

To: Hospital CFOs  
Cc: Hospital Quality Liaisons, Case-Mix Liaisons  
From: HSCRC Quality/Performance Measurement Team  
Date: February 25, 2022  
Re: Maryland Quality-Based Reimbursement Program Measure  
Standards, Scaling Determination, and other Methodology  
Changes for Rate Year 2024

**Adam Kane, Esq**  
Chairman

**Joseph Antos, PhD**  
Vice-Chairman

**Victoria W. Bayless**

**Stacia Cohen, RN, MBA**

**James N. Elliott, MD**

**Maulik Joshi, DrPH**

**Sam Malhotra**

---

This memo summarizes the changes to the Quality Based Reimbursement (QBR) Program that will impact hospital rates in Rate Year (RY) 2024.

**Katie Wunderlich**  
Executive Director

**William Henderson**  
Director  
Medical Economics & Data Analytics

**Allan Pack**  
Director  
Population-Based Methodologies

**Gerard J. Schmith**  
Director  
Revenue & Regulation Compliance

## INTRODUCTION

On November 10, 2021, the Commission approved the staff recommendations for revising the Quality-Based Reimbursement (QBR) Program for RY 2024. Consistent with the RY 2023 policy, the preset scale for RY 2024 uses a full distribution of potential scores (scale of 0-80%), and a score cut point of 41% for rewards and penalties. The maximum reward will remain at 2%, and the maximum penalty remains at 2%. The preset scale is included as Appendix A of this memorandum.

The RY 2024 policy incorporates QBR Redesign Subgroup recommendations and outlines strategies for future work to respond to concerns raised by Centers for Medicare and Medicaid Services (CMS) in response to Maryland's annual QBR exemption requests. The changes target better performance on HCAHPS in the Person and Community Engagement (PCE) domain and expansion of other QBR measures for monitoring purposes in advance of future consideration for

adoption in the QBR payment program.

With the ongoing COVID-19 pandemic, the Commission also approved a recommendation for staff to adjust retrospectively the RY 2024 QBR pay-for-performance program methodology as needed and report any changes to Commissioners.

More information is provided in the sections that follow.

## EXEMPTIONS FROM CMS HOSPITAL QUALITY PROGRAMS

Exemptions from the CMS hospital quality programs enable Maryland to operate programs with incremental revenue adjustment scales established prospectively, wherein all hospitals have the opportunity to earn rewards based on their performance. As required, HSCRC has submitted Maryland's QBR program reports and requests for exemptions from the federal Value-Based Purchasing (VBP) program to CMS since FY 2013. Beginning in FY 2021, HSCRC has also sought and received exemptions from CMS for HAC Reduction and Hospital Readmission Reduction Programs. CMS has approved Maryland's exemption request for the FY 2022 quality programs allowing the state to continue to operate the QBR, Maryland Hospital Acquired Conditions, and Readmission Reduction Incentive programs.

In response to the FY 2021 and 2022 VBP exemption requests, CMS noted that Maryland's performance continues to lag behind the nation under the person and community engagement (HCAHPS) and safety (NHSN HAI) measure domains in the QBR and VBP programs. Staff notes that in order for Maryland to maintain its exemptions from federal pay-for-performance quality programs under the TCOC Model, the State must ensure that there is no backsliding on the progress made under the All-Payer Model, and the policies must continue to be aggressive and progressive, as reflected in annual reports submitted to CMS along with our exemption request.

## QBR REDESIGN

In the approved RY 2022 QBR policy, the HSCRC committed to convene a QBR Redesign Subgroup in CY 2020 in order to target areas of underperformance and to outline strategic updates to the QBR program that should be made in the short-, mid- and longer- terms. With the onset of the COVID Public Health Emergency (PHE), staff deferred convening the Subgroup until the first half of CY 2021. The state submitted a QBR Redesign Subgroup [report](#) on August 16, 2021 to CMS, and CMS generally agreed with the State's approach to redesign the QBR program for implementation in RY 2024 and beyond. The approved RY 2024 QBR policy vetted by the Performance Measurement Workgroup (PMWG) begins the incremental adoption of the QBR updates recommended by the QBR Redesign Subgroup.

## RY 2024 METHODOLOGY AND STRATEGIC UPDATES

### METHODOLOGY UPDATES

For the QBR program, the HSCRC generally follows the VBP program in terms of measures and calculation of measure scores, but there are some differences. Below are the updates to the QBR program for RY 2024:

- To encourage better HCAHPS performance, continue weighting the PCE domain at 50% of the overall program score. To encourage iterative improvement on HCAHPS throughout the TCOC Model, which could lead to improvement in HCAHPS top box scores, pilot the use of HCAHPS measures' linear scores for the following four measures weighted at 10% of the PCE domain:
  - Nurse communication
  - Doctor communication
  - Staff responsiveness
  - Care transition

### MEASURE EXPANSION FOR MONITORING

- The timely follow-up measure used in the QBR PCE domain assesses the percentage of patients who receive follow-up after an acute exacerbation (ED visit, observation stay, or inpatient admission) for one of six chronic conditions within the specified timeframes. The RY 2024 QBR policy included recommendations to expand reporting of the measure for monitoring purposes as is feasible during CY 2022.<sup>1</sup> Planned expansions to the measure include:
  - Provide chronic condition monitoring reports for persons covered by Medicaid.
  - Provide monitoring reports for follow up after hospitalizations for mental illness.
- The QBR program currently uses one inpatient mortality measure whereas the VBP program includes four measures of condition-specific 30 day mortality. The Commission recognizes that post-hospitalization deaths are an important indicator of quality and that moving to a 30-day measure better aligns with CMS's intention. Thus, staff has been working with Mathematica to develop a 30-day all-payer, all-cause mortality measure based on CMS' measure.
  - The RY 2024 policy included a recommendation to begin reporting for monitoring purposes the hospital level 30 day all-cause, all-condition mortality rates when feasible.

#### DOMAIN WEIGHTS

The final RY 2024 measures, domain weights and data sources for the QBR program, as compared with the VBP Program, are listed below in Figure 1.

**Figure 1. QBR Measures, Domain Weights and Data Sources Compared with the VBP Program**

	Clinical Care	Person and Community Engagement	Safety	Efficiency
<b>QBR RY 24</b>	15 percent 2 measures <input type="checkbox"/> Inpatient Mortality (HSCRC case-mix data) <input type="checkbox"/> THA TKA (CMS Hospital Compare, Medicare claims data)	50 percent 9 measures <input type="checkbox"/> 8 HCAHPS measures (CMS Hospital Compare patient survey) top box performance (35%) <input type="checkbox"/> 4 HCAHPS measures' linear scores (CMS Hospital Compare patient	35 percent 6 measures <input type="checkbox"/> 5 CDC NHSN HAI measures (CMS Hospital Compare chart-abstracted) <input type="checkbox"/> PSI-90 All-payer (HSCRC case-mix data)	N/A

<sup>1</sup> The measure currently assesses the percentage of ED visits, observation stays, and inpatient admissions for one of six conditions in which a follow-up was received within the time frame recommended by clinical practice: Hypertension (follow-up within seven days), Asthma (follow-up within 14 days), Heart failure (follow-up within 14 days), Coronary artery disease (follow-up within 14 days), Chronic obstructive pulmonary disease (follow-up within 30 days), Diabetes (follow-up within 30 days),

	Clinical Care	Person and Community Engagement	Safety	Efficiency
		survey) linear performance (10%) <input type="checkbox"/> Follow up after acute exacerbation of Chronic Conditions (CCLF, Medicare claims) (5%)		
<b>VBP FY 24</b>	25 percent 5 measures <input type="checkbox"/> 4 measures- 30-day condition-specific Inpatient Mortality <input type="checkbox"/> 1 measure- THA TKA  (CMS Hospital Compare, Medicare claims data)	25 percent 8 measures <input type="checkbox"/> 8 HCAHPS domains (CMS Hospital Compare patient survey)	25 percent 6 measures <input type="checkbox"/> 5 CDC NHSN HAI measures (CMS Hospital Compare chart abstracted) <input type="checkbox"/> PSI-90 Medicare (CMS Hospital Compare Medicare Claims data)	25 percent 1 measure <input type="checkbox"/> Medicare Spending Per Beneficiary (CMS Hospital Compare Medicare Claims data)

### COVID 19 PUBLIC HEALTH EMERGENCY UPDATES

The RY 2024 approved policy included a recommendation to adjust retrospectively the QBR pay-for-performance program methodology as needed due to COVID-19 Public Health Emergency and report any changes to Commissioners. This includes evaluation of measures, scoring methodology, and revenue adjustment scales. Because the majority of QBR measures are obtained from CMS Care Compare and included in the CMS VBP program, the HSCRC staff will monitor for any changes to the national programs. For the Maryland inpatient mortality measure, HSCRC staff are currently exploring using the performance period to determine expected values (i.e., concurrent norms) and the impact of including or excluding COVID-10 discharges. No changes are being proposed for the follow-up measure since this is a process measure. While it is always our intention to set the quality programs prospectively, the COVID PHE warrants additional considerations to be made retrospectively. Furthermore, we acknowledge that through the Maryland Hospital Association, hospitals are requesting a delayed implementation of RY 2024 quality policies. HSCRC staff will review this request with CMMI and provide updates.

### MEASUREMENT PERIODS

The base and performance measurement periods used for the QBR program for RY 2024 are illustrated below in Figure 2. Staff will update hospitals on any changes to the measurement periods related to the adjustments needed related to the COVID PHE.

### *Maryland Extraordinary Circumstances Exception (ECE) Process*

HSCRC notes that CMS has developed an Extraordinary Circumstances Exception (ECE) process for hospitals under the Inpatient Prospective Payment System (IPPS) that experience circumstances beyond their control that impacts the hospital's ability to meet quality reporting or payment program requirements. Since the CMS ECE process is not applicable for Maryland hospitals, HSCRC is developing a similar process for Maryland facilities under the purview of the HSCRC Rate Setting system to request an exception from HSCRC or CMS quality reporting and payment program requirements due to extraordinary circumstances beyond the control of the facility. This process will be communicated to hospital quality contacts and posted to the HSCRC website, [hsrc.maryland.gov](http://hsrc.maryland.gov), within the coming weeks.



**Figure 2. RY 2024 QBR Base and Performance Timeline**

Rate year (Maryland fiscal year)	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23	Q1-24	Q2-24	Q3-24	Q4-24		
Calendar year	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23	Q1-24	Q2-24		
QBR base and performance periods	BASE- CMS Hospital Compare base period (HCAHPS measures, all CDC NHSN measures)																							
													PERFORMANCE: CMS Hospital Compare performance period (HCAHPS measures, all CDC NHSN measures)								Rate year impacted by QBR results			
					BASE- inpatient mortality, PSI-90, follow-up chronic conditions																			
													PERFORMANCE: inpatient mortality, PSI-90, follow-up chronic conditions)											
PERFORMANCE: CMS Hospital Compare THA/TKA performance period* X																								

\* Hospital Compare THA/TKA complications **base period** April 1, 2014–March 31, 2017.  
 X CMS announced it will not use data for CY 2020 Quarters 1 and 2 for the quality pay-for-performance programs due to the COVID-19 public health emergency; staff will consider options as CMS publishes to the updated measure performance period.

## QBR DATA SOURCES, SCORE CALCULATIONS AND PERFORMANCE STANDARDS FOR RY 2024

To the extent possible, HSCRC has aligned the QBR program data, scoring calculations, measures list and performance standards with the VBP program. Appendix B provides an overview of the QBR methodology. Key points regarding this methodology are outlined below.

- HSCRC will use the data submitted to CMS for the Inpatient Quality Reporting program and posted to Care Compare, formerly Hospital Compare, for calculating hospital performance scores for all measures with exception of in-hospital mortality measure and the PSI-90 measure, which are calculated using HSCRC case-mix data, and the follow-up after discharge for acute exacerbation of chronic condition, which is calculated from Medicare Claims and Claims-Line Feed (CCLF) data.
  - NOTE: If NHSN data are unavailable on CMS Care Compare for the relevant time periods for some or all hospitals, the HSCRC may obtain these data directly from CMS, or may download the data directly from the NHSN by MHCC. Results from MHCC may be pulled at a different time and may not match CMS data.
- CMS rules will be used when possible for minimum measure requirements for scoring a domain. HSCRC will proportionally readjust domain weighting if a measurement domain is missing for a hospital. Hospitals must be eligible for a score in the HCAHPS domain (i.e., must have at least 100 completed surveys in the performance period) to be included in the program.
- Maryland Mortality summary reports and case-level data are provided to hospitals quarterly based on preliminary and final data. Reports are available on the CRS Portal. Appendix C contains the specifications for the Maryland Mortality measure.
- For hospitals with measures that have no data in the base period, staff reserves the right to assess hospitals on attainment-only, since the HSCRC will be unable to calculate improvement scores.
- For hospitals that have measures with data missing from Care Compare for the base and performance periods, staff reserves the right to give hospitals a score of zero for these measures. It is imperative, therefore, that hospitals review their data as soon as it is available and contact CMS with any concerns related to preview data or issues with posting data to Care Compare, and to alert HSCRC staff in a timely manner if issues cannot be resolved.
- With the exception of the PSI-90, Inpatient Mortality, and Chronic Conditions Timely Follow-up measures, the performance standards for each of the Safety, Clinical Care, and Person and Community Engagement measures for RY 2024 are listed below in Figure 3.
  - NOTE: In prior years, CMS has adjusted the VBP thresholds and benchmarks mid-year for certain measures. Should any VBP measure included in the RY 2024 QBR program be updated, HSCRC will notify industry and provide an updated calculation sheet at that time.
- Staff anticipates that the following will be provided via the CRISP Reporting Services (CRS) Portal, and will also be posted to the HSCRC Website:
  - An excel workbook with base year data.



- A score calculation workbook containing a worksheet for each domain for hospitals to use to calculate and monitor their scores, current (included) mortality DRGs, and associated thresholds/benchmarks.
- For the measures where the standards indicate TBD in Figure 3 below, the final standards for the all-payer PSI 90, Inpatient Mortality, and Timely Follow-up after Exacerbation of Chronic Conditions measures.

Due to the recent Maryland Department of Health cyberattack, these baseline reports have been delayed.

**Figure 3. QBR Performance Standards for RY 2024**

<b>Previously Established and Newly Established Performance Standards for the FY 2024 Program Year</b>		
<b>Measure Short Name</b>	<b>Achievement Threshold</b>	<b>Benchmark</b>
<b>Safety Domain</b>		
CMS PSI 90* <sup>^</sup> (all payer)	TBD	TBD
CAUTI* <sup>+</sup>	0.650	0
CLABSI* <sup>+</sup>	0.589	0
CDI* <sup>+</sup>	0.520	0.014
MRSA Bacteremia* <sup>+</sup>	0.726	0
Colon and Abdominal Hysterectomy SSI* <sup>+</sup>	0.717	0
	0.738	0
<b>Clinical Outcomes Domain</b>		
Inpatient Mortality	TBD	TBD
COMP-HIP-KNEE* <sup>#</sup>	0.027428	0.019779

\* Lower values represent better performance.

<sup>^</sup>Preliminary using CY 2019 data.

<sup>#</sup> Previously established performance standards

<sup>+</sup> The newly established performance standards displayed in this table for the CDC NHSN measures (CAUTI, CLABSI, CDI, MRSA Bacteremia, and Colon and Abdominal Hysterectomy SSI) were published in CMS FY 2022 IPPS Final Rule and calculated using four quarters of CY 2019 data.

<b>Person and Community Engagement Domain</b>		
	<b>Achievement Threshold</b>	<b>Benchmark</b>
Follow Up after Exacerbation for Chronic Conditions	TBD	TBD

<b>Hospital Consumer Assessment of Healthcare Providers and Systems</b>			
<b>HCAHPS Survey Dimension</b>	<b>Floor (minimum)</b>	<b>Achievement Threshold (50<sup>th</sup> percentile)</b>	<b>Benchmark (mean of top decile)</b>
Communication with Nurses	53.50	79.42	87.71
Communication with Doctors	62.41	79.83	87.97
Responsiveness of Hospital Staff	40.40	65.52	81.22
Communication about Medicines	39.82	63.11	74.05
Hospital Cleanliness & Quietness	45.94	65.63	79.64
Discharge Information	66.92	87.23	92.21
Care Transition	25.64	51.84	63.57
Overall Rating of Hospital	36.31	71.66	85.39

<sup>±</sup> As discussed in section V.H.4.b. of the FY 2022 IPPS final rule, CMS finalized the updates to the FY 2024 baseline periods for measures included in the Person and Community Engagement, Safety, and Efficiency and Cost Reduction domains to use CY 2019. Therefore, the performance standards displayed in this table for the Person and Community Engagement domain measures were calculated using CY 2019 data.

For any questions, please email [hsrcr.quality@maryland.gov](mailto:hsrcr.quality@maryland.gov).

## Appendix A: RY 2023 QBR Preset Payment Scale

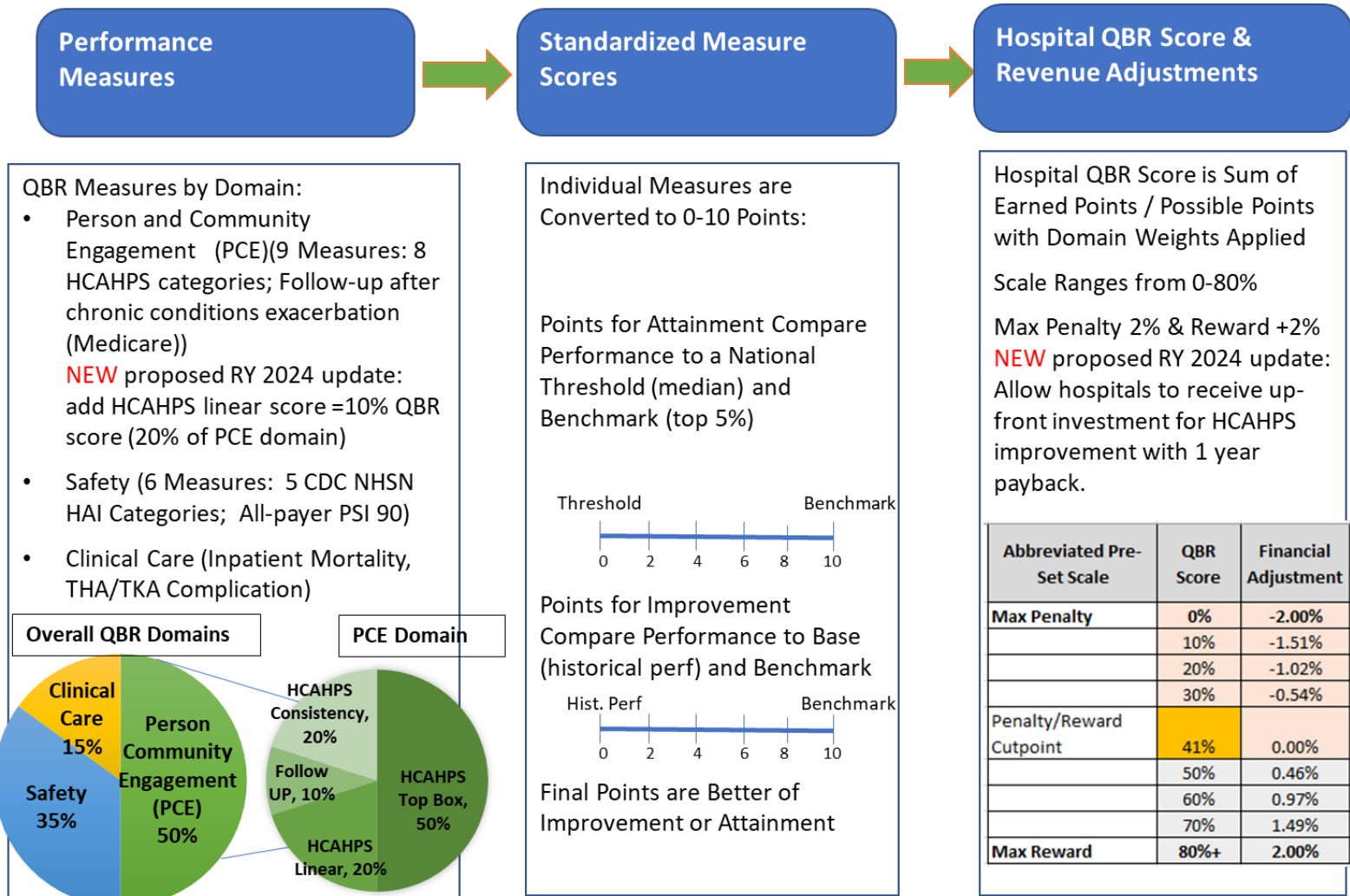
Please see below for approximate percent revenue adjustments associated with QBR scores.

Final QBR Score	QBR Preset Scale
<b>Scores less than or equal to</b>	
0%	-2.00%
1%	-1.95%
2%	-1.90%
3%	-1.85%
4%	-1.80%
5%	-1.76%
6%	-1.71%
7%	-1.66%
8%	-1.61%
9%	-1.56%
10%	-1.51%
11%	-1.46%
12%	-1.41%
13%	-1.37%
14%	-1.32%
15%	-1.27%
16%	-1.22%
17%	-1.17%
18%	-1.12%
19%	-1.07%
20%	-1.02%
21%	-0.98%
22%	-0.93%
23%	-0.88%
24%	-0.83%
25%	-0.78%
26%	-0.73%
27%	-0.68%
28%	-0.63%
29%	-0.59%
30%	-0.54%
31%	-0.49%
32%	-0.44%
33%	-0.39%
34%	-0.34%
35%	-0.29%
36%	-0.24%
37%	-0.20%
38%	-0.15%
39%	-0.10%
40%	-0.05%
41%	0.00%

Final QBR Score	QBR Preset Scale
42%	0.05%
43%	0.10%
44%	0.15%
45%	0.20%
46%	0.26%
47%	0.31%
48%	0.36%
49%	0.41%
50%	0.46%
51%	0.51%
52%	0.56%
53%	0.62%
54%	0.67%
55%	0.72%
56%	0.77%
57%	0.82%
58%	0.87%
59%	0.92%
60%	0.97%
61%	1.03%
62%	1.08%
63%	1.13%
64%	1.18%
65%	1.23%
66%	1.28%
67%	1.33%
68%	1.38%
69%	1.44%
70%	1.49%
71%	1.54%
72%	1.59%
73%	1.64%
74%	1.69%
75%	1.74%
76%	1.79%
77%	1.85%
78%	1.90%
79%	1.95%
80%	2.00%
<b>Scores greater than or equal to</b>	
80%	2.00%

\*For RY 2024, hospitals receiving a score of less than 41% (0.41) will receive a penalty, and hospitals receiving 0.42 and above will receive a reward. Any hospital receiving a score of 0.80 or higher will receive the maximum reward. This “cut point” will be re-evaluated in light of the COVID-19 Public Health Emergency, as outlined in the approved RY 2024 QBR Policy.

## Appendix B: RY 2023 QBR Methodology: Converting Performance Scores to Payment Adjustments



## Appendix C: RY 2024 Maryland Mortality Measure Specifications

### Inpatient Mortality Rates using 3M, Health Information Systems Risk of Mortality Adjustment

As 3M Risk of Mortality (ROM) categories--which comprise four levels similar to severity of illness classifications used in the All Patient Refined Diagnosis Related Group (APR DRG) payment classification system-- account for risk adjustment for deaths in the hospital, the ROM may provide an appropriate measure of hospital mortality with a broader focus. 3M APR DRGs and ROM are also used as the risk adjustment methodology for other mortality measures, such as those developed by the Agency for Healthcare Research and Quality.

#### Exclusions

The following categories are removed from the denominators and therefore not included in the mortality rate calculations (excluded from both mortality counts and denominator):

1. APR-DRGs that are NOT in the 80% of cumulative deaths after removing all the exclusions. DRGs are chosen without palliative care discharges and then discharges with palliative care for selected DRGs are added back. All DRGs in the measure that have same number of observed deaths as the DRG at the 80 percent cut point are included.
2. APR-DRG ROM with a state-wide cell sizes below 20 after removing all the exclusions
3. Rehab hospitals (provider IDs that start with 213)
4. Hospitals without HCAHPS (RY 2021: Levindale, UMROI, McCready)
5. Transfers to other acute hospitals (PAT\_DISP=discharge destination 02,05)
6. Age and sex unknown
7. Hospice (Daily service of 10, DAILYSER=10)
8. University of Maryland Shock Trauma Patients (daily service=02, and trauma days>0)
9. Left Against Medical Advice admissions: (PAT\_DISP=07).
10. Trauma and Burn admissions: Admissions for multiple significant trauma (MDC=25) or extensive 3rd degree burn (APR DRG = 841 "Extensive 3rd degree burns with skin graft" or 843 "Extensive 3rd degree or full thickness burns w/o skin graft")
11. Error DRG: Admissions assigned to an error DRG 955 or 956
12. Other DRG: Admissions assigned to DRG 589 (Neonate BWT <500G or GA <24 weeks), 591 (NEONATE BIRTHWT 500-749G W/O MAJOR PROCEDURE), 196 (cardiac arrest) due to high risk of mortality in these conditions

13. "APR DRG 004 (Tracheostomy w MV 96+ hours w extensive procedure or ECMO); starting in RY 2022, remove discharges with primary or secondary procedure code for ECMO ("5A1522F", "5A1522G", "5A1522H", "5A15223")
14. Medical (non-surgical) Malignancy admissions: Medical admissions with a principal diagnosis of a major metastatic malignancy (see calculation sheet for list of medical malignancies)

### Adjustments

The Maryland inpatient hospital mortality measure was developed in conjunction with Performance Measurement workgroup and other stakeholders. Based on this stakeholder input mortality is assessed using a regression model that adjusts for the following variables:

1. Admission APR DRG with Risk of Mortality (ROM)
2. Age (as a continuous variable) and age squared
3. Gender
4. Palliative Care Status (ICD-10 code = Z51.5)
5. Transfers from another institution defined as source of admission codes (SOURCADM) of 04 = FROM (TRANSFER) A DIFFERENT HOSPITAL FACILITY (INCLUDES TRANSFERS FROM ANOTHER ACUTE CARE HOSPITAL (ANY UNIT), FREESTANDING EMERGENCY DEPARTMENT, MIEMSS-DESIGNATED FACILITY). NOT LIMITED TO ONLY IP SERVICES.

Again as stated earlier, the HSCRC staff is considering retrospective changes to this measure. Specifically we are examining the use of concurrent norms and the inclusion of COVID discharges with additional risk-adjustment. These decisions are pending a decision on RY 2023.

### **Mortality Reporting**

Hospitals will be provided with summary level quarterly reports based on preliminary and final HSCRC case-mix data. In addition, case-level detailed files will be provided to each hospital. These summary and case level reports will be posted through the CRISP Reporting Services portal.