



# **Reviewing Your Fiscal Year 2026 Hospital Value-Based Purchasing Program Mortality and Complication Measures Hospital-Specific Report**

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**April 30, 2025**

# Speakers

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Program Lead, Hospital Value-Based Purchasing (VBP) Program  
Division of Value, Incentives, and Quality Reporting  
Program Support (DPS) Contractor

## **Mike Miller**

Delivery Manager, Hospital VBP Program  
Hospital Quality Reporting

# Purpose

This event provides an overview of the Hospital-Specific Reports (HSRs) for the mortality and complication measures used in the fiscal year (FY) 2026 Hospital Value-Based Purchasing 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 FY 2026 Hospital VBP Program Mortality and Complication Measures HSR updates.
- Access and review the HSR.
- Submit a review and correction request for the Mortality and Complication Hospital VBP Program measures.

# Acronyms

<b>AMI</b>	Acute Myocardial Infarction	<b>HIPAA</b>	Health Insurance Portability and Accountability Act
<b>CABG</b>	Coronary Artery Bypass Graft	<b>HF</b>	heart failure
<b>CBM</b>	claims-based measure	<b>HSR</b>	Hospital-Specific Report
<b>CMS</b>	Centers for Medicare & Medicaid Services	<b>HQR</b>	Hospital Quality Reporting
<b>COPD</b>	Chronic Obstructive Pulmonary Disease	<b>MFT</b>	Managed File Transfer
<b>DPS</b>	Division of Value, Incentives, and Quality Reporting Program Support	<b>MSPB</b>	Medicare Spending per Beneficiary
<b>FFS</b>	Fee for Service	<b>THA</b>	Total Hip Arthroplasty
<b>FY</b>	fiscal year	<b>TKA</b>	Total Knee Arthroplasty
<b>HARP</b>	Health Care Quality Information System Access Role and Profile	<b>VBP</b>	value-based purchasing

Maria Gugliuzza, MBA, Program Lead  
Hospital VBP Program, DPS Contractor

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## **Included Measures**

# Overview of Mortality and Complication Measures HSRs

- **Purpose of Report:** Mortality and Complication Measures 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:**
  - Acute Myocardial Infarction (AMI) Mortality
  - Heart Failure (HF) Mortality
  - Pneumonia Mortality
  - Chronic Obstructive Pulmonary Disease (COPD) Mortality
  - Coronary Artery Bypass Graft (CABG) Mortality
  - Total Hip Arthroplasty and/or Total Knee Arthroplasty (THA/TKA) Complication

# Hospital VBP Program

## FY 2026 Measurement Periods

Measure	Performance Period
Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following: <ul style="list-style-type: none"><li>• AMI Hospitalization</li><li>• COPD Hospitalization</li><li>• CABG Surgery</li><li>• HF Hospitalization</li><li>• Pneumonia Hospitalization</li></ul>	July 1, 2021–June 30, 2024
Hospital 90-Day, Risk-Standardized Complication Rate Following Primary Elective THA and/or TKA	April 1, 2021– March 31, 2024



# Important Dates

- Hospital VBP Program Mortality and Complication Measures HSRs were delivered **April 14, 2025**.
- The review and correction period for FY 2026 Hospital VBP Program Mortality and Complication Measures HSRs is **April 15–May 14, 2025**.

# FY 2026 Baseline Measures Reports

Only performance period data will be included in the Mortality and Complication Measures HSR for the Hospital VBP Program.

- Baseline period data are displayed on your hospital's Baseline Measures Report.
- The FY 2026 Baseline Measures Report was first made available in March of 2024.
- You can access your hospital's FY 2026 Baseline through the *Hospital Quality Reporting (HQR) Secure Portal*:  
<https://hqr.cms.gov/hqrng/login>

# Coming Soon: Public Reporting Mortality and THA/TKA Complications HSRs

- CMS anticipates delivering Public Reporting Mortality and THA/TKA Complications HSRs to hospitals in late April or early May 2025.
- CMS will provide notification of Public Reporting Mortality HSR and THA/TKA Complications HSR delivery through these Notification Listserve groups:
  - HIQR Notify: Hospital Inpatient Quality Reporting (IQR) Program Notifications
  - Hospital VBP Notify: Hospital Inpatient Value-Based Purchasing (VBP) 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 MSPB HSRs to become available to hospitals in May/June 2025.
- CMS will provide notification of MSPB HSRs delivery through these Notification Listserve groups:
  - HIQR Notify: Hospital Inpatient Quality Reporting (IQR) Program Notifications
  - Hospital VBP Notify: Hospital Inpatient Value-Based Purchasing (VBP) 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 [QualityNet Question and Answer Tool](#). Include your hospital's six-digit CMS Certification Number. Use these programs and topics when submitting questions through the tool.

Question Topic	Program Selection	Topic Selection
Mortality Measure Methodology	Inpatient Claims-Based Measures	Mortality > 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 and Individual Extraordinary Circumstances Exception 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) and you cannot download your report, please contact the Center for Clinical Standards & Quality Service Center at [QNetSupport@cms.hhs.gov](mailto:QNetSupport@cms.hhs.gov) or (866) 288-8912 (TTY: 877.715.6222) weekdays 8 a.m. to 8 p.m. Eastern Time.

Mike Miller, Delivery Manager  
Hospital VBP Program, Hospital Quality Reporting

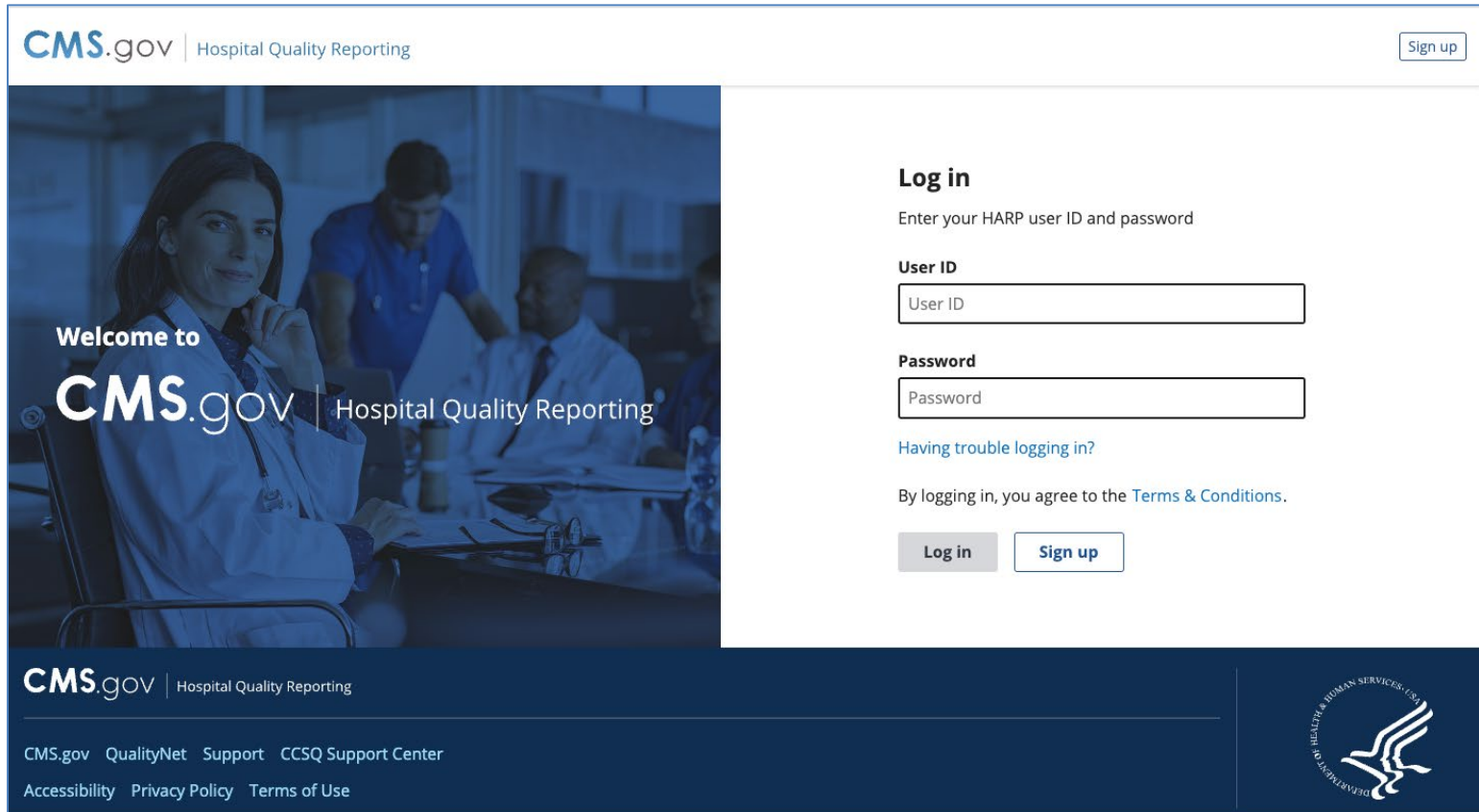
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## **Accessing Mortality and Complication Measures HSRs and User Guide**

# How to Access Your Mortality and Complication Measures HSRs

- CMS sent a Listserve communication via email to those who 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 to announce that reports become available no later than April 14.
- You can directly download the FY 2026 Hospital VBP Program Mortality and Complication HSRs 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 Mortality and Complication Measures HSR



The screenshot shows the CMS.gov Hospital Quality Reporting login page. The header includes the CMS.gov logo and 'Hospital Quality Reporting' text, with a 'Sign up' button in the top right. The main content area features a large image of healthcare professionals on the left and a login form on the right. The login form has a 'Log in' heading, a prompt to enter HARP user ID and password, and two input fields for 'User ID' and 'Password'. Below the fields are links for 'Having trouble logging in?' and 'Terms & Conditions', and 'Log in' and 'Sign up' buttons. The footer contains the CMS.gov logo, navigation links (QualityNet, Support, CCSQ Support Center, Accessibility, Privacy Policy, Terms of Use), and the Department of Health & Human Services logo.

CMS.gov | Hospital Quality Reporting [Sign up](#)

**Welcome to**  
**CMS.gov** | Hospital Quality Reporting

**Log in**  
Enter your HARP user ID and password

**User ID**

**Password**

[Having trouble logging in?](#)

By logging in, you agree to the [Terms & Conditions](#).

[Log in](#) [Sign up](#)

CMS.gov | Hospital Quality Reporting

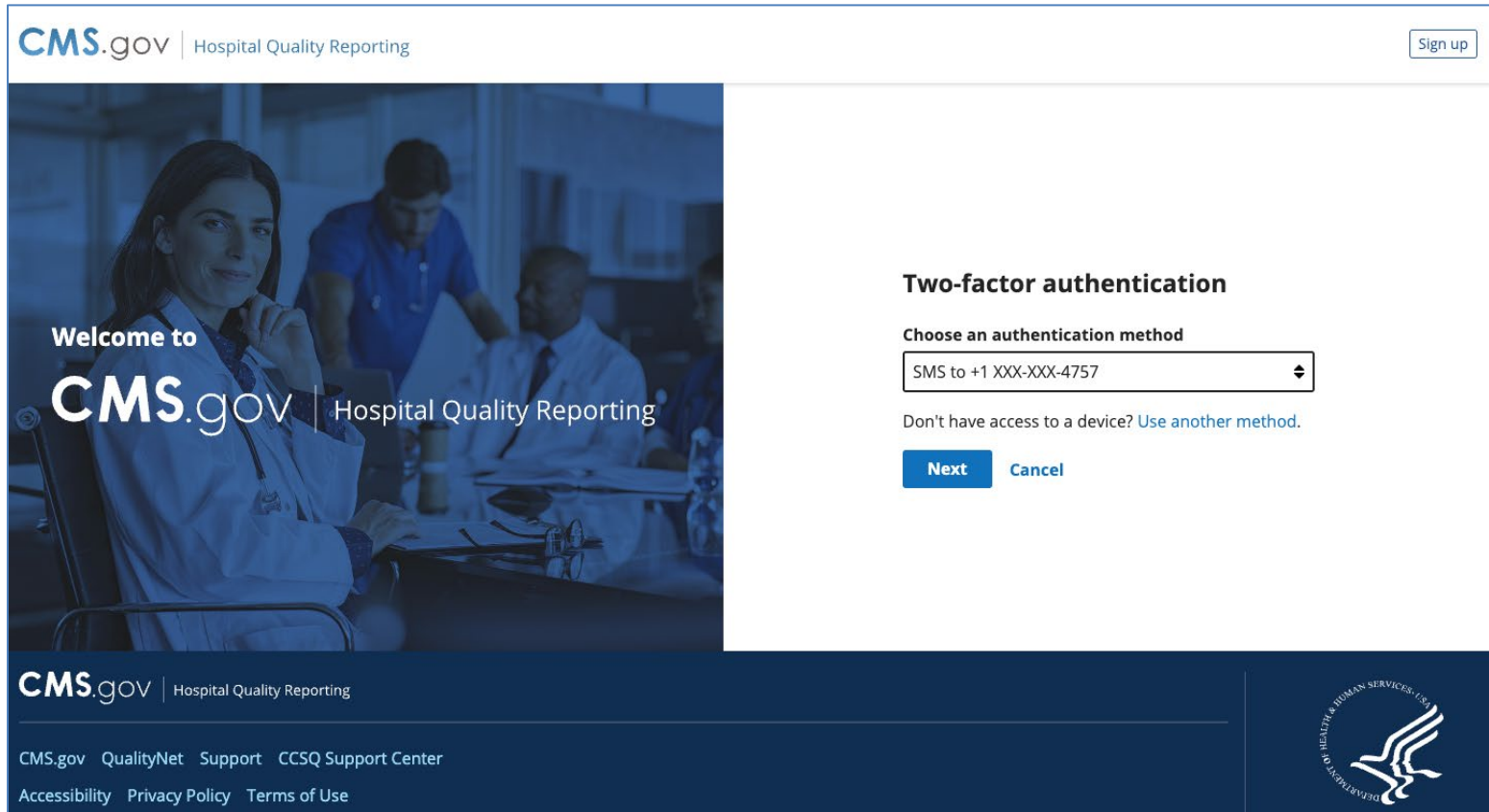
CMS.gov QualityNet Support CCSQ Support Center  
Accessibility Privacy Policy Terms of Use

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



# Accessing Your Mortality and Complication Measures HSR



The screenshot shows the CMS.gov Hospital Quality Reporting login interface. On the left, there is a blue-tinted image of healthcare professionals in a meeting, with the text "Welcome to CMS.gov | Hospital Quality Reporting" overlaid. On the right, the "Two-factor authentication" section is active, prompting the user to "Choose an authentication method". A dropdown menu is open, showing "SMS to +1 XXX-XXX-4757". Below this, a link says "Don't have access to a device? Use another method." At the bottom of the authentication section are "Next" and "Cancel" buttons. The footer contains the CMS.gov logo, navigation links (QualityNet, Support, CCSQ Support Center, Accessibility, Privacy Policy, Terms of Use), and the Department of Health & Human Services logo.

CMS.gov | Hospital Quality Reporting Sign up

Welcome to  
**CMS.gov** | Hospital Quality Reporting

**Two-factor authentication**

Choose an authentication method

SMS to +1 XXX-XXX-4757

Don't have access to a device? [Use another method.](#)

**Next** Cancel

CMS.gov | Hospital Quality Reporting

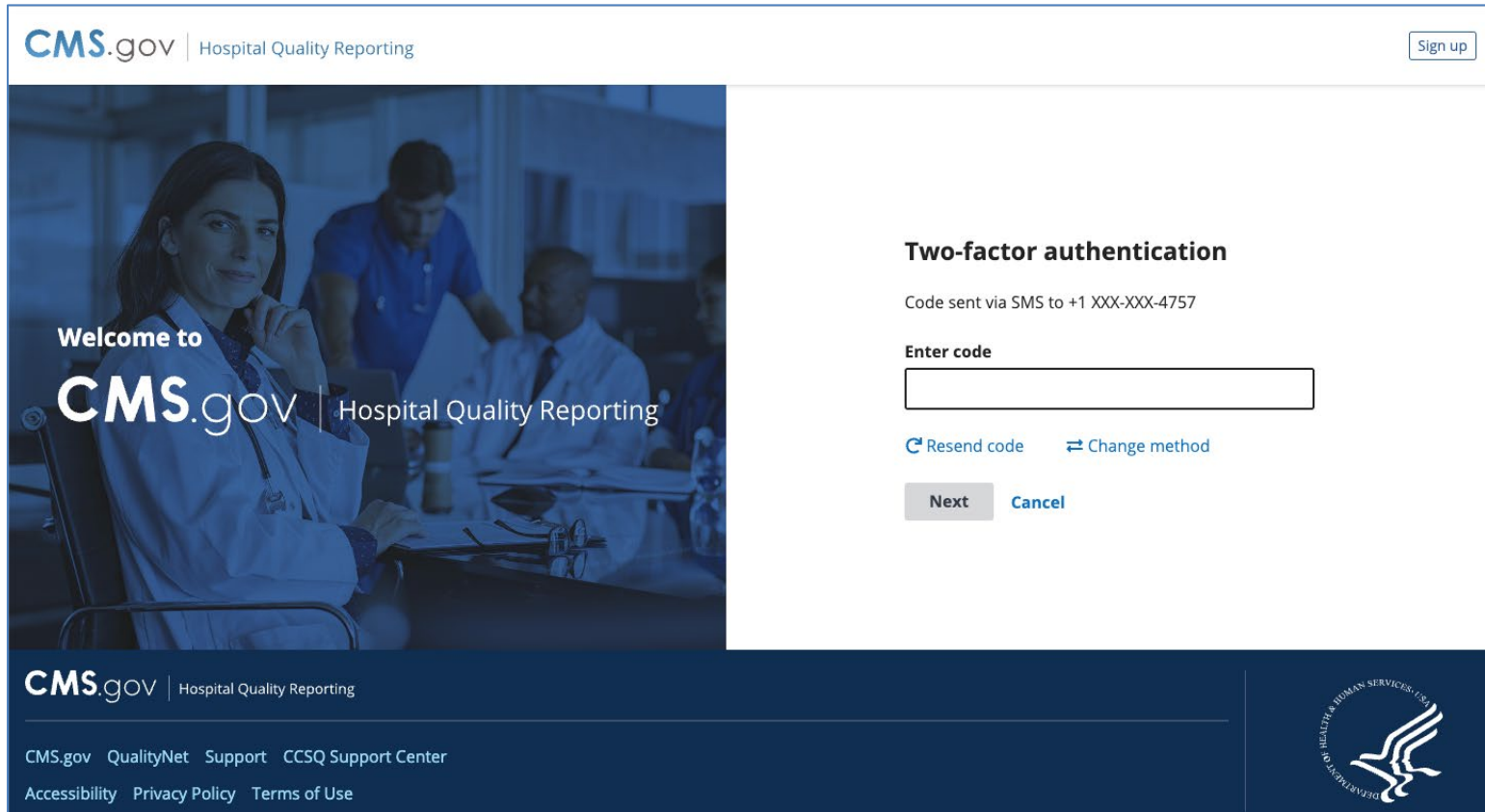
CMS.gov QualityNet Support CCSQ Support Center

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Step 1b: Choose the authentication method.

# Accessing Your Mortality and Complication Measures HSR



The screenshot shows the CMS.gov Hospital Quality Reporting login interface. On the left, a blue-tinted image of healthcare professionals is overlaid with the text "Welcome to CMS.gov | Hospital Quality Reporting". On the right, the "Two-factor authentication" section displays a message: "Code sent via SMS to +1 XXX-XXX-4757". Below this is a text input field labeled "Enter code". Under the input field are two links: "Resend code" and "Change method". At the bottom of this section are "Next" and "Cancel" buttons. The footer contains the CMS.gov logo, navigation links (QualityNet, Support, CCSQ Support Center, Accessibility, Privacy Policy, Terms of Use), and the Department of Health & Human Services logo.

CMS.gov | Hospital Quality Reporting Sign up

Welcome to  
**CMS.gov** | Hospital Quality Reporting

**Two-factor authentication**

Code sent via SMS to +1 XXX-XXX-4757

Enter code

[Resend code](#) [Change method](#)

Next Cancel

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[Accessibility](#) [Privacy Policy](#) [Terms of Use](#)

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Step 1c: Enter your code.

# Accessing Your Mortality and Complication Measures HSR

[Dashboard](#)  
[Program Reporting](#)


**i** Are you expecting to receive facility-specific or claims-detail reports in Managed File Transfer (MFT)? Users who historically received these reports through their AutoRoute Inbox in Secure File Transfer may need to request permissions in the Hospital Quality Reporting system to continue to receive these reports for their facilities. Refer to the [Important: Request Access to Managed File Transfer \(MFT\) & Auto-Route Now to Ensure You Receive Your Reports](#) notification to learn more about requesting permissions to access your reports!

## The New HQR is Coming

We are hard at work behind the scenes to modernize Hospital Quality Reporting. Over the next year you will see many exciting new features to help you execute your responsibilities faster, and with more confidence.

**New! Check out the navigation on the left:**

- ← All features and functions are now available in the navigation
- ← Tasks are clearly divided - move from one to another with ease



Here are some of the key features of the new Hospital Quality Reporting

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

# Accessing Your Mortality and Complication Measures HSR

Dashboard

Program Reporting

Measure details

Are you expecting to receive facility-specific or claims-detail reports in Managed File Transfer (MFT)? Users who historically received these reports through their AutoRoute Inbox in Secure File Transfer may need to request permissions in the Hospital Quality Reporting system to continue to receive these reports for their facilities. Refer to the [Important: Request Access to Managed File Transfer \(MFT\) & Auto-Route Now to Ensure You Receive Your Reports](#) notification to learn more about requesting permissions to access your reports!


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Step 2b: Select Program Reporting and then select Measure details.

# Accessing Your Mortality and Complication Measures HSR

The screenshot displays the CMS Hospital Quality Reporting (HQR) interface. On the left is a navigation menu with 'Dashboard', 'Program Reporting', and 'Measure details' (which is highlighted). Below the menu is an 'Unlock Menu' button. The main content area is titled 'Measure details' and includes a sub-header: 'View your Hospital Specific Reports (HSRs), Claims Detail Reports (CDRs), Facility Specific Reports (FSRs), and IPF-Specific Reports (ISRs)'. A 'Measure details dashboard' card is shown with a 'New' badge and a link to 'View metrics for IQR/PR and overall star rating, and export current reports for these programs.' Below this is a 'Report export' section with the instruction: 'Export current reports for ASCQR, OQR, OIE, Hospital VBP, PCHQR, as well as your past reports for all programs.' This section contains three dropdown menus: 'Release year' (set to 2025), 'Program' (set to HVBP), and 'Report' (set to All reports). To the right of these is an 'Export' button with a dropdown arrow. A dropdown menu is open from the 'Export' button, showing options for 'CSV' and 'Excel'. At the bottom of the interface is a dark blue footer with the CMS.gov logo, 'Hospital Quality Reporting' text, a list of links (CMS.gov, QualityNet, Support, CCSQ Support Center, Idea Portal, Accessibility, Privacy Policy, Terms of Use, Vulnerability Disclosure Policy, PRA Disclosure), a link to 'Help improve HQR. Participate in user feedback >', and the Department of Health & Human Services logo.

Dashboard

Program Reporting

Measure details

Unlock Menu

## Measure details

View your Hospital Specific Reports (HSRs), Claims Detail Reports (CDRs), Facility Specific Reports (FSRs), and IPF-Specific Reports (ISRs).

**Measure details dashboard** New

View metrics for IQR/PR and overall star rating, and export current reports for these programs.

### Report export

Export current reports for ASCQR, OQR, OIE, Hospital VBP, PCHQR, as well as your past reports for all programs.

Release year <sup>i</sup>

2025

Program

HVBP

Report

All reports

Export

CSV

Excel

Help improve HQR. Participate in user feedback >

CMS.gov | Hospital Quality Reporting

CMS.gov QualityNet Support CCSQ Support Center Idea Portal

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DEPARTMENT OF HEALTH & HUMAN SERVICES

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

# Accessing Your Mortality and Complication Measures HSR

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Dashboard

Program Reporting

Measure details

## Measure details

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**Measure details dashboard** New

View metrics for IQR/PR and overall star rating, and export current reports for these programs.

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Release year <sup>1</sup>

2025

Program

HVBP

Report

All reports

Export

CSV

Excel

Help improve HQR. Participate in user feedback >

**CMS.gov** | Hospital Quality Reporting

CMS.gov QualityNet Support CCSQ Support Center Idea Portal

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

# Mortality and Complication Measures HSR User Guide

The User Guide (FY2026-HVBP-Mortality-Complication-HUG.pdf) accompanies the HSRs to provide additional measure data information. The User Guide is also available on QualityNet: <https://qualitynet.cms.gov/inpatient/measures/hvbp-mortality-complication/resources>.

Mike Miller, Delivery Manager  
Hospital VBP Program, Hospital Quality Reporting

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## **Hospital VBP Program Mortality Measures 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, 2021 through June 30, 2024

Measure	Number of Eligible Discharges [a]	Performance Period Survival Rate [b]	Achievement Threshold [c]	Benchmark [d]
AMI 30-Day Mortality	7	0.883142	0.874426	0.890687
COPD 30-Day Mortality	82	0.894048	0.914691	0.932157
HF 30-Day Mortality	256	0.858579	0.885949	0.912874
Pneumonia 30-Day Mortality	269	0.828724	0.843369	0.877097
CABG 30-Day Mortality	1	0.974505	0.970568	0.980473

[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 2026 Hospital VBP Performance period; your results are presented here for your information.

[b] FY 2026 Performance Period Survival Rate =  $1 - \text{Risk Standardized Mortality Rate (RSMR)}$ . 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 2026 baseline period (July 1, 2016 - June 30, 2019 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 2026 baseline period (July 1, 2016 - June 30, 2019 for AMI, COPD, HF, Pneumonia and CABG measures).

Notes:

1. "--" = 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, 2021 through June 30, 2024

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	1.32	1.38	0.121745	0.116858	0.883142
COPD 30-Day Mortality	82	8.84	7.62	0.091365	0.105952	0.894048
HF 30-Day Mortality	256	37.56	31.11	0.117121	0.141421	0.858579
Pneumonia 30-Day Mortality	269	42.18	40.47	0.164328	0.171276	0.828724
CABG 30-Day Mortality	1	0.02	0.02	0.025614	0.025495	0.974505

[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. "--" = 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	2	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	Hospital Effect	Average Effect
--	--	0.05382116481675	0.11675606461046	0.40245298713728	-3.79295059846871	-3.73369487190494
No	--	28	0	0	--	--
No	--	7	1			

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

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	2	Yes
2	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	2	Yes
3	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	2	Yes
4	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I213	3	Yes
5	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	2	Yes
6	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	3	Yes
7	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	I214	62	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	<b>Patient ID</b> <b>Multiply each risk factor flag where Index Stay = "YES" rows by the relevant coefficient found in Row 8</b>							
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
16	0	0			=SUM(N16:BB16)	HOSP_EFFECT
17	0	0			-0.17718542905313	=BE16+BC\$8
18	0	0			-0.47079752497354	-3.23838438642914
19	0	-0.087327587			1.81212958895791	-3.53199648234955
20	0	-0.087327587			1.27145398299867	-1.24906936841810
						-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	$= (1 / (1 + \text{EXP}(-1 * \text{BF16})))$	
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 =  $(1 / (1 + \text{EXP}(-1 * \text{Add HOSP\_EFFECT results})))$

# 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

	BC	BD	BE	BF	BG	BH	BI	BJ
6	<div>HOSP_EFFECT</div> <div>AVG_EFFECT</div>							
7								
8								
9								
10								
11								
12								
13								
14								
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

Expected probability for each discharge =  $(1/(1+\exp(-1 * \text{Add AVG\_EFFECT results})))$

# Understanding Your Mortality Calculation – Calculate Expected Deaths

**ADD**

**AVG\_EFFECT**

**Predicted Probability**

-3.35458676202137	0.03374528544679
-3.21096282026417	0.03875525031327
-3.50457491618458	0.02918234047860
-1.22164780225313	0.22764659799298
-1.76232340821237	0.14649958807174

**Expected Deaths**

**=SUM(BJ16:BJ20)**

0.47582906230337

**Rounded**

0.48

# Calculate the Risk-Standardized Mortality Rate

	BE	BF	BG	BH	BI	BJ	BK	BL	BM
15	<b>SUM</b>	<b>ADD HOSP_EFFECT</b>	<b>Predicted Probability</b>		<b>ADD AVG_EFFECT</b>	<b>Predicted Probability</b>			
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			<b>Predicted Deaths</b>			<b>Expected Deaths</b>			
23		=SUM(BG16:BG20)	0.46498972095758		=SUM(BJ16:BJ20)	0.47582906230337			
24		<b>Rounded</b>	0.46		<b>Rounded</b>	0.48			
25									
26					=BG23/BJ23	0.977220094	<b>Standardized Mortality Rate (SMR)</b>		
27						0.083139	<b>National Observed Mortality Rate from Table 2</b>		
28					=BI26*BI27	0.081245	<b>Risk Standardized Mortality Rate (RSMR)</b>		

# Calculate the Performance Period Survival Rate

	BE	BF	BG	BH	BI	BJ	BK	BL	BM
15	<b>SUM</b>	<b>ADD HOSP_EFFECT</b>	<b>Predicted Probability</b>		<b>ADD AVG_EFFECT</b>	<b>Predicted Probability</b>			
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			<b>Predicted Deaths</b>			<b>Expected Deaths</b>			
23		<b>=SUM(BG16:BG20)</b>	0.46498972095758		<b>=SUM(BJ16:BJ20)</b>	0.47582906230337			
24		<b>Rounded</b>	0.46		<b>Rounded</b>	0.48			
25									
26			<b>=BG23/BJ23</b>		0.977220094	<b>Standardized Mortality Rate (SMR)</b>			
27					0.083139	<b>National Observed Mortality Rate from Table 2</b>			
28			<b>=BI26*BI27</b>		0.081245	<b>Risk Standardized Mortality Rate (RSMR)</b>			
29									
30			<b>=1-BI28</b>		0.918755	<b>Performance Period Survival Rate</b>			

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## **Hospital VBP Program Complication Measures 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: April 1, 2021 through March 31, 2024

Measure	Number of Eligible Discharges [a]	Risk-Standardized Complication Rate [b]	Achievement Threshold [c]	Benchmark [d]
THA/TKA Complication	4	0.029914	0.024019	0.016873

[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 2026 Hospital VBP Performance period; your results are presented here for your information.

[b] FY 2026 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 2026 baseline period (April 1, 2016 - March 31, 2019).

[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 2026 baseline period (April 1, 2016 - March 31, 2019).

Notes:

1. "--" = 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: April 1, 2021 through March 31, 2024

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	4	0.17	0.17	0.030714	0.029914

[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. "--" = 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	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	No	No
6	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	No	No
7	9AA9AA9AA99	99999A	99/99/9999	99/99/9999	99/99/9999	No	Yes

- 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]
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
Sepsis	Yes	--	--	--	--
Pneumonia	Yes	--	--	--	--
Sepsis	Yes	--	--	--	--
Pulmonary Embolism	Yes	--	--	--	--
--	--	--	--	--	--

# Understanding the Calculations

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.

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Hospital VBP Program, Hospital Quality Reporting

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## **Mortality and Complication Measures Review and Correction Requests**

# Mortality and Complication Measures Review and Correction Process

- The Hospital VBP Program Mortality and Complication Measures Review and Correction period for FY 2026 HSRs is **April 15–May 14, 2025**.
- The review and correction period is a designated time for hospitals to review their performance data and submit suspected calculation errors for possible correction, but not to submit new or corrected claims.
- 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 Hospital VBP Program Mortality and Complication Measures Review and Correction period and process are only applicable to the Hospital VBP Program Mortality and Complication Measures HSRs and do not apply to the *Public Reporting* HSRs, which will be distributed in the upcoming weeks.

# Mortality and Complication Measures Review and Correction Process

To submit a review and correction request:

- Submit a Review and Correction request to the [QualityNet Question and Answer Tool](#).
  - Select “Ask a Question.”
  - Choose “Inpatient Claims-Based Measures” under the Program List.
  - Select “HVBP Mortality & Complication” from the Topics list.
  - Choose “Review & Correction request” as the subtopic.
- Please include your hospital’s CMS Certification Number when submitting your request.
- Do NOT submit Personally Identifiable Information (such as Date of Birth or Social Security Number) to this tool.

# **Mortality and Complication Measures Review and Correction 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.



# Mortality and Complication Measures Review and Correction 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.

## Reviewing Your Fiscal Year 2026 Hospital Value-Based Purchasing Program Mortality and Complication Measures Hospital-Specific Report

### **Questions**

# Disclaimer

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