Quality Based Reimbursement Mortality for Rate Year 2025

By HSCRC, last updated 5/2/2023

Quality Based Reimbursement Program

This is a user guide specifically for the Inpatient Mortality report, used to track inpatient mortality for the QBR program. For more information about the QBR policy, please visit the HSCRC QBR Webpage.

Methodology

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

3M Risk of Mortality (ROM) categories comprise four levels of risk, similar to the severity of illness (SOI) classifications used in the All-Patient Refined Diagnosis Related Group (APR DRG) payment classification system. ROM, combined to each Admission DRG (ADM-DRG) are utilized in the case-mix adjustment for inpatient mortality on a broader basis than the condition-specific mortality measures utilized in the Medicare pay-for-performance programs. 3M APR DRGs and ROM designations 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. DRGs with palliative care discharges are excluded but those with palliative care for selected DRGs are re-included. ADM-DRGs that are not in the top 80% of cumulative deaths are excluded. All DRGs in the measure that have the same number of observed deaths as the DRG at the 80% cut point are included.
2. ADM-DRG ROM with state-wide cell sizes below 20 after removing all the exclusions
3. Rehab hospitals (provider IDs that start with 213)
4. Hospitals with <100 HCAHPS surveys (RY 2024: UMROI, Chestertown)
5. Transfers to other acute hospitals (PAT_DISP= 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)
3. Age squared
4. Sex
5. Palliative Care Status (ICD-10 code = Z51.5)
6. 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, MIEMSSDESIGNATED FACILITY). NOT LIMITED TO ONLY IP SERVICES.
7. COVID-19 Flag: Primary or Secondary Diagnosis

Data Sources

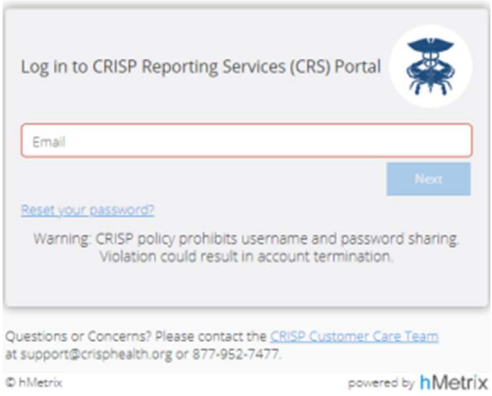
The HSCRC's inpatient case-mix dataset is used for this report. The Inpatient Mortality summary reports and case-level data are provided to hospitals quarterly based on preliminary and final data. Reports are available on the CRS portal.

Static Reports User Guide

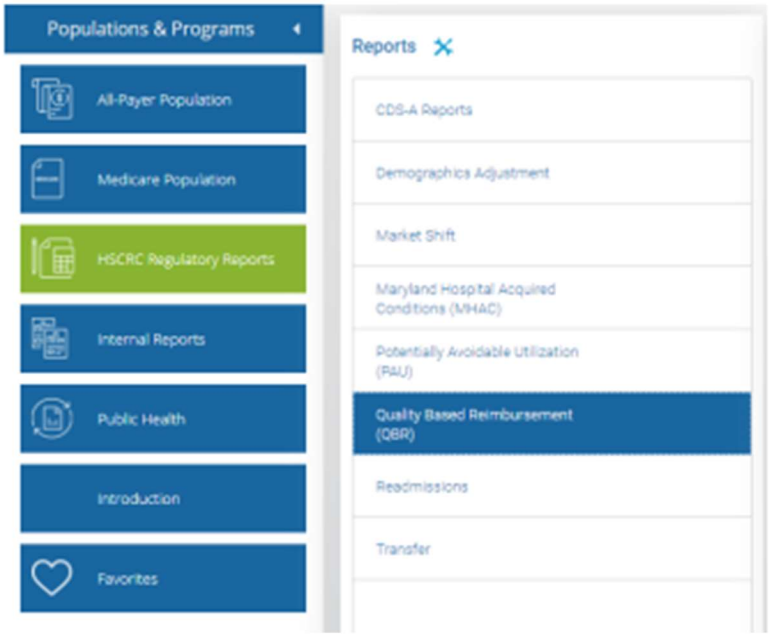
QBR Report Access/Card

The Inpatient Mortality reports can be accessed by visiting reports.crisphealth.org and logging-in with a CRS username and password. There are both summary and detail-level static reports. Note: Only users credentialed for PHI access may access the detail-level reports.

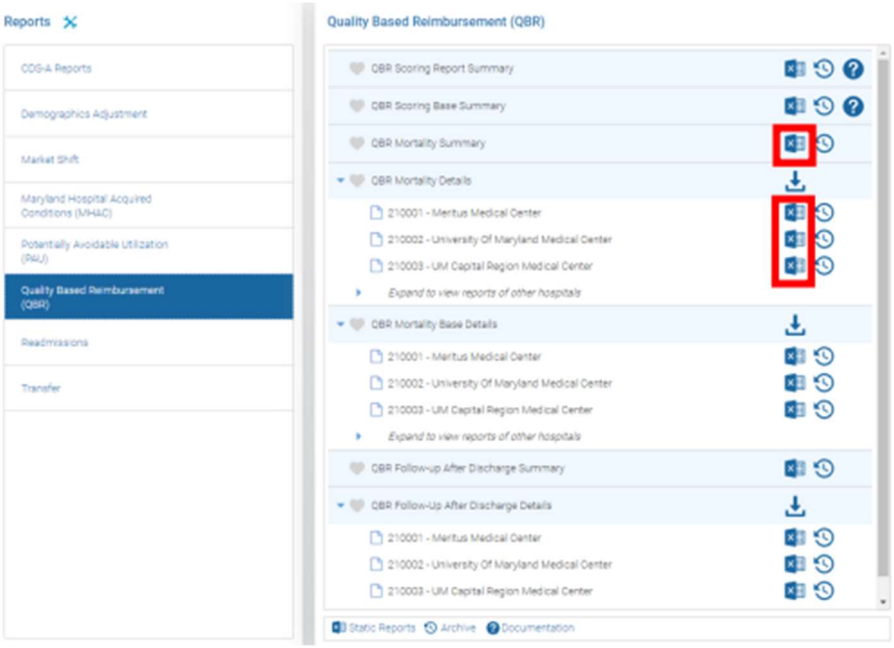
Step 1. To access the QBR Report card, a user must first login to the CRISP Reporting Services Portal by visiting reports.crisphealth.org. The following screenshots represent the user's workflow.



Step 2. Once in the CRS Portal, a dashboard of different blue report "cards" will appear based on the access permissions of the user. Clicking the card named "QBR" will bring up the available reports for this category.



Step 3. By clicking the excel icon as shown below, you will access the most recent static summary file. An excel workbook will open with all available tabs. If you have permission, you can also access the by hospital detail level static files as shown below.

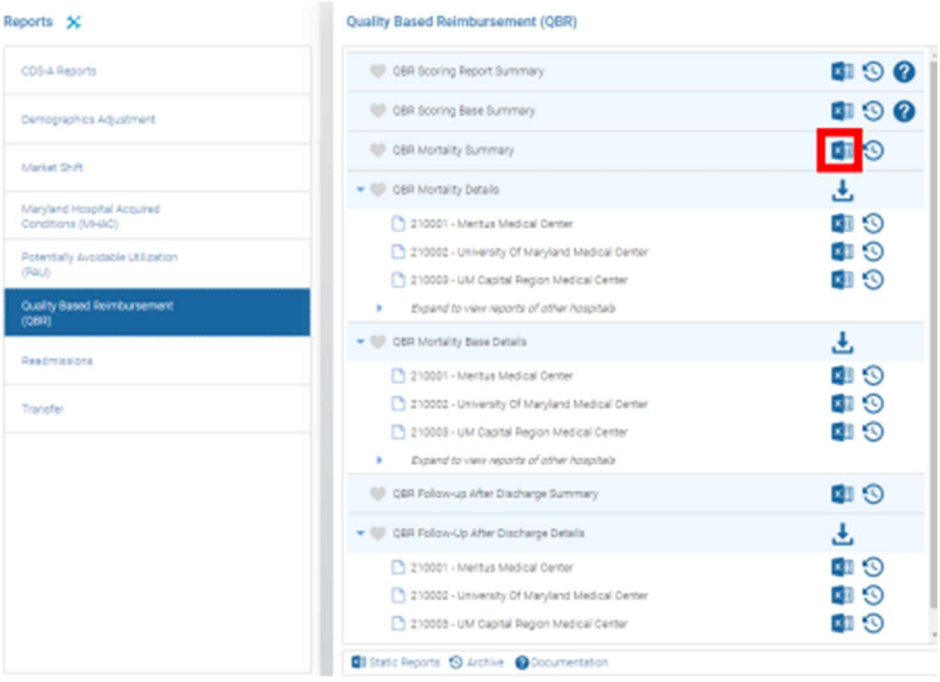


Inpatient Mortality Reports

You can view the QBR Calculation sheet at the HSCRC Website under the Data Workbooks section, or also under the "?" icon, as shown below, in the CRS Portal Report, to see a more detailed breakdown on scoring.

Sheets included in workbook:

1. Cover Sheet
2. Base
3. Performance

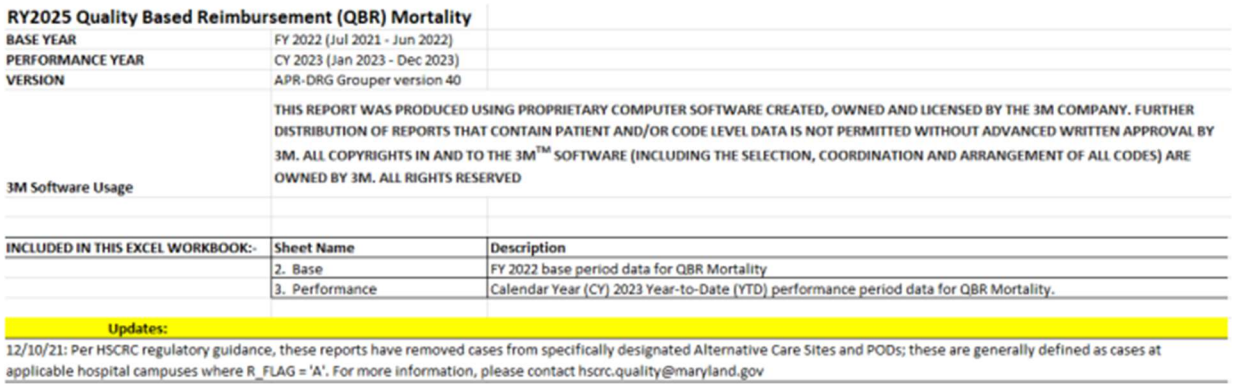


The following metrics can be found in the Mortality Reports:

Metric	Description
TOTAL_NUMBER_DISCHARGES	Number of discharges
OBSERVED_MORTALITY_RATE	Number of deaths/total number of cases
PREDICTED_MORTALITY_RATE	Predicted based on based year hospital data with adjustments
RATIO_OF_OBSERVED_TO_PREDICTED	Observed mortality rate/predicted mortality rate
RISK_ADJUSTED_MORTALITY_RATE	Risk of death adjusted for admission APR DRG with risk of mortality, age, gender, palliative care status, transfer from an institution
RISK_ADJUSTED_SURVIVAL_RATE	Survival rate adjusted for admission APR DRG with risk of mortality, age, gender, palliative care status, transfer from an institution
NUMBER OF DEAD	Number of deaths
AVERAGE OF DEAD	Average number of deaths

(1) Cover Sheet

The cover sheet provides an overview of each sheet available in the QBR Mortality Report.



RY2025 Quality Based Reimbursement (QBR) Mortality

BASE YEAR	FY 2022 (Jul 2021 - Jun 2022)
PERFORMANCE YEAR	CY 2023 (Jan 2023 - Dec 2023)
VERSION	APR-DRG Grouper version 40
3M Software Usage	THIS REPORT WAS PRODUCED USING PROPRIETARY COMPUTER SOFTWARE CREATED, OWNED AND LICENSED BY THE 3M COMPANY. FURTHER DISTRIBUTION OF REPORTS THAT CONTAIN PATIENT AND/OR CODE LEVEL DATA IS NOT PERMITTED WITHOUT ADVANCED WRITTEN APPROVAL BY 3M. ALL COPYRIGHTS IN AND TO THE 3M™ SOFTWARE (INCLUDING THE SELECTION, COORDINATION AND ARRANGEMENT OF ALL CODES) ARE OWNED BY 3M. ALL RIGHTS RESERVED

INCLUDED IN THIS EXCEL WORKBOOK:-	Sheet Name	Description
	2. Base	FY 2022 base period data for QBR Mortality
	3. Performance	Calendar Year (CY) 2023 Year-to-Date (YTD) performance period data for QBR Mortality.

Updates:

12/10/21: Per HSCRC regulatory guidance, these reports have removed cases from specifically designated Alternative Care Sites and PODs; these are generally defined as cases at applicable hospital campuses where R_FLAG = 'A'. For more information, please contact hscrc.quality@maryland.gov

(2) FY2022 Base

This sheet provides a summary of the Mortality Statistics for each hospital for FY2022.

Mortality Statistics by Hospital, Base period – FY2022

HOSPID	HOSPITALNAME	TOTAL_NUMBER_DISCHARGES	OBSERVED_MORTALITY_RATE	PREDICTED_MORTALITY_RATE	RATIO_OF_OBSERVED_TO_PREDICTED	RISK_ADJUSTED_MORTALITY_RATE	RISK_ADJUSTED_SURVIVAL_RATE	NUMBER OF DEAD	Average of Dead

(3) CY2023 Performance

This sheet provides a summary of the mortality statistics by hospital for CY2023.

Inpatient Mortality Detail-Level Reports

Separately, the HSCRC produces a detail-level report of inpatient mortality by hospital.

Sheets included in workbook: **CY2023 Performance Period**

The following metrics can be found in the PHI Mortality reports:

Metric	Description
Hospital ID	Hospital's unique identification number
Medical Record Number	Patient's unique identification number
Admission Date	Date of patient's admission
Discharge Date	Date of patient's discharge
Admit DRG+ Risk of Mortality	DRG# + Risk of Mortality (1-4)
Age in Years	Age of Patient (Pt)
Age Squared	Patient's Age
Sex	(0=Female or Other, 1=Male)
Transferred from Other Hospitals	(0=No, 1=Yes)
Death	(0=No, 1=Yes)
Palliative Care	(0=No, 1=Yes)
COVID-19 Confirmed Flag	COVID-19 as Primary or Secondary Diagnosis

CY2023 Performance Period

This sheet provides detail-level mortality statistics by hospital for CY 2023.