Reviewing Your Fiscal Year 2025 Hospital Value-Based Purchasing Program Mortality and Complication Measures Hospital-Specific Report

Inpatient Value, Incentives, and Quality Reporting (VIQR) Outreach and Education Support Contract

May 22, 2024

Speakers

Maria Gugliuzza, MBA
Hospital Value-Based Purchasing (VBP) Program Lead
Inpatient VIQR Outreach and Education Support Contract

Mike Miller
Hospital Quality Reporting Analytics Team

Manjiri Joshi, MPH
Measure Implementation and Stakeholder Communication Lead
Hospital Outcome Measure Development, Reevaluation, and Implementation Contractor

Purpose

This event will provide an overview of the Hospital-Specific Reports (HSRs) for the mortality and complication measures used in the fiscal year (FY) 2025 Hospital VBP Program. This includes measure methodology, measure calculations, HSR access, and instructions for submitting a review and correction request.

Objectives

Participants will be able to:

- Understand the FY 2025 Hospital VBP Program HSR for the mortality and complication measures.
- Access and review the HSR.
- Submit a review and correction request for the Hospital VBP Program measures.

Acronyms

AMI	Acute Myocardial Infarction	**HSR**	Hospital-Specific Report
CABG	Coronary Artery Bypass Graft	**ICD**	International Classification of Diseases
CBM	claims-based measure	**MFT**	Managed File Transfer
CCN	CMS Certification Number	**MSPB**	Medicare Spending per Beneficiary
CCSQ	Center for Clinical Standards & Quality	**PN**	pneumonia
CMS	Centers for Medicare & Medicaid Services	**POA**	Point of Admission
COPD	Chronic Obstructive Pulmonary Disease	**Q**	quarter
ECE	extraordinary circumstance exception	**RSCR**	Risk-Standardized Complication Rate
FFS	fee for service	**RSMR**	Risk-Standardized Mortality Rate
FY	fiscal year	**THA**	Total Hip Arthroplasty
HARP	Health Care Quality Information System Access Role and Profile	**TKA**	Total Knee Arthroplasty
HF	heart failure	**VBP**	value-based purchasing
HIPPA	Health Insurance Portability and Accountability Act	**VIQR**	Value, Incentives, and Quality Reporting
HQR	Hospital Quality Reporting		

Maria Gugliuzza, MBA, Hospital VBP Program Lead
Inpatient VIQR Outreach and Education Support Contractor

Included Measures and Important Notes

HSR Overview

- **Purpose of Report**: HSRs are provided for claims-based measures (CBMs) so that hospitals may review and request correction to the calculations of the performance period measure results prior to the results being used to calculate a hospital's Total Performance Score.
- **Included Measures**:
  - Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following:
    - Acute Myocardial Infarction (AMI) Hospitalization
    - Chronic Obstructive Pulmonary Disease (COPD) Hospitalization
    - Coronary Artery Bypass Graft (CABG) Surgery
    - Heart Failure (HF) Hospitalization
    - Pneumonia (PN) Hospitalization
  - Hospital 90-Day, Risk-Standardized Complication Rate (RSCR) Following Primary Elective Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA)

Hospital VBP Program
FY 2025 Measurement Periods

Measure	Performance Period	Updated Discharge Period*
Hospital 30-Day, All-Cause, RSMR Following: • AMI Hospitalization • COPD Hospitalization • CABG Surgery • HF Hospitalization	July 1, 2020–June 30, 2023	N/A
Hospital 90-Day, RSCR Following: • Primary Elective THA and/or TKA	Apr. 1, 2020– March 31, 2023	July 1, 2020–March 31, 2023*

*In response to the COVID-19 public health emergency, CMS is not using claims data reflecting services provided January 1, 2020–June 30, 2020, (Q1 and Q2 2020) in its calculations for the Medicare quality reporting programs. The discharge period in this report has been updated to reflect this policy.

Performance Period Due to COVID-19 Exception

- In response to the COVID-19 public health emergency, CMS is not using claims data reflecting services provided January 1, 2020–June 30, 2020, (Q1 and Q2 2020) in its calculations for the Medicare quality reporting programs. The reporting periods for complication measure have been updated to reflect this policy. This change was finalized in FY 2022 Hospital Inpatient Prospective Payment System/Long-Term Care Hospitals Prospective Payment System final rule.
- The THA/TKA payment measure identifies complications within 90 days of each index stay; therefore, the discharge periods for the complication measure ends 90 days, respectively, before January 1, 2020, so that no claims from Q1 and Q2 2020 are used in the measure calculations.
- Hospitals do **not** need to request an Extraordinary Circumstance Exception (ECE) for measures and submissions covered under the COVID-19 exception for Q1 and Q2 2020.

Important Dates

- Hospital VBP Program HSRs were delivered **May 9, 2024**.
- The review and correction period for FY 2025 Hospital VBP Program HSRs is **May 9– June 10, 2024**.

FY 2025 Baseline Measures Reports

Only performance period data will be included in the HSR for the Hospital VBP Program.

- Baseline period data are displayed on your hospital's Baseline Measures Report.
- The FY 2025 Baseline Measures Report was first made available in March of 2024.
- You can access your hospital's FY 2025 Baseline through the *Hospital Quality Reporting (HQR) Secure Portal*: https://hqr.cms.gov/hqrng/login

Coming Soon: Public Reporting CBM HSRs

- CMS anticipates the Public Reporting CBM HSRs will be delivered to hospitals in late April or early May 2024.
- CMS will provide notification of HSR delivery through these Notification Listserve groups:
  - HIQR Notify: Hospital Inpatient Quality Reporting (IQR) Program Notifications
  - HVBP Notify: Hospital Inpatient Value-Based Purchasing (HVBP) Program Notifications
- Sign up for those Listserve groups on QualityNet: https://qualitynet.cms.gov/listserv-signup

Coming Soon: Medicare Spending per Beneficiary (MSPB) HSRs

- CMS anticipates the MSPB HSRs will be available to hospitals in May/June 2024.
- CMS will provide notification of HSR delivery through these Notification Listserve groups:
  - HIQR Notify: Hospital Inpatient Quality Reporting (IQR) Program Notifications
  - HVBP Notify: Hospital Inpatient Value-Based Purchasing (HVBP) Program Notifications
- Sign up for those Listserve groups on QualityNet: https://qualitynet.cms.gov/listserv-signup

Contacts for Questions

You can submit questions regarding measures, HSRs, and the Hospital VBP Program through the Questions and Answers Tool on QualityNet. Include your hospital's six-digit CMS Certification Number (CCN). Use these programs and topics when submitting questions through the tool.

Question Topic	Program Selection	Topic Selection
Mortality Measure Methodology	Inpatient Claims-Based Measures	Morality > Understanding Measure Methodology
Complication Measure Methodology	Inpatient Claims-Based Measures	Complication > Understanding Measure Methodology
Data or Calculations in HSR	Inpatient Claims-Based Measures	HVBP Mortality & Complication > Question About Results
Review and Correction Request	Inpatient Claims-Based Measures	HVBP Mortality & Complication > Review & Correction Request
Request to Resend an HSR	Inpatient Claims-Based Measures	HVBP Mortality & Complication > Request for HVBP HSRs
Hospital VBP Program, COVID-19 Exception, and Individual ECE Requests	HVBP – Hospital Value Based Purchasing	General information (HVBP)

If your profile had a Health Care Quality Information System Access Role and Profile (HARP) account with access to Managed File Transfer (MFT) permissions prior to April 10, 2024, and you cannot download your report, please contact the Center for Clinical Standards & Quality (CCSQ) Service Center at QNetSupport@cms.hhs.gov or (866) 288-8912 (TTY: 877.715.6222) Weekdays 8 a.m. to 8 p.m. Eastern Time.

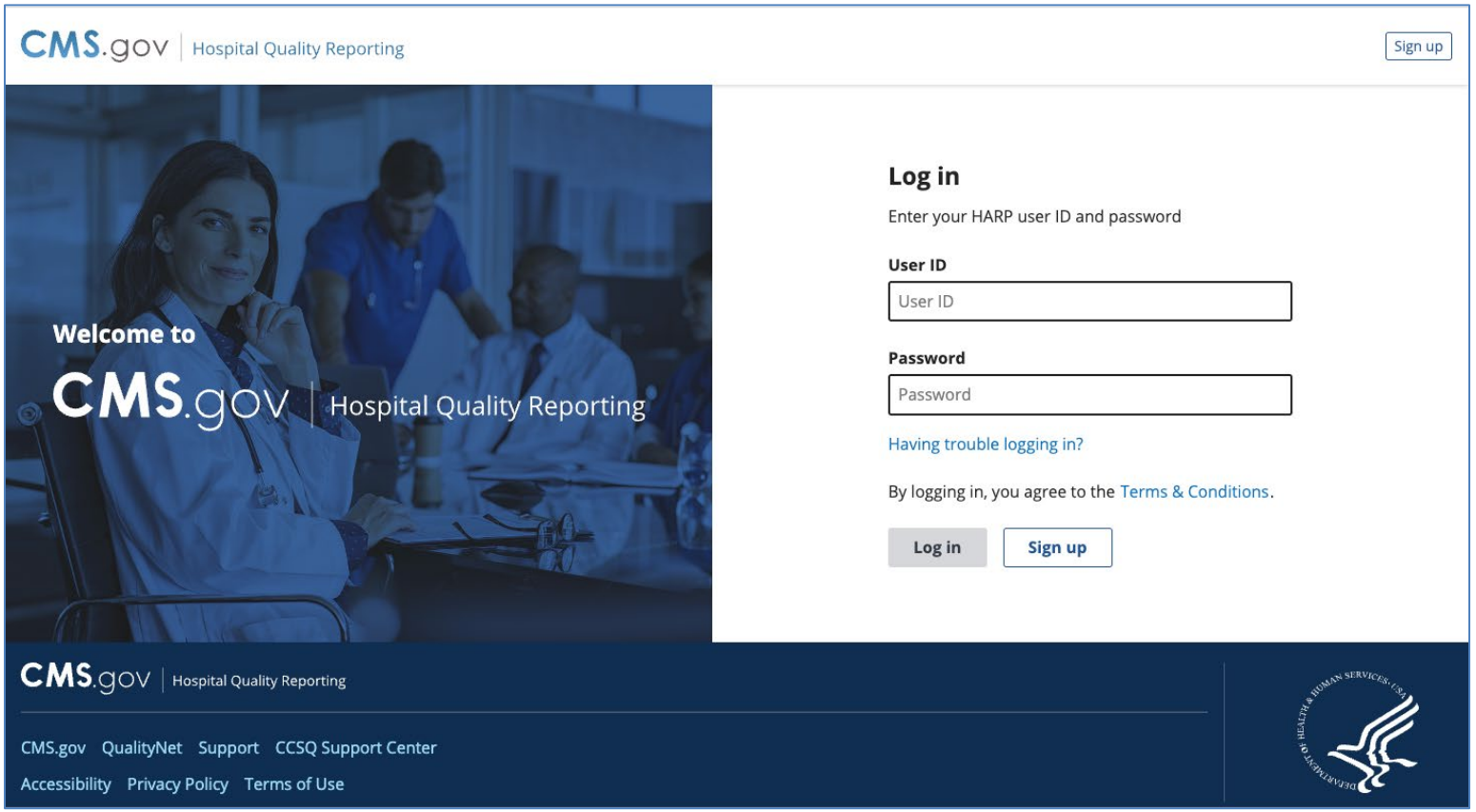
Mike Miller
Hospital Quality Reporting Analytics Team

Accessing the HSRs and User Guide

How to Access Your HSR

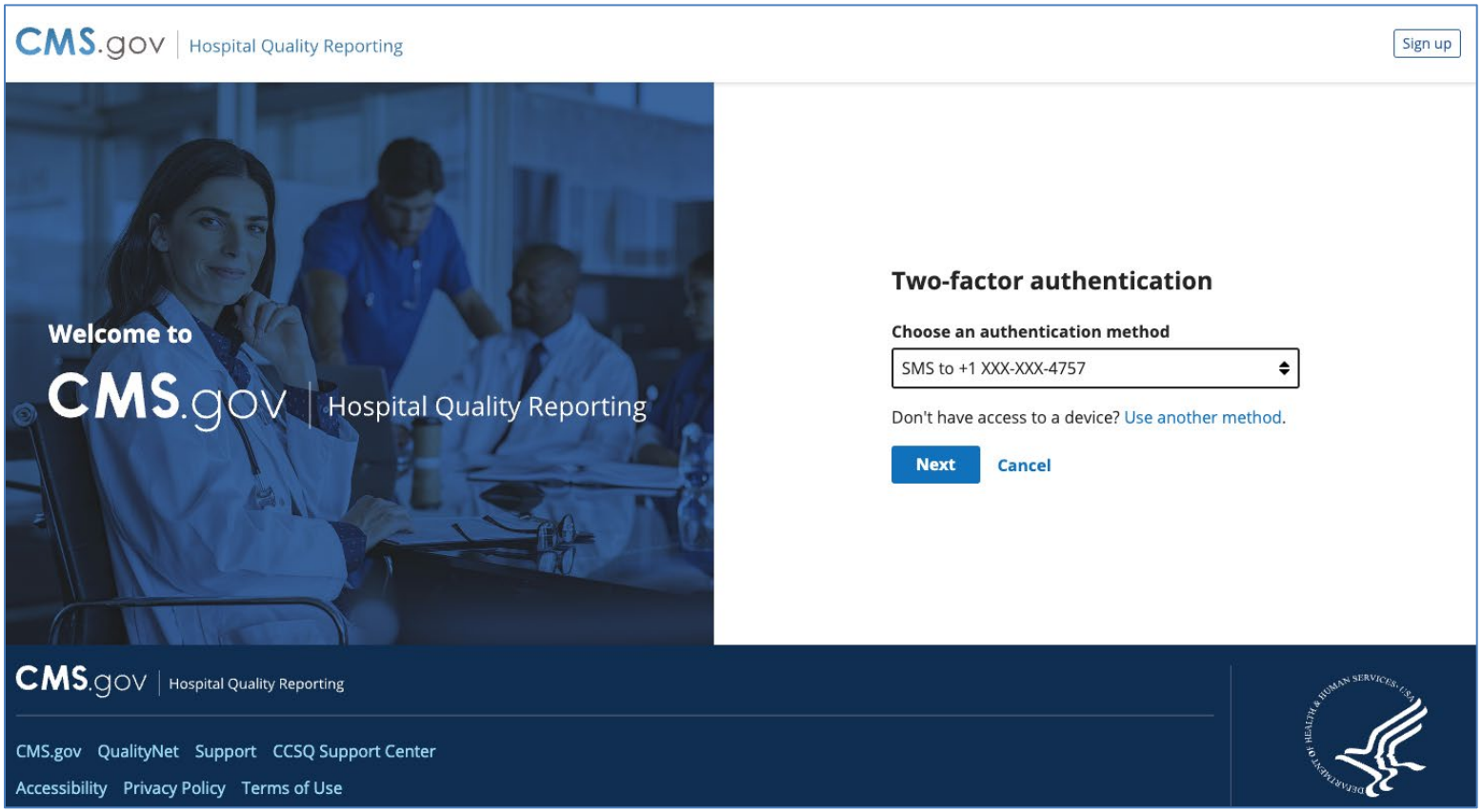
- A Listserve communication was sent via email to those who are registered for the **HIQR Notify: Hospital Inpatient Quality Reporting (IQR) Program Notifications** and the **HVBP Notify: Hospital Inpatient Value-Based Purchasing (HVBP) Program Notifications** Listserve groups on *QualityNet* announcing the reports would be available no later than April 4.
- The FY 2025 Hospital VBP Mortality and Complication HSRs can now be downloaded directly from the HQR system: https://hqr.cms.gov/hqrng/login
- The HQR system requires users to have a HARP account with access to MFT to log on.

Accessing Your HSR



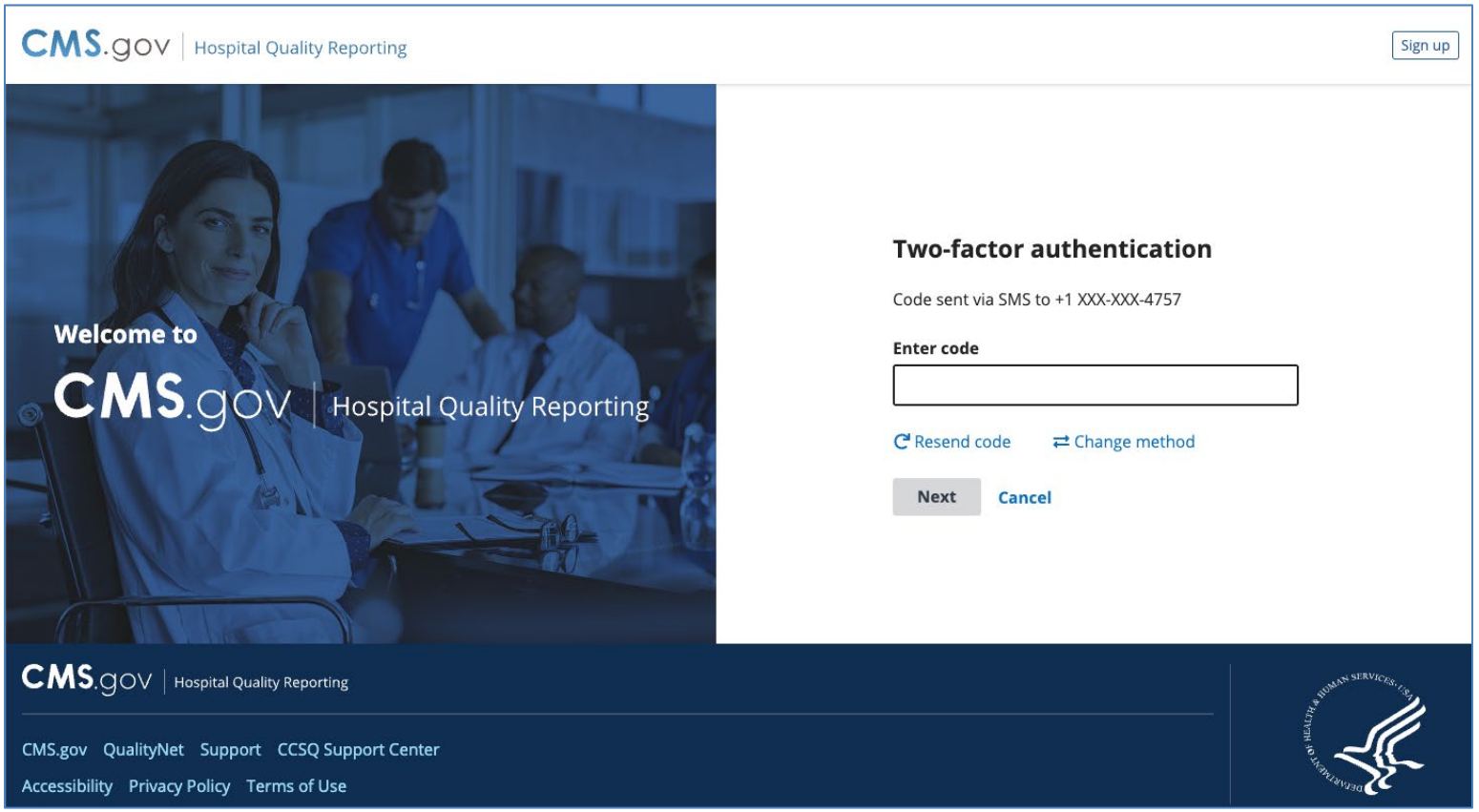
Step 1a: Log into the HQR System using your HARP account.

Accessing Your HSR



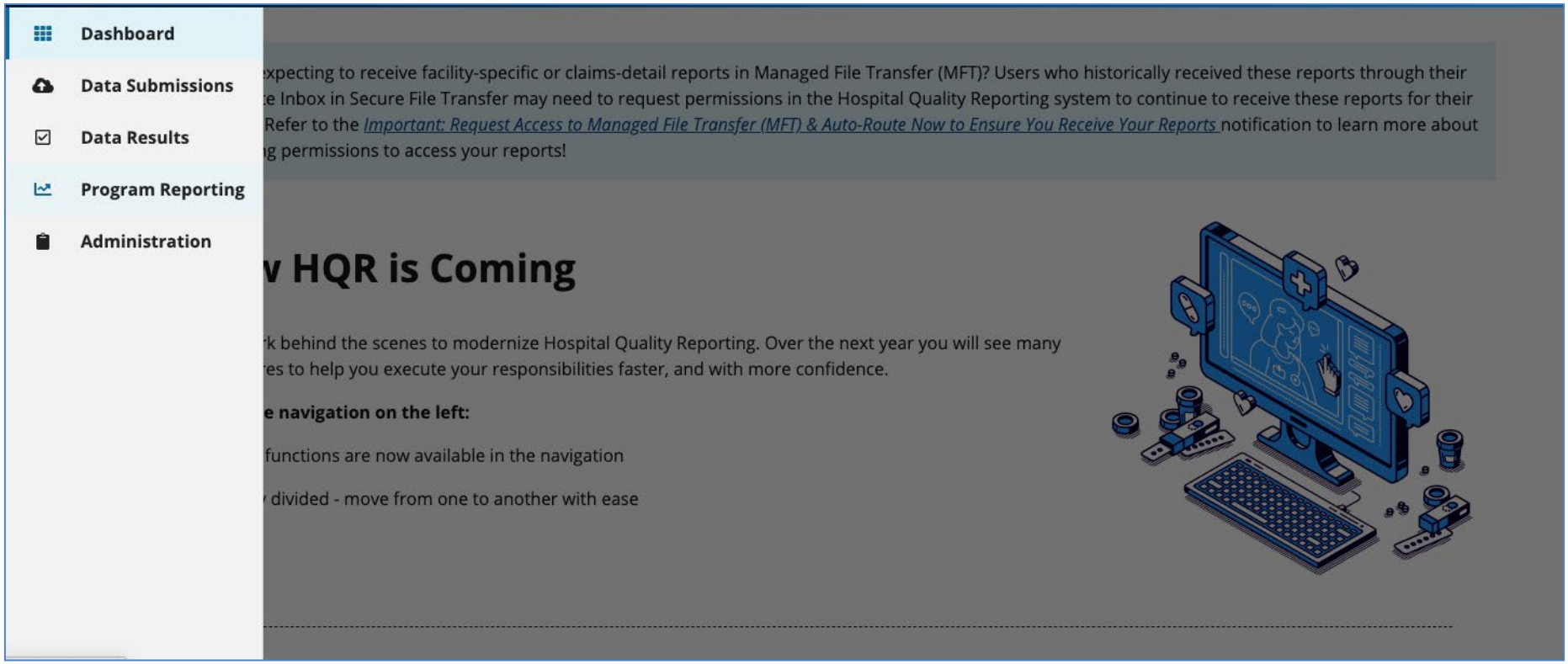
Step 1b: Choose the authentication method.

Accessing Your HSR



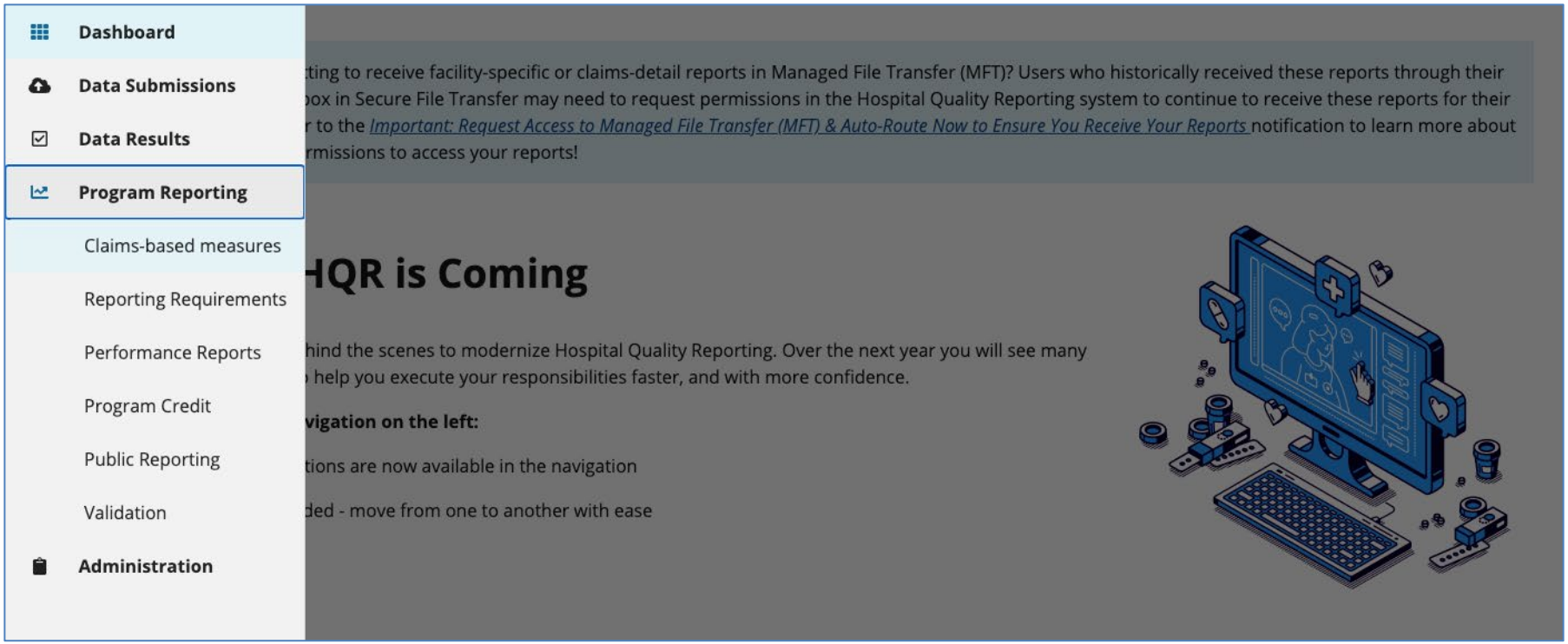
Step 1c: Enter your code.

Accessing Your HSR



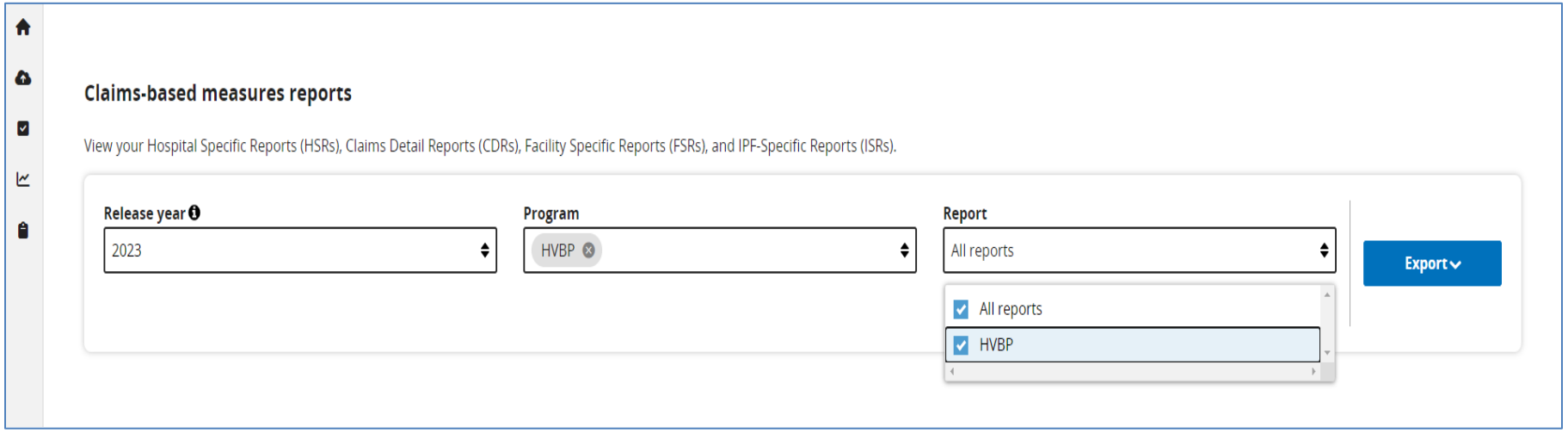
Step 2a: Go to the navigation menu on the left side of your screen.

Accessing Your HSR



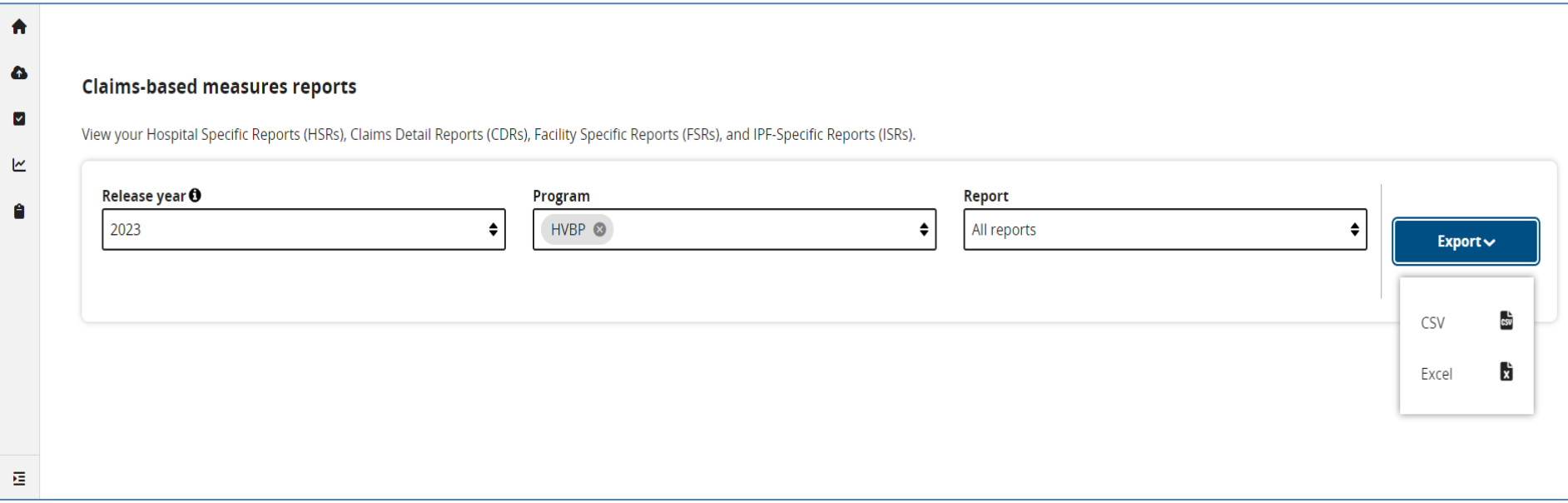
Step 2b: Select Program Reporting and then select Claims-based measures.

Accessing Your HSR



Step 2c: Select the Release year, Program as HVBP, and the report.

Accessing Your HSR



Step 2d: Select your preferred file type for download.

HSR User Guide

The FY2025-HVBP-Mortality-Complication-HUG.pdf is the User Guide accompanying the HSRs with additional information about the measure data.

The User Guide is also available on QualityNet: https://qualitynet.cms.gov/inpatient/measures/hvbp-mortality-complication/resources.

Manjiri Joshi, MPH
Measure Implementation and Stakeholder Communication Lead
Hospital Outcome Measure Development, Reevaluation, and Implementation Coordinator

COVID-19 Impact on Mortality and Complication Measures

Cohort

The mortality and complication measures reported in Spring 2024 continue to exclude index admissions with either of the following:

- Principal diagnosis of COVID-19 (ICD-10-CM code U07.1) OR
- Secondary diagnosis code of COVID-19 coded as Present on Admission (POA) on the index admission claim

Risk Adjustment

The mortality and complication measures continue to risk adjust for a "**History of COVID-19"** variable defined as any of the following codes:

- ICD-10-CM code U07.1 as principal or secondary diagnosis on a historical claim
- Personal history of COVID-19 as a secondary diagnosis on the index or historical claim identified by one of the following codes:
  - ICD-10-CM code Z86.16
  - ICD-10-CM code J12.82 Pneumonia due to coronavirus disease
  - ICD-10-CM code U09.9 Post COVID-19 condition, unspecified

Mortality Outcomes

Patients who died from COVID-19 within 30 days are not excluded from the outcomes since the cause of death is not available.

THA/TKA Complication Outcome

- Remove admissions with a principal or with a secondary diagnosis of COVID-19 coded as POA for only the following complications:
  - AMI
  - Pneumonia or other acute respiratory complication
  - Sepsis/septicemia/shock
  - Pulmonary embolism
- Patients with a principal or secondary diagnosis of COVID-19 and the following complications will remain in the outcome:
  - Mortality (cause of death is not available)
  - Mechanical and wound complication, or surgical site bleeding (not conceptually related to COVID-19)

Mike Miller
Hospital Quality Reporting Analytics Team

Hospital VBP Program Mortality HSRs

Table 1 Hospital Results

Table 1. 30-Day Mortality Measure Results for the Hospital VBP Performance Period

HOSPITAL NAME

Hospital Discharge Period: July 1, 2020 through June 30, 2023

Measure	Number of Eligible Discharges [a]	Performance Period Survival Rate [b]	Achievement Threshold [c]	Benchmark [d]
AMI 30-Day Mortality	7	0.873605	0.872624	0.889994
COPD 30-Day Mortality	16	0.900302	0.915127	0.932236
HF 30-Day Mortality	29	0.889045	0.883990	0.910344
Pneumonia 30-Day Mortality	26	0.781171	0.841475	0.874425
CABG 30-Day Mortality	2	0.971828	0.970100	0.979775

[a] Final number of discharges from your hospital used for measure calculation.
Results for hospitals with fewer than 25 eligible discharges will not be used to calculate the score for that measure for the FY 2025 Hospital VBP Performance period; your results are presented here for your information.
[b] FY 2025 Performance Period Survival Rate = 1 – Risk Standardized Mortality Rate (RSMR). See Table 2 for RSMR.
[c] Achievement Threshold = the median survival rate among all hospitals with measure results that meet the minimum case size (n=25) during the FY 2025 baseline period (July 1, 2015 - June 30, 2018 for AMI, COPD, HF, Pneumonia and CABG measures).
[d] Benchmark = the mean of the top decile of survival rates among all hospitals with measure results that meet the minimum case size (n=25) during the FY 2025 baseline period (July 1, 2015 - June 30, 2018 for AMI, COPD, HF, Pneumonia and CABG measures).

Notes:
1. N/A = Your hospital had no qualifying cases for the measure.
2. AMI = acute myocardial infarction; COPD = chronic obstructive pulmonary disease; HF = heart failure; CABG = coronary artery bypass graft

Table 2 Additional Information

Table 2. Additional Information for Replicating Your Hospital's Risk-Standardized Mortality Results for the Hospital VBP Performance Period

HOSPITAL NAME

Hospital Discharge Period: July 1, 2020 through June 30, 2023

Measure	Number of Eligible Discharges [a]	Predicted Deaths [b]	Expected Deaths [c]	National Observed Mortality Rate [d]	Risk-Standardized Mortality Rate [e]	Performance Period Survival Rate [f]
AMI 30-Day Mortality	7	1.00	1.00	0.126399	0.126395	0.873605
COPD 30-Day Mortality	16	1.62	1.58	0.097126	0.099698	0.900302
HF 30-Day Mortality	29	3.67	3.99	0.120667	0.110955	0.889045
Pneumonia 30-Day Mortality	26	5.83	4.83	0.181440	0.218829	0.781171
CABG 30-Day Mortality	2	0.05	0.05	0.028507	0.028172	0.971828

[a] Final number of discharges from your hospital used for measure calculation.
[b] The number of predicted deaths within 30 days from admission, on the basis of your hospital's performance with its observed case mix and your hospital's estimated effect on mortality (provided in your hospital discharge-level data). The numbers of predicted deaths are not whole numbers because they are generated from a statistical model.
[c] The number of expected deaths within 30 days of admission, on the basis of average hospital performance with your hospital's case mix and the average hospital effect (provided in your hospital discharge-level data). The numbers of expected deaths are not whole numbers because they are generated from a statistical model.
[d] National Observed Mortality Rate = (Number of observed 30-day deaths nationally / Number of eligible discharges nationally).
[e] Risk-Standardized Mortality Rate (RSMR) = (Predicted Deaths / Expected Deaths) * National Observed Mortality Rate.
[f] Performance Period Survival Rate = (1 - RSMR).

Notes:
1. The information in this table is provided only to help in replicating your hospital's survival rate in Table 1; other than the number of eligible discharges and the survival rate, information in this table will not be publicly reported.
2. See the Replication Instructions provided as part of the Hospital VBP Program HSR User Guide for more information for replicating your hospital's risk-standardized mortality measure results.
3. N/A = Your hospital had no qualifying cases for the measure.
4. AMI = acute myocardial infarction; COPD = chronic obstructive pulmonary disease; HF = heart failure; CABG = coronary artery bypass graft

Tables 3, 4, 5 and 6 Discharge Tables

ID Number	MBI	Medical Record Number	Beneficiary DOB	Admit Date of Index Stay	Discharge Date of Index Stay	Principal Diagnosis	Discharge Destination	Index Stay (Yes/No)	Inclusion/ Exclusion Indicator
--	--	--	--	--	--	--	--	--	--
1	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	20	Yes	0

- The discharge tables contain discharge-level data for all Part A Medicare Fee for Service (FFS) patients with a principal qualifying diagnosis of AMI, COPD, HF or CABG accordingly; patients with a discharge date in the reporting period; and patients age 65 and above at the time of admission.
- The **ID Number** is provided for use if needed to reference records in this table in an email or otherwise, so that sharing of personally identifiable information or personal health information is avoided.

Tables 3, 4, 5 and 6 Discharge Tables

Death within 30 Days	Death Date	Years over 65 (Continuous)	Male	Chronic Liver Disease	HOSP_EFFECT	AVG_EFFECT
--	--	0.05264004990714	0.10316138020466	0.40319342914279	-3.58751235532285	-3.58746837962789
Yes	99/99/9999	23	1	0	-	-

Row 8 in the HSR contains the model coefficients for each risk factor, which are estimates over data for all hospitals.

Understanding the Mortality Calculations Through Replication

The replication process for the Mortality measures includes the following steps:

- Calculate predicted deaths
- Calculate expected deaths
- Calculate the risk-standardized mortality rate
- Calculate the performance period survival rate

Understanding Your Mortality Calculation – Calculate Predicted Deaths

ID Number	MBI	Medical Record Number	Beneficiary DOB	Admit Date of Index Stay	Discharge Date of Index Stay	Principal Diagnosis	Discharge Destination	Index Stay (Yes/No)
1	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	20	Yes
2	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	1	Yes
3	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	1	Yes
4	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	1	Yes
5	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	1	Yes
6	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	1	Yes
7	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	1	Yes

Limit your replication calculations to rows where “INDEX STAY” (column J) equals “YES.” In this example, “INDEX STAY” of “YES” is represented by discharges for ID 1 through 7.

Understanding Your Mortality Calculation – Calculate Predicted Deaths

	A	J	K	L	N	O	P	Q
6								
7	ID Number	Index Stay (Yes/No)	Inclusion/ Exclusion Indicator	Death within 30 Days	Years over 65 (continuous)	History of mechanical ventilation	Metastatic cancer and acute leukemia	Lung and other severe cancers
8	--	--	--	--	0.03405420316912	0.19357141934084	0.94550633345284	0.45705131037565
9	1	Yes	0	No	3	1	0	0
10	2	Yes	0	No	4	0	0	0
11	3	Yes	0	No	12	0	0	0
12	4	Yes	0	No	9	0	0	0
13	5	Yes	0	No	21	0	0	0
14								
15				Patient ID	Multiply each risk factor flag where Index Stay = "YES" rows by the revelant coefficient found in Row 8			
16				1	=N$8*N9	=O$8O9	=P$8*P9	0
17				2	=N$8*N10	=O$8O10	0	0
18				3	=N$8*N11	0	0	0
19				4	0.306487829	0	0	0
20				5	0.715138267	0	0	0

Understanding Your Mortality Calculation – Calculate Predicted Deaths

	BA	BB	BC	BD	BE	BF
6						
7	Vertebral fractures without spinal cord injury	Major complications of medical care and trauma	HOSP_EFFECT	AVG_EFFECT		
8	0.20603423767796	-0.08732758666131	-3.06119895737601	-3.03377739121104		
9	0	0	-	-		
10	0	0	-	-		
11	0	0	-	-		
12	0	1	-	-		
13	0	1	-	-		
14						
15					SUM	ADD HOSP_EFFECT
16	0	0			=SUM(N16:BB16)	=BE16+BC$8
17	0	0			-0.17718542905313	-3.23838438642914
18	0	0			-0.47079752497354	-3.53199648234955
19	0	-0.087327587			1.81212958895791	-1.24906936841810
20	0	-0.087327587			1.27145398299867	-1.78974497437734

Understanding Your Mortality Calculation – Calculate Predicted Deaths

	BA	BB	BC	BD	BE	BF	BG
6							
7	**Vertebral fractures without spinal cord injury**	**Major complications of medical care and trauma**	**HOSP_EFFECT**	**AVG_EFFECT**			
8	0.20603423767796	-0.08732758666131	-3.06119895737601	-3.03377739121104			
9	0	0	-	-			
10	0	0	-	-			
11	0	0	-	-			
12	0	1	-	-			
13	0	1	-	-			
14							
15					**SUM**	**ADD HOSP_EFFECT**	**Predicted Probability**
16	0	0			-0.32080937081033	-3.38200832818634	=(1/(1+EXP(-1*BF16)))
17	0	0			-0.17718542905313	-3.23838438642914	0.03774652858052
18	0	0			-0.47079752497354	-3.53199648234955	0.02841541691780
19	0	-0.087327587			1.81212958895791	-1.24906936841810	0.22286127717944
20	0	-0.087327587			1.27145398299867	-1.78974497437734	0.14310399321209

Predicted probability for each discharge = (1/(1+EXP(-1 * Add HOSP_EFFECT results)))

Understanding Your Mortality Calculation – Calculate Predicted Deaths

SUM	ADD HOSP_EFFECT	Predicted Probability
-0.32080937081033	-3.38200832818634	0.03286250506773
-0.17718542905313	-3.23838438642914	0.03774652858052
-0.47079752497354	-3.53199648234955	0.02841541691780
1.81212958895791	-1.24906936841810	0.22286127717944
1.27145398299867	-1.78974497437734	0.14310399321209
		Predicted Deaths
	=SUM(BG16:BG20)	0.46498972095758
	Rounded	0.46

Understanding Your Mortality Calculation – Calculate Expected Deaths

HOSP_EFFECT	AVG_EFFECT
-3.06119895737601	-3.03377739121104
-	-
-	-
-	-
-	-
-	-

SUM	ADD HOSP_EFFECT	Predicted Probability	ADD AVG_EFFECT	Predicted Probability
-0.32080937081033	-3.38200832818634	0.03286250506773	-3.35458676202137	0.03374528544679
-0.17718542905313	-3.23838438642914	0.03774652858052	-3.21096282026417	0.03875525031327
-0.47079752497354	-3.53199648234955	0.02841541691780	-3.50457491618458	0.02918234047860
1.81212958895791	-1.24906936841810	0.22286127717944	-1.22164780225313	0.22764659799298
1.27145398299867	-1.78974497437734	0.14310399321209	-1.76232340821237	0.14649958807174

Expected probability for each discharge = (1/(1+exp(-1 * Add AVG_EFFECT results)))

Understanding Your Mortality Calculation – Calculate Expected Deaths

ADD AVG_EFFECT	Predicted Probability
-3.35458676202137	0.0337452854467 9
-3.21096282026417	0.0387552503132 7
-3.50457491618458	0.0291823404786 0
-1.22164780225313	0.2276465979929 8
-1.76232340821237	0.1464995880717 4
	Expected Deaths
=SUM(BJ16:BJ20)	0.4758290623033 7
Rounded	0.48

Calculate the Risk-Standardized Mortality Rate

	BE	BF	BG	BH	BI	BJ	BK	BL	BN
15	**SUM**	**ADD HOSP_EFFECT**	**Predicted Probability**		**ADD AVG_EFFECT**	**Predicted Probability**			
16	-0.32080937081033	-3.38200832818634	0.03286250506773		-3.35458676202137	0.03374528544679			
17	-0.17718542905313	-3.23838438642914	0.03774652858052		-3.21096282026417	0.03875525031327			
18	-0.47079752497354	-3.53199648234955	0.02841541691780		-3.50457491618458	0.02918234047860			
19	1.81212958895791	-1.24906936841810	0.22286127717944		-1.22164780225313	0.22764659799298			
20	1.27145398299867	-1.78974497437734	0.14310399321209		-1.76232340821237	0.14649958807174			
21									
22			**Predicted Deaths**			**Expected Deaths**			
23		=SUM(BG16:BG20)	0.46498972095758		=SUM(BJ16:BJ20)	0.47582906230337			
24		**Rounded**	0.46		**Rounded**	0.48			
25									
26				**=BG23/BJ23**	0.977220094	**Standardized Mortality Rate (SMR)**			
27					0.083139	**National Observed Mortality Rate from Table 2**			
28				**=BI26*BI27**	0.081245	**Risk Standardized Mortality Rate (RSMR)**			

Calculate the Performance Period Survival Rate

	BE	BF	BG	BH	BI	BJ	BK	BL	BM
15	**SUM**	**ADD HOSP_EFFECT**	**Predicted Probability**		**ADD AVG_EFFECT**	**Predicted Probability**			
16	-0.32080937081033	-3.38200832818634	0.03286250506773		-3.35458676202137	0.03374528544679			
17	-0.17718542905313	-3.23838438642914	0.03774652858052		-3.21096282026417	0.03875525031327			
18	-0.47079752497354	-3.53199648234955	0.02841541691780		-3.50457491618458	0.02918234047860			
19	1.81212958895791	-1.24906936841810	0.22286127717944		-1.22164780225313	0.22764659799298			
20	1.27145398299867	-1.78974497437734	0.14310399321209		-1.76232340821237	0.14649958807174			
21									
22			**Predicted Deaths**			**Expected Deaths**			
23		=SUM(BG16:BG20)	0.46498972095758		=SUM(BJ16:BJ20)	0.47582906230337			
24		**Rounded**	0.46		**Rounded**	0.48			
25									
26				**=BG23/BJ23**	0.977220094	**Standardized Mortality Rate (SMR)**			
27					0.083139	**National Observed Mortality Rate from Table 2**			
28				**=BI26*BI27**	0.081245	**Risk Standardized Mortality Rate (RSMR)**			
29									
30				**=1-BI28**	0.918755	**Performance Period Survival Rate**			

Mike Miller
Hospital Quality Reporting Analytics Team

Hospital VBP Program Complication HSRs

Table 1 Hospital Results

Table 1. Risk-Standardized THA/TKA Complication Measure Results for the Hospital VBP Performance Period

HOSPITAL NAME

Hospital Discharge Period: July 1, 2020 through March 31, 2023

Measure	Number of Eligible Discharges [a]	Risk-Standardized Complication Rate [b]	Achievement Threshold [c]	Benchmark [d]
THA/TKA Complication	5	0.032127	0.025332	0.017946

[a] Final number of discharges from your hospital used for measure calculation.
Results for hospitals with fewer than 25 eligible discharges will not be used to calculate the score for that measure for the FY 2025 Hospital VBP Performance period; your results are presented here for your information.
[b] FY 2025 Risk-Standardized Complication Rate = (Predicted Admissions with a Complication / Expected Admissions with a Complication) * National Observed Complication Rate. See Table 2 for additional information.
[c] Achievement Threshold = the median complication rate among all hospitals with measure results and minimum case size (n=25) during the FY 2025 baseline period (April 1, 2015 - March 31, 2018).
[d] Benchmark = the mean of the top decile of complication rates among all hospitals with measure results and minimum case size (n=25) during the FY 2025 baseline period (April 1, 2015 - March 31, 2018).

Notes:
1. N/A = Your hospital had no qualifying discharges or results for the procedure.
2. THA/TKA = total hip arthroplasty/total knee arthroplasty

Table 2 Additional Information

Table 2. Additional Information for Replicating Your Hospital's Risk-Standardized THA/TKA Complication Results for the Hospital VBP Performance Period

HOSPITAL NAME

Hospital Discharge Period: July 1, 2020 through March 31, 2023

Measure	Number of Eligible Discharges [a]	Predicted Admissions with a Complication [b]	Expected Admissions with a Complication [c]	National Observed Complication Rate [d]	Risk-Standardized Complication Rate [e]
THA/TKA Complication	5	0.18	0.16	0.028727	0.032127

[a] Final number of discharges from your hospital used for measure calculation.
[b] The number of predicted complications within 90 days from the start of the index admission, on the basis of your hospital's performance with its observed case mix and your hospital's estimated effect on complications (provided in your hospital discharge-level data). The numbers of predicted complications are not whole numbers because they are generated from a statistical model. A patient may have more than one complication associated with an index admission, but only one complication is counted in the raw complication rate.

[c] The number of expected complications within 90 days of the index admission, on the basis of average hospital performance with your hospital's case mix and the average hospital effect (provided in your hospital discharge-level data). The numbers of expected complications are not whole numbers because they are generated from a statistical model. A patient may have more than one complication associated with an index admission, but only one complication is counted in the raw complication rate.

[d] National Observed Complication Rate = (Number of observed 90-day complications nationally / Number of eligible discharges nationally).
[e] Risk-Standardized Complication Rate = (Predicted Admissions with a Complication / Expected Admissions with a Complication) * National Observed Complication Rate.

Notes:
1. The information in this table is provided only to help in replicating your hospital's complication rate in Table 1; other than the number of eligible discharges and the complication rate, information in this table will not be publicly reported.
2. See the Replication Instructions provided as part of the Hospital VBP Program HSR User Guide for more information for replicating your hospital's risk-standardized THA/TKA Complication results.
3. N/A = Your hospital had no qualifying discharges or results for the procedure.
4. THA/TKA = total hip arthroplasty/total knee arthroplasty

Table 3 Discharges

ID Number	MBI	Medical Record Number	Beneficiary DOB	Admit Date of Index Stay	Discharge Date of Index Stay	Index Stay (Yes/No)	Additional Complication Record (Yes/No) [a]
--	--	--	--	--	--	--	--
1	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No
2	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	Yes
3	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No
4	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No

- The discharge table contains discharge-level data for Part A Medicare FFS patient stays.
- There are several columns unique to the THA/TKA Complication HSR.
- The same stay can appear multiple times on your Discharges tab if the patient has more than one complication. However, the stay is only included once in the calculation of the measure.

Table 3 Discharges Complication Fields

Complication	Complication Occurred During Index Stay (Yes/No)	Admit Date for Complication (If Not During Index Stay)	Death Date	Readmission to Same Hospital (Yes/No)	Provider ID of Readmitting Hospital [c]
--	--	--	--	--	--
Mechanical complication	No	99/99/9999	N/A	Yes	999999
Infection	No	99/99/9999	N/A	Yes	999999
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A

Understanding the Calculations Through Replication

ID Number	MBI	Medical Record Number	Beneficiary DOB	Admit Date of Index Stay	Discharge Date of Index Stay	Index Stay (Yes/No)	Additional Complication Record (Yes/No) [a]
1	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No
3	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No
4	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No
5	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No
6	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	Yes	No

The replication process for the THA/TKA Complication measure is the same as the Mortality measures with one difference:

In the first step, when you limit your replication calculations to rows where "Index Stay" (column G) equals "Yes," you must also limit them to rows where "Additional Complication Record [a]" (column H) equals "No."

The rest of the replication process would follow the same steps as those outlined for the Mortality measures.

Mike Miller
Hospital Quality Reporting Analytics Team

HSR Review and Correction Requests

Review and Corrections Process

- The review and correction period for FY 2024 Hospital VBP Program HSRs is **May 9– June 10, 2024**.
- A Listserve notification was sent informing hospitals of when HSRs would be available, the review and correction request deadline, and instructions for submitting a review and correction request.
- Review and correction requests sent after the deadline will **not** result in a correction.
- The review and correction period and process are only applicable to the Hospital VBP Program HSRs and do not apply to the *Public Reporting* HSRs, which will be distributed in the upcoming weeks.

Review and Corrections Process

To submit a review and correction request:

- Send via email to qnetsupport@hcqis.org, by phone at (866) 288-8912, or over TTY at (877) 715-6222.
- Use the *QualityNet* Inpatient Question & Answer tool at https://qualitynet.cms.gov/ > Help > Question and Answer Tools: “Hospitals - Inpatient” > Ask a Question
  - Program: Inpatient Claims-Based Measures
  - Topic: HVBP Mortality & Complication > Review & Correction Request

* Please include your hospital’s CCN when submitting your request.

Review and Corrections Process

Do not email HSR files or their contents. HSRs contain discharge-level data protected by Health Insurance Portability and Accountability Act (HIPAA). Any disclosure should only be in accordance with, and to the extent permitted by, the HIPAA Privacy and Security Rules and other applicable law. Use the ID number found within the HSR when referring to the contents of that report.

Review and Corrections Process

What **can** I submit for a review and correction?

What **can't** I submit for a review and correction?

- Suspected calculation errors on your report **can** be submitted for review with the possibility of a correction.
- Requests for submission of new or corrected claims to the underlying data **are not** allowed; they **cannot** be submitted.
- General questions about the HSRs, the Mortality measures, or the Complication measures **can** be submitted.

Questions

Disclaimer

This presentation was current at the time of publication and/or upload onto the Quality Reporting Center and QualityNet websites. Any links to Medicare online source documents are for reference use only. In the case that Medicare policy, requirements, or guidance related to this presentation change following the date of posting, this presentation will not necessarily reflect those changes; given that it will remain as an archived copy,
it will not be updated.

This presentation was prepared as a service to the public and is not intended to grant rights or impose obligations. Any references or links to statutes, regulations, and/or other policy materials included in the presentation are provided as summary information. No material contained therein is intended to take the place of either written laws or regulations. In the event of any conflict between the information provided by the presentation and any information included in any Medicare rules and/or regulations, the rules and regulations shall govern. The specific statutes, regulations, and other interpretive materials should be reviewed independently for a full and accurate statement of their contents.