financing structure of the HVS pilot, which requires local lead government entities to provide a local match through an intergovernmental transfer, has garnered limited participation from additional lead entities because of the requirement to produce the required match from non-federal funding sources. Expanding existing HFA or NFP programs would allow more high-risk pregnant individuals to get access to both health and social support during the prenatal to three year period through home visiting services.

Sustainability: §1115 waiver

Monitoring and Impact Measures:

- Process Measures: Increased number of evidence-based home visiting programs participating in Medicaid-funded home visiting pilot programs; number of Medicaid participants
- Outcome Measures: Increased prenatal and postpartum care attendance; increased child vaccination rate and well-child visit attendance

- Expected Impact: Cost savings due to reductions of low birth weight babies, birth complications and C-sections, maternal morbidity and mortality

Reimbursement for Doula Services

Doulas are trained to provide continuous physical, emotional and informational support to a mother before, during and shortly after childbirth.⁴ Key to a doula's function are the provision of emotional support and a constant presence during labor; encouraging laboring individuals and their families; and communicating between mothers and medical professionals. Potential benefits of working with a doula include reductions in C-sections, instrumental vaginal births and the need for oxytocin augmentation, in addition to shortened durations of labor.⁵ Doula care has demonstrated a stronger impact for individuals who are socially-disadvantaged, low-income, unmarried, primiparous, giving birth in a hospital without a companion or had experienced language or cultural barriers.⁶

Sustainability: §1115 waiver; State Plan Amendment under 42 CFR §440.130(c)

Monitoring and Impact Measures:

- Process Measures: Development of infrastructure for Medicaid reimbursement (scope, supervision, payment mechanism, establishment of direct billing process through CMS Preventive Services Rule); number of certified doulas eligible to bill Medicaid; number of Maryland jurisdictions where services are covered; number of Medicaid participants utilizing doula services
- Outcome Measures: Increased prenatal and postpartum care attendance
- Expected Impact: Cost savings due to reductions in low birth weight babies, birth complications and C-sections, maternal morbidity and mortality

CenteringPregnancy

CenteringPregnancy is an evidence-based group prenatal care model for low-risk pregnancies. Facilitators support a cohort of eight to ten individuals of similar gestational age through a curriculum of ten 90- to 120-

⁴ <https://www.dona.org/what-is-a-doula/>

⁵ Gruber, K. J., Cupito, S. H., & Dobson, C. F. (2013). Impact of doulas on healthy birth outcomes. *The Journal of perinatal education*, 22(1), 49–58. <https://doi.org/10.1891/1058-1243.22.1.49>

⁶ Vonderheid S. C., Kishi R., Norr K. F., & Klima C. (2011). Group prenatal care and doula care for pregnant women In Handler A., Kennelly J., & Peacock N. (Eds.), *Reducing racial/ethnic disparities in reproductive and perinatal outcomes: The evidence from population-based interventions* (pp. 369–399). 10.1007/978-1-4419-1499-6_15

minute interactive group prenatal care visits that largely consist of discussion sessions covering medical and non-medical aspects of pregnancy, including nutrition, common discomforts, stress management, labor and birth, breastfeeding and infant care.⁷ While Centering groups are comprised of participants of different ages, races and socio-economic backgrounds, this program has been shown to improve outcomes and reduce preterm birth, particularly for Black participants.⁸ Evidence suggests CenteringPregnancy reduces costs, improves outcomes and leads to high satisfaction, with one study showing a reduction in risk of premature birth by 36 percent, with an average cost savings of \$22,667, in the rate of low birthweight by 44 percent (average savings of \$29,627) and NICU stays (average savings of \$27,249). There are currently eight CenteringPregnancy sites in Maryland—four in the Baltimore metro area, two in the DC metro area, one on the Eastern Shore and one in Western Maryland.

Sustainability: Explore value-based purchasing arrangements or in-lieu of or §1115 waiver coverage; determine how to include in specifications for prenatal care measures, e.g. HEDIS

Monitoring and Impact Measures:

- Process Measures: Number of sites (existing and new); number of participating MCOs; number of Medicaid participants
- Outcome Measures: Increased prenatal and postpartum care attendance and screenings for STIs and HIV
- Expected Impact: Cost savings due to reductions in preterm births, low birthweight, elective C-sections, infant mortality, NICU stays and ED visits for mothers and babies

HealthySteps

HealthySteps, a program of ZERO TO THREE, is a pediatric primary care model that promotes positive parenting and healthy development for babies and toddlers. Under the model, all children ages zero to three and their families are screened and placed into a tiered model of services of risk-stratified supports, including care coordination and on-site intervention.⁹ The HealthySteps Specialist, a child development expert, joins the pediatric primary care team to ensure universal screening, provide successful interventions, referrals and follow-up to the whole family.¹⁰ HealthySteps has demonstrated a 204 percent

⁷ https://www.centeringhealthcare.org/uploads/files/PressRelease_BirthEquityIssueBrief_10.2.19.pdf

⁸ <https://www.centeringhealthcare.org/what-we-do/centering-pregnancy>

⁹ https://ztt-healthysteps.s3.amazonaws.com/documents/222/attachments/Funding_HealthySteps_Site_System_Snapshots.pdf?1597851037

¹⁰ <https://www.healthysteps.org/the-model>

average annual return on investment.¹¹ Healthy Steps has two existing locations in Maryland: University of Maryland School of Medicine Department of Family & Community Medicine and University of Maryland Pediatrics – Midtown, both located in Baltimore.

Sustainability: §1115 waiver; inclusion in MCO capitation rates; opening code for preventive medicine counseling (99401); attaching reimbursement for z-code diagnosis

Monitoring and Impact Measures:

- Process Measures: Number of sites (existing and new); number of participating MCOs; number of Medicaid participants
- Outcome Measures: Increased prenatal and postpartum care attendance; decreased postpartum depression rate; increased child vaccination rate and well-child visit attendance
- Expected Impact: Cost savings due to reductions in ED utilization for ambulatory-sensitive conditions

Maternal Opioid Misuse (MOM) Model

The MOM model focuses on improving care for pregnant and postpartum Medicaid participants diagnosed with opioid use disorder (OUD). With over 21,000 individuals of childbearing age diagnosed with an OUD in Maryland, substance use is a leading cause of maternal death and has a significant impact on the approximately 1,500 infants born to Medicaid beneficiaries with OUD in Maryland per year. Utilizing HealthChoice MCOs as care delivery partners, the MOM model focuses on improving clinical resources and enhancing care coordination to Medicaid beneficiaries with OUD during and after their pregnancies. Under the Maryland MOM model, HealthChoice MCOs will receive a per member, per month payment to provide a set of enhanced case management services, standardized social determinants of health screenings and care coordination, as well as to encourage appropriate somatic and behavioral health care utilization, such as prenatal care and behavioral health counseling. The Maryland MOM model is currently a CMMI-funded demonstration; model services will be provided on a pilot basis in one Maryland jurisdiction (St. Mary's County) when enrollment begins in July 2021.

Sustainability: §1115 waiver

Monitoring and Impact Measures:

- Process Measures: Number of Maryland jurisdictions where services are covered; number of MOM model participants

¹¹ Internal Presentation: HealthySteps Slides for March 2021 Medicaid Meeting.

- Outcome Measures: Increased prenatal and postpartum care attendance; increased utilization of medication for OUD; increased screenings for maternal anxiety, depression and social determinants of health; increased well-child visit attendance
- Expected Impact: Cost savings due to reductions in potentially-avoidable ED utilization and NICU lengths of stay

PHPA Initiatives for Improving Maternal and Child Health

PHPA proposes directing funding to evidence-based and promising practices to improve maternal and child health outcomes through two main programs and initiatives:

1. Expansion of the State's existing asthma home-visiting program
2. Eliminating Disparities in Maternal Health Initiative

Asthma Home Visiting Program

In 2017, MDH submitted a successful application to the Centers for Medicare and Medicaid Services (CMS) for a Health Services Initiative (HSI) under the Children's Health Insurance Program (CHIP). The new program, approved as a State Plan Amendment (SPA), allowed MDH to create a \$3 million home visiting program for children who are enrolled in or eligible for Medicaid (including CHIP), based on diagnosis of either moderate to severe asthma or lead poisoning.

The program operates in nine jurisdictions: Baltimore City and Baltimore, Charles, Dorchester, Frederick, Harford, Prince George's, St. Mary's, and Wicomico Counties. These are sites with some of the highest burden of asthma ED visits. Once they are deemed eligible and enrolled in the program, the children's families are eligible for up to six home visits to receive education and training around home environmental factors that trigger asthma, durable goods that can reduce or eliminate home triggers, and improved care coordination with providers through asthma action plans. The program similarly provides home visiting for eligible children who have been lead poisoned and is one of the first such programs in the country.

Appendix 2 shows the impact that additional HSCRC funding would have on home visiting capacity under the program.

While \$1 million of the proposed funding would support the Asthma Home Visiting Program describe above, \$250,000 would fund community-based interventions, such as mobile asthma treatment, for patients of all payer types.

Sustainability: Continued State funds and Federal match; Public-Private Partnerships

Monitoring and Impact Measures

- Process Measures: Enrollment capacity

- Outcome Measures: Increase in program referrals and enrollment
- Expected Impact: Cost savings due to reductions in asthma-related ED utilization for children, reductions in school absenteeism

Eliminating Disparities in Maternal Health Initiative

PHPA also proposes developing an Eliminating Disparities in Maternal Health initiative which will provide funding opportunities to jurisdictions with elevated severe maternal morbidity rates. PHPA intends to release a Request for Application to support health systems, community-based organizations, Federally Qualified Health Centers (FQHCs), community health centers, and local health departments (LHDs) to develop and implement a CenteringPregnancy Model of Care and expand promising practices in home visiting (e.g. Healthy Start, Maternal and Infant Health Care, and Family Connect).

As described earlier in the recommendation, Medicaid also proposes to support the CenteringPregnancy Model of Care and home visiting. These investments would be mutually reinforcing, with PHPA funding focused on expanding infrastructure for programs and non-Medicaid patients seeking similar services. In addition, PHPA's funding focus on home visiting is focused on promising practices.

Sustainability: Applicants would be required to develop sustainability plans at the end of the funding period. Sustainability plans would vary based on the initiatives being performed.

Monitoring and Impact Measures: PHPA is developing scale targets, similar to those used in the Regional Partnership Catalyst Program, to ensure accountability for funding recipients.

Recommendations

Staff makes the following recommendations:

1. Approve the use of the \$10 million in reserved annual Regional Partnership Catalyst Program funding to support the third SIHIS population health priority area, maternal and child health, for four years (FY 2022 – FY 2025).
2. Authorize funding to be applied to annual hospital rates through a broad-based, uniform assessment on hospitals for transfer to the Maternal and Child Health Population Health Improvement Fund which will sunset in 2025.
3. Authorize HSCRC staff to enter a MOU with MDH to establish the terms and conditions of administration of the Maternal and Child Health Population Health Improvement Fund.
4. Approve the use of \$8 million annually by Medicaid to support the following initiatives and programs:
 - Home Visiting Services pilot expansion

- Reimbursement for doula services;
 - CenteringPregnancy, a clinic-based group prenatal care model;
 - Healthy Steps, a clinic-based intensive prenatal and postpartum case management framework; and
 - Maternal Opioid Misuse (MOM) model expansion.
5. Approve the use of \$2 million annually by PHPA to support the following initiatives and programs:
- Asthma Home Visiting Program
 - Eliminating Disparities in Maternal Health Initiative

Appendix 1 – Medicaid Programs – Expansion Estimates

Table 4. Medicaid Programs - Expansion Estimates

Program	Estimated Eligible Population (annual)	Current Enrollment (annual)	Expanded Enrollment (annual)
Postpartum Coverage	3,667	0	3,455
Reimbursement for Doula Services	25,037	0	1,502
HVS Pilot Expansion	1,432	45	1387
MOM Model	1,362	30	817

Appendix 2 – PHPA Programs - Expansion Estimates

Table 5. Capacity for CHIP-SPA Asthma Home Visiting

Current Areas	Estimated Eligible Children (FY 2018)	# of Children w Asthma ED Visits ¹² (CY 2018)	# of Child Asthma ED Visits ¹³ (CY 2018)	Current Enrollment Capacity ¹⁴	Expanded Enrollment Capacity ¹⁵	Capacity Growth
Baltimore City [expanded]	8,897	2,482	3,419	232	416	79%
Baltimore County [Expanded]	4,020	1,391	1,849	232	263	13%
Charles	527	199	243	166	180	8%
Dorchester	339	73	93	99	97	-2%
Frederick	433	291	373	166	180	8%
Harford	534	290	353	166	180	8%
Prince George's	3057	690	771	232	263	13%
St. Mary's	386	136	167	166	180	8%
Wicomico	453	181	241	166	180	8%
Montgomery [New]	2,439	922	1,104		263	
Total in Jurisdictions	21,085	6,655	8,613	1625	2202	36%

Table 6. Enrollment Capacity for Eliminating Disparities in Maternal Health Initiative

Program	Estimated Eligible Population (Annual) ¹⁶	Current Enrollment (Annual)	Expanded Enrollment (Annual)
Centering Pregnancy	56728	600 ¹⁷	1200 ¹⁸
Maternal and Infant Home Visiting	56728	2747	2947 ¹⁹

¹² With Asthma as the primary diagnosis

¹³ With Asthma as the primary diagnosis

¹⁴ Based on staffing

¹⁵ Based on staffing

¹⁶ Eligible population estimate based on number of delivery hospitalizations in the 12 jurisdictions (Anne Arundel, Baltimore City, Baltimore County, Carroll, Charles, Frederick, Harford, Howard, Montgomery, Washington, Prince George's, Wicomico) that account for 90% of the SMM events.

¹⁷ Enrollment calculated based on an additional 6 certified sites

¹⁸ Enrollment based on 6 certified sites at approximately 100 individuals per site per year

¹⁹ Enrollment based on expansion in 5 additional sites at an increase of 40 clients per year for specific Maternal and Infant home visiting site.



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Update on Medicare FFS Data & Analysis

April 2021 Update

Data through December 2020, Claims paid through February 2021

Data contained in this presentation represent analyses prepared by HSCRC staff based on data summaries provided by the Federal Government. The intent is to provide early indications of the spending trends in Maryland for Medicare FFS patients, relative to national trends. HSCRC staff has added some projections to the summaries. This data has not yet been audited or verified. Claims lag times may change, making the comparisons inaccurate. ICD-10 implementation and EMR conversion could have an impact on claims lags. These analyses should be used with caution and do not represent official guidance on performance or spending trends. These analyses may not be quoted until public release.



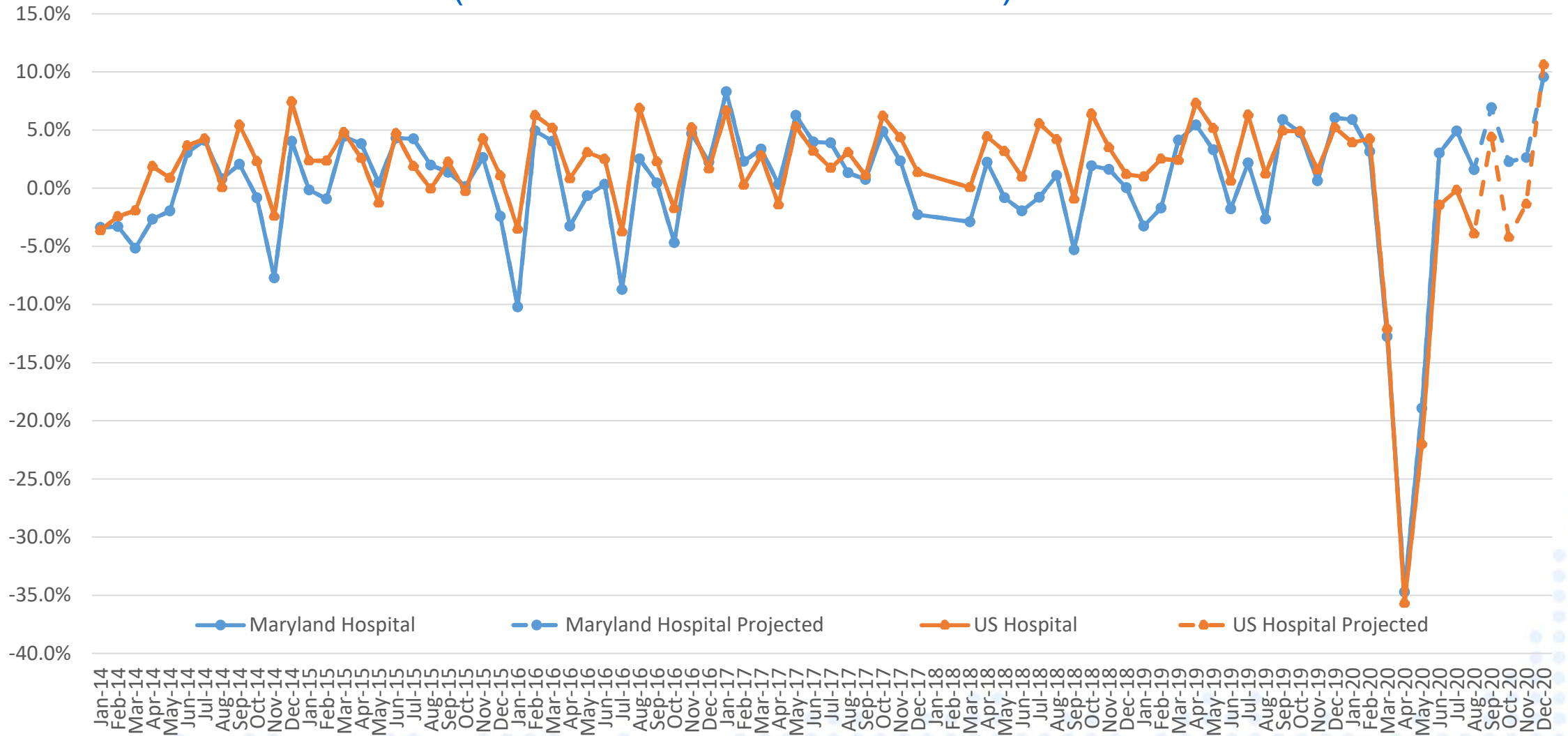
Note for CY 2016:

During the last six months of CY 2016 (July – December of 2016), Hospitals undercharged their Global Budget Revenue mid-year targets by approximately 1% (\$25M dollars). The following slides have been adjusted to ‘add back’ the undercharge to the period of July – December 2016 to offset the decline in savings for January – June 2017.

Staff has noted which slides in the following presentation include the adjustment for the undercharge.

Medicare Hospital Spending per Capita

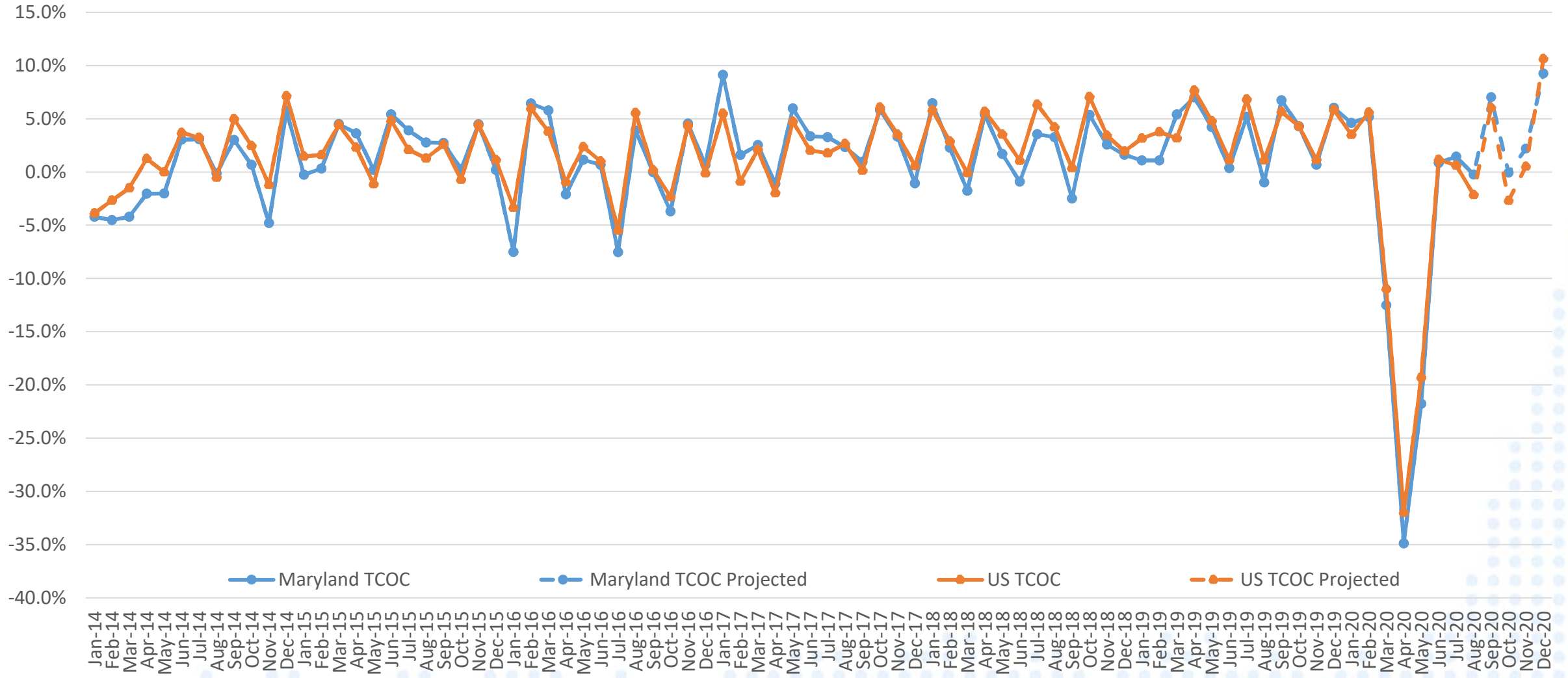
Actual Growth Trend (CY month vs. Prior CY month)



CY16 has been adjusted for the undercharge.

Medicare Total Cost of Care Spending per Capita

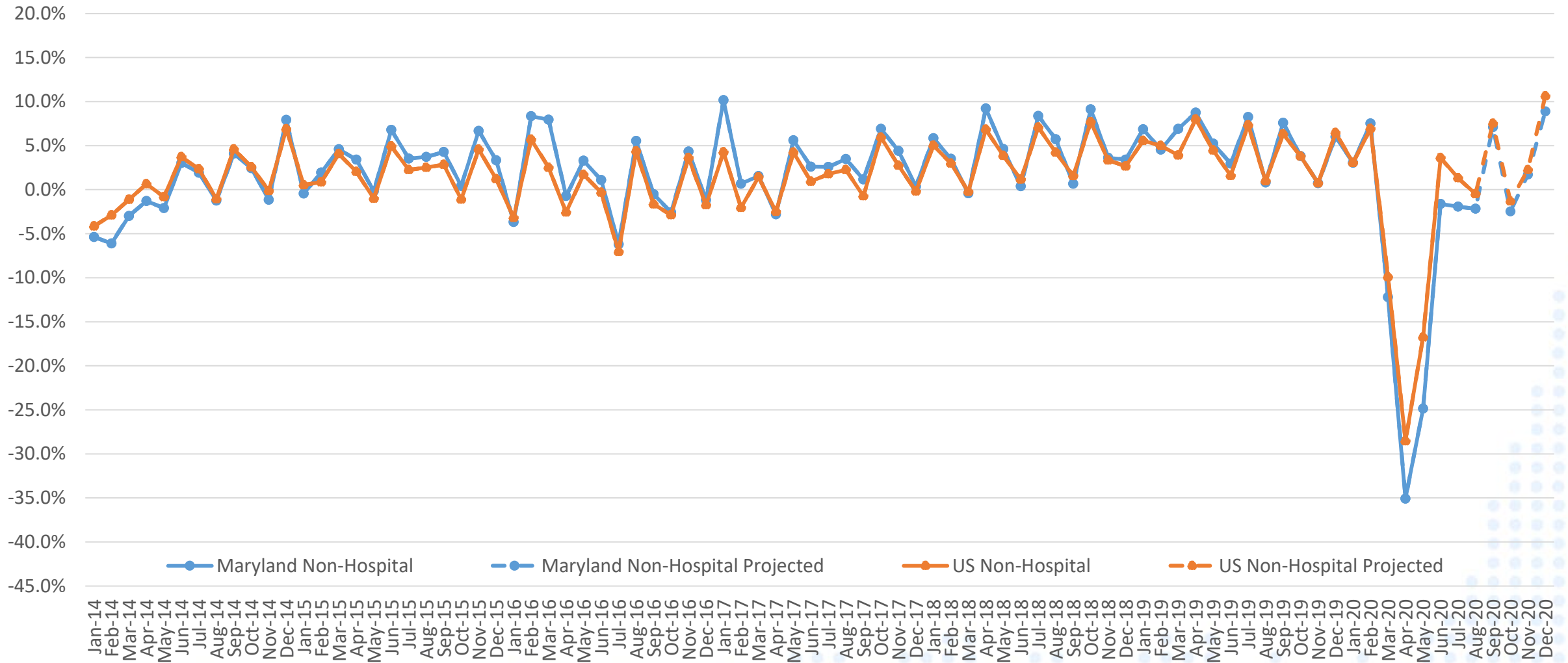
Actual Growth Trend (CY month vs. Prior CY month)



CY16 has been adjusted for the undercharge

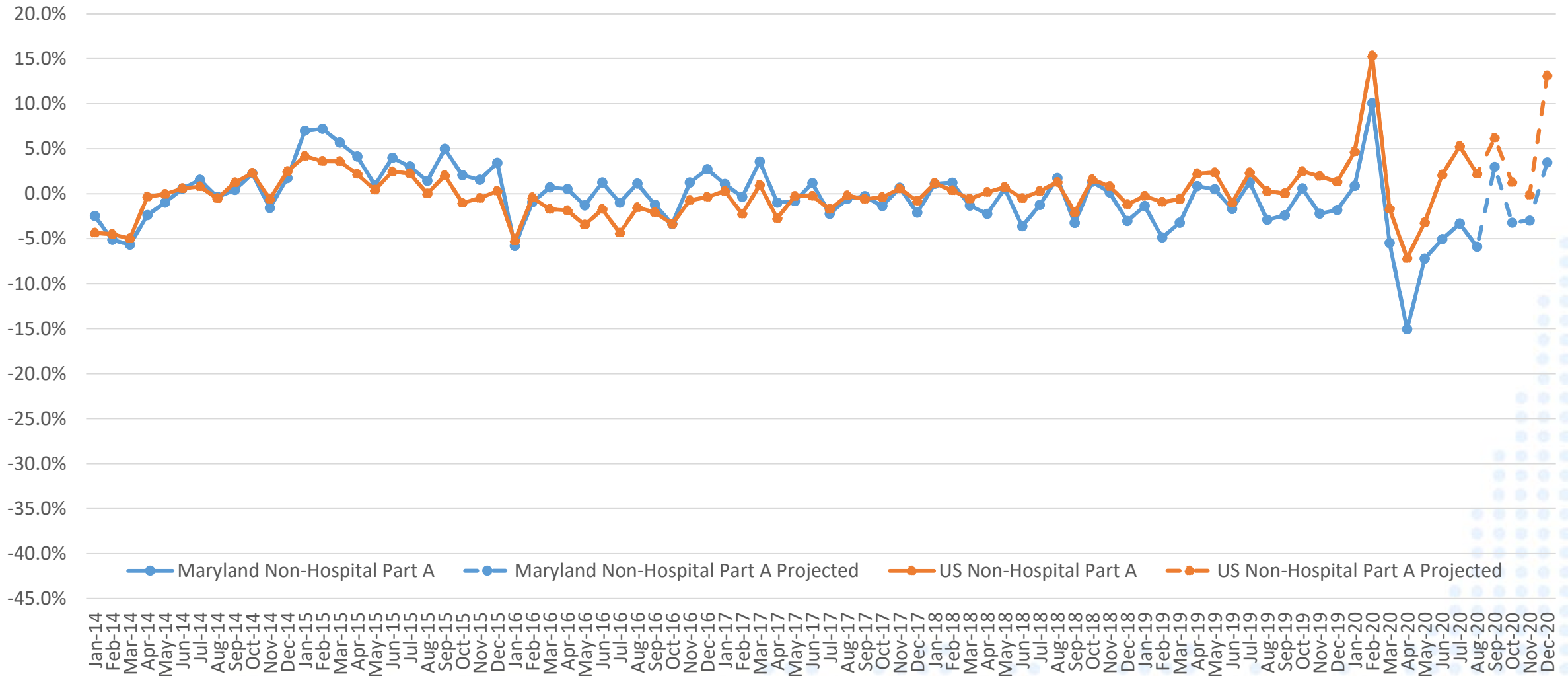
Non-Hospital Spending per Capita

Actual Growth Trend (CY month vs. Prior CY month)



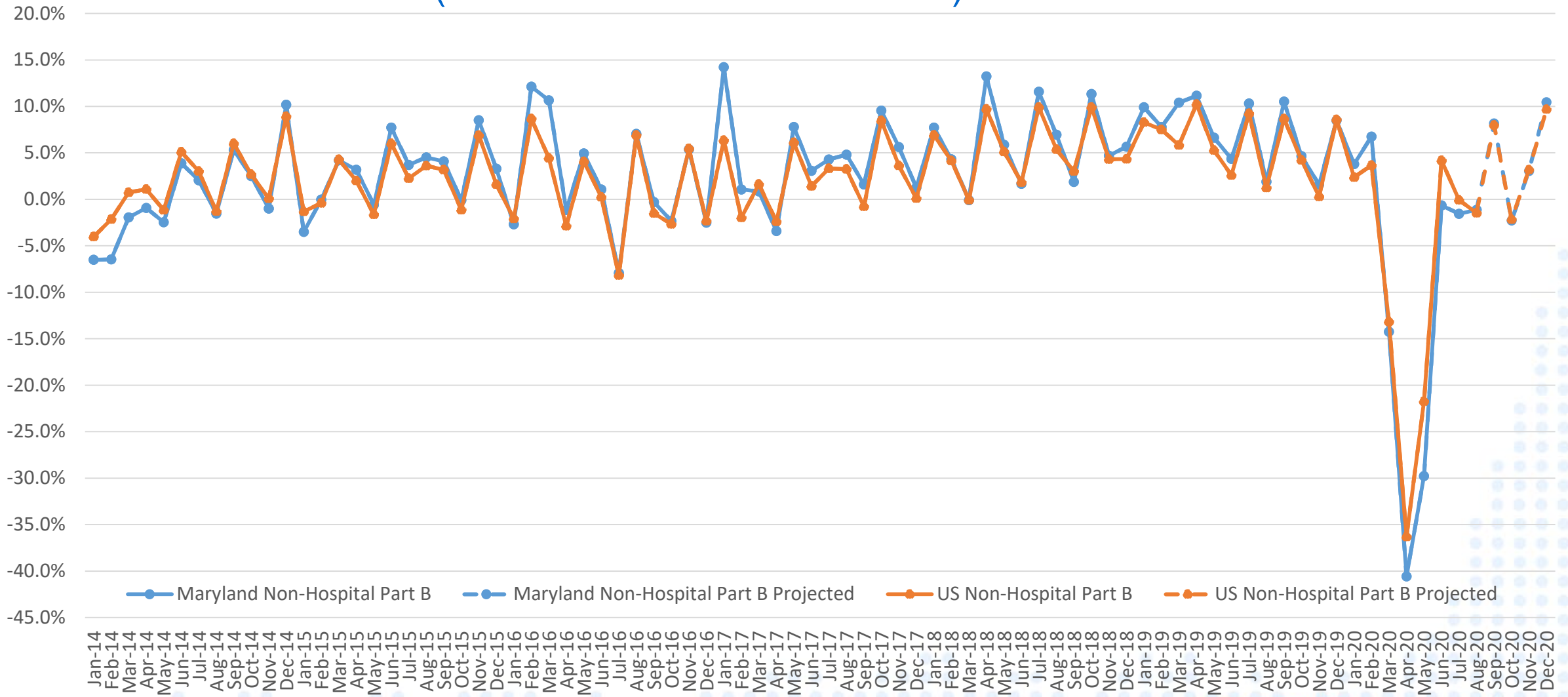
Non-Hospital Part A Spending per Capita

Actual Growth Trend (CY month vs. Prior CY month)



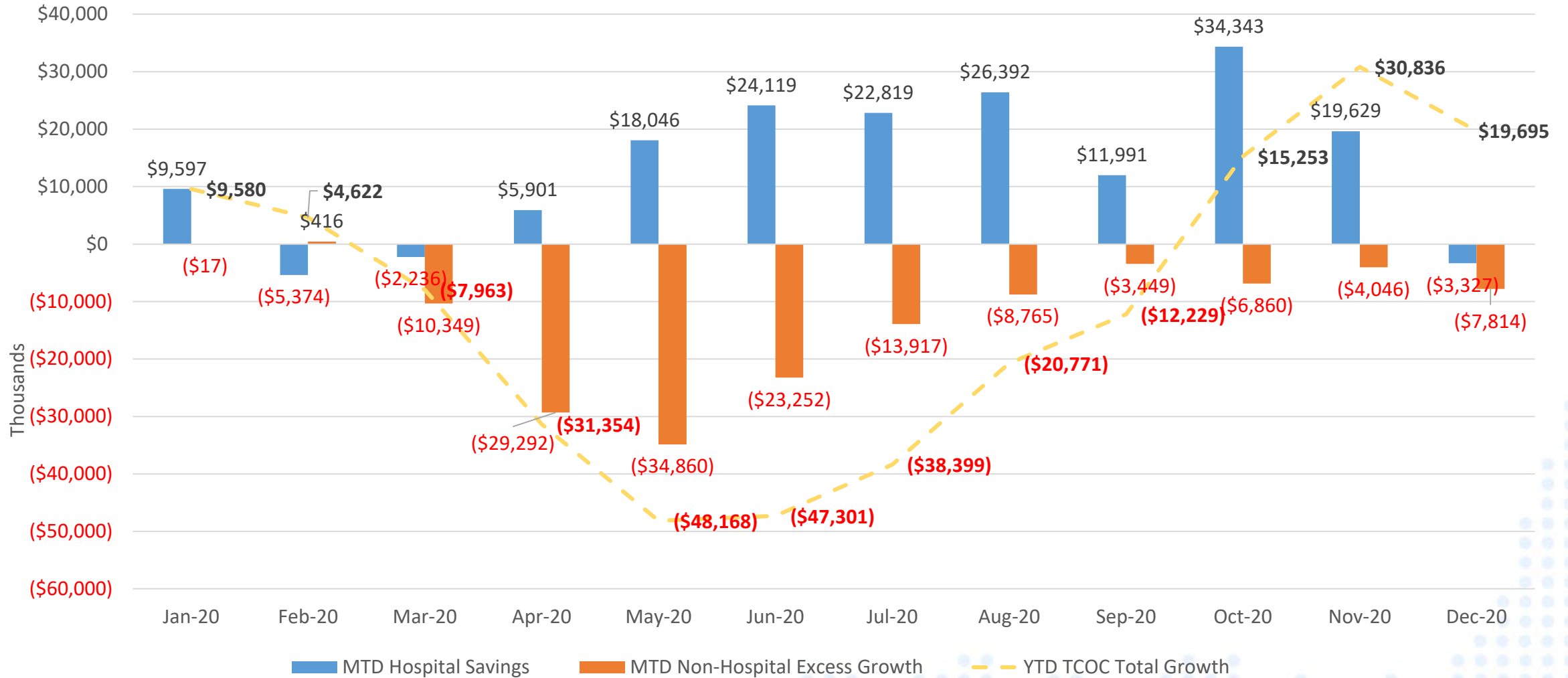
Non-Hospital Part B Spending per Capita

Actual Growth Trend (CY month vs. Prior CY month)



Maryland Medicare Hospital & Non-Hospital Growth

CYTD through December 2020



Update on Reconciliation of CARES PRF Funding and HSCRC-support

Process Update

- Reconciliation will be rolled into the update factor recommendation
 - May Update Factor Draft recommendation will include a section with a revised draft recommendation on this topic.
 - Draft of this section of the recommendation will be shared with the Payment Models Workgroup on April 20
 - Stakeholders will have further chance to comment as part of their comment on the update factor draft
 - Final recommendation with final update factor recommendation in June
- Topic is being wrapped into the update factor because:
 - Resolution impacts Maryland's position on CY21 guardrails
 - Provides an additional window for industry comment

Recap of Current Staff Thinking

Alternative Approach under consideration based on Stakeholder feedback

- Limit settlement calculation to FY20
 - Removes mid-year reconciliation concerns.
 - Decision on FY21 undercharge to be made - bias towards guaranteeing for FY21
- Apply “alternative approach” of recovering CARES funding above the GBR only to the extent COVID-specific relief granted
 - COVID-specific relief would include:
 - COVID related corridor relief
 - COVID-related expense funding (currently being analyzed, only incremental net expenses qualify)
 - COVID Surge Funding
 - Complete at a hospital-level
 - Use more generous to hospital of state average or hospital specific regulated/unregulated split in calculating portion of CARES funding used in assessing regulated GBR position.
- Results in \$47M additional net additional funding before considering expenses or COVID Surge Funding. \$97 M funded Jan 1, 2021, so \$50 M reversal in 2nd half of calendar 2021.

HSCRC Evaluation of Race Data Quality

- Starting in 2013, in conjunction with MHA and other collaborators, HSCRC implemented training for hospitals on best practices for gathering race data. This training and related information remains available on the HSCRC website.
- HSCRC evaluated case mix race data by comparing across secondary data sets - Census and CCLF. These analyses show strong agreement at the more summarized levels (e.g. % Black was highly correlated).
 - It is difficult to assess accuracy at the hospital level for other categories, such as Asian and Hispanic/Latinx, due to small numbers. Smaller categories and “other” tend to vary due to definitional differences between sets.

Changing Race as a Reliability Measure

An additional approach suggested by the literature is test-retest reliability, which evaluates agreement between data collected from individuals at two points in time.

- This approach acknowledges that there is no single source of truth in claims regarding race, while assessing the degree to which the race recorded by individual patients may change over time.
- Changes across admits at different hospitals provides information on reliability of data collected at each hospital.

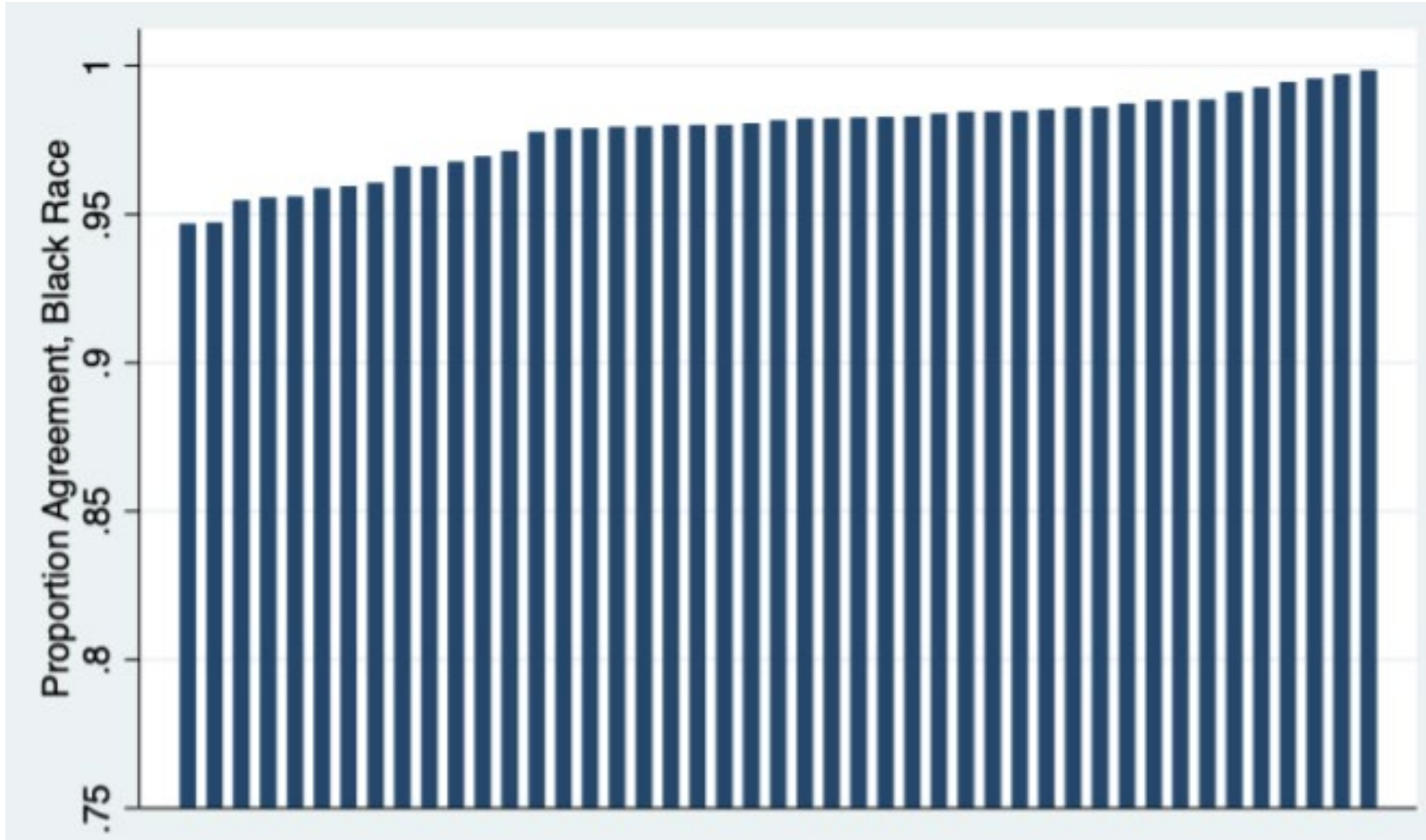
Analytic Approach

- Create Black race flag using criteria developed for PAI measure
- Using 2017-19 casemix, restrict analytic file to patients who have been admitted at more than one hospital
- Identify the most recent admit for each patient as the index case
- Compare % agreement between index race and race information from most recent claim at a different hospital

Expected Findings

- We expect excellent, but not perfect, agreement between race information provided by a single patient across admits at two hospitals.
 - In some cases, racial identification may change over time due to personal preference.
- A lower level of agreement at a given hospital may indicate data problems at that hospital, or problems at a hospital that frequently shares patients with the index hospital.
- We limit the evaluation to black race because other categories are not currently used in policy. Many have issues with small cell size.

Proportion of Agreement by Hospital



Statewide agreement is 0.98

Modest variation between hospitals

All hospitals have acceptable level of agreement

Findings consistent with earlier analysis supporting validity of race data



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Legislative Update

HSCRC April 2021 Commission Meeting

April 14, 2021

End of Session Legislative Process

- All passed bills, except the budget bill and constitutional amendments, must be presented to the Governor within twenty days following adjournment of a session.
- The Governor has thirty days to act on bills once he receives the. If a passed bill is not vetoed, it becomes law at the end of the 30-day period.
 - Exception: The budget bill becomes law upon its final passage and cannot be vetoed.

Budget

Bill #	Description	Bill Status
HB 588	Budget Bill for FY 2022 (The Governor's Budget)	Passed
HB 589 SB 493	Budget Reconciliation and Financing Act of 2021 (BRFA)	Sent to Governor

- The proposed increase to the Medicaid Deficit Assessment was removed from BRFA
- A Maternal and Child Health Population Health Improvement Fund was created to allow HSCRC to support MDH maternal and child health improvement efforts; the fund sunsets in 2025

Joint Chairmen's Report Tasks assigned to HSCRC

- **Evaluation of MDPCP**

- Evaluate MDPCP's impact on cost, utilization, and racial equity (for both providers and patients)
- HSCRC is the sole author of this report

- **Hospital at Home**

- Report on the efficacy of the Hospital at Home model, including how the model fits with TCOC model, existing legal barriers, impacts on public and private payers, and recommendations
- HSCRC and MHCC are joint authors of the report, in consultation with OHCQ and Medicaid

Both reports are due October 1, 2021

Telehealth Bills

Bill #	Description	HSCRC Actions	Bill Status
HB 123 SB 3	<p>Preserve Telehealth Access Act of 2021</p> <ul style="list-style-type: none"> • Medicaid must cover medically necessary somatic, dental, or behavioral health services via telehealth. • From July 1, 2021 through June 30, 2023, Medicaid and private insurers must cover audio-only visits and must reimburse for telehealth at the same rate as in-person care • Clinic/facility fees are not permitted for telehealth services, unless the health care professional cannot bill directly; and • HSCRC retains the authority to set rates for regulated services. • MHCC, in consultation with HSCRC, MDH, and MIA, must study the use of telehealth services in Maryland. MHCC must submit a report with their findings and recommendations by December 1, 2022. 	HSCRC submitted a letter of information	Both bills have passed both Houses and are with the Governor.

Medical Debt Bills

Bill #	Description	HSCRC Actions	Bill Status
<p>HB 565 SB 514</p>	<p>Health Facilities - Hospitals - Medical Debt Protection</p> <ul style="list-style-type: none"> HSCRC will develop guidelines for hospital income-based payment plan policies with input from stakeholders. HSCRC must report on the guidelines by January 1, 2022. Hospitals are prohibited from pursuing debt through legal action until they implement the payment plan policy. Hospitals must submit data on debt collection to HSCRC. HSCRC will compile this data and submit an annual report to the legislature. Before January 1, 2022, HSCRC must study the impact on UCC of: <ul style="list-style-type: none"> Hospitals refunding amounts collected from patients who were later found to be eligible for reduced-cost care; and Requiring a hospital to forgive any judgment or strike any adverse information reported to a consumer reporting agency about patients who were later found to be eligible for reduced-cost care. By December 1, 2021, MHCC must examine the feasibility of using CRISP to support the determination of financial status for purposes of determining eligibility for free or reduced-cost care or for an income-based payment plan. The bill no longer contains language prohibiting hospitals from filing an action for a patient who owes less than \$1000 or is uninsured, or from handing collection activity for amounts less than \$1000 over to a collection agency. 	<p>HSCRC wrote a letter of information</p>	<p>Both bills have passed both Houses and are with the Governor.</p>

Health Information Exchange Bills

Bill #	Description	HSCRC Actions	Bill Status
HB 1022 SB 748	<p>Public Health – State Designated Exchange – Clinical Information Sharing</p> <p>Requires nursing homes and electronic health networks to provide data to CRISP for state health improvement programs, mitigation of a public health emergency, or improvement of patient safety.</p>	HSCRC submitted a letter of support	Both bills have passed both Houses and are with the Governor.
HB 1375	<p>Health Information Exchanges - Electronic Health Information - Sharing and Disclosure</p> <ul style="list-style-type: none"> • HB 1375 requires the state-designated health information exchange to develop and maintain a consent management application, so that patients who opt out of information sharing only need to do so once. Other HIEs operating in the State are required to check this tool before sharing patient information. • MHCC will study a possible update to the legal definition of HIE. 		Passed both Houses and is with the Governor.

Questions?

Megan Renfrew

Associate Director of External Affairs

Center for Payment Reform and Provider Alignment

megan.renfrew1@maryland.gov



TO: HSCRC Commissioners
FROM: HSCRC Staff
DATE: March 10, 2020
RE: Hearing and Meeting Schedule

Adam Kane, Esq
Chairman

Joseph Antos, PhD
Vice-Chairman

Victoria W. Bayless

Stacia Cohen, RN, MBA

John M. Colmers

James N. Elliott, MD

Sam Malhotra

.....
Katie Wunderlich
Executive Director

Allan Pack
Director
Population-Based Methodologies

Tequila Terry
Director
Payment Reform & Provider Alignment

Gerard J. Schmith
Director
Revenue & Regulation Compliance

William Henderson
Director
Medical Economics & Data Analytics

May 12, 2021 To be determined - GoTo Webinar

July 9, 2021 To be determined - GoTo Webinar

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.