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MHAC Report Static User Guide for Rate Year 2025

By CRISP, last updated 2/7/2023



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RY 2025 MHAC Report User Guide

Overview

The Maryland Hospital Acquired Conditions (MHAC) program is based on a system developed by 3M Health Information Systems to identify potentially preventable complications (PPCs) using present-on-admission codes available in claims data. 3M originally developed specifications for 65 PPCs, which are defined as harmful events that develop after the patient is admitted to the hospital and may result from processes of care and treatment rather than from the natural progression of the underlying illness. For example, the program holds hospitals accountable for respiratory failure and pulmonary embolisms that occur during inpatient stays. These complications can lead to 1) poor patient outcomes, including longer hospital stays, permanent harm, and death; and 2) increased costs. Thus, the MHAC program is designed to provide incentives to improve patient care by adjusting hospital budgets based on PPC performance. The maximum penalty remains at 2 percent, and the maximum reward is increased to 2 percent.

For more information on the MHAC policy, please visit the following HSCRC website page: https://hscrc.maryland.gov/Pages/init_qi_MHAC.aspx

Methodology

The MHAC methodology assesses attainment only. The attainment score is calculated by comparing hospital performance to a statewide threshold benchmark. For RY2025, hospitals are now evaluated on 15 clinically significant PPCs, weighted by 3M cost weights as proxy for patient harm. The MHAC program uses a point-based system for converting PPC results to standardized scores, and the weighted PPC scores are converted to revenue adjustment. For RY 2025, 24 months of data (July 2020- June 2022) is used to establish the normative values that are used to calculate a hospital's expected PPC rate, and to determine the threshold and benchmark for scoring hospital performance. The RY 2025 scale uses a full distribution of potential scores (scale of 0-100%), with a hold harmless zone between 60 and 70 percent. The performance period data for RY2025 is CY 2023 and CY2022-2023 for small hospitals; data will be reported via the CRS portal as it becomes available.

For RY 2025, data will be used during the COVID Public Health Emergency to assess performance standards. With the performance standards determined post-COVID, that reduces any concerns that may arise about using a pre-COVID period. The v40 grouper has clinic logic that determines if a COVID-related discharge can be assigned a PPC.



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Grouper Version

The APR-DRG and PPC Grouper Version 40 will be used for RY 2025.

Static Report User Guide

MHAC Report Access/Card

The MHAC Static Report can be accessed by visiting reports.crisphealth.org and logging-in with a CRS username and password.

Step 1. To access the HSCRC Regulatory Report tile, login to the CRISP Reporting Services Portal by visiting <https://reports.crisphealth.org>. Once in the CRS Portal, a dashboard of different blue report “cards” will appear. Availability of reports is based on the access of the user. Clicking the card named “HSCRC Regulatory Report” will bring up the available reports for this category. The following screenshots represent the user’s workflow.

Log in to CRISP Reporting Services (CRS) Portal

Email !

Next

[Reset your password?](#)

Warning: CRISP policy prohibits username and password sharing.
Violation could result in account termination.

Questions or Concerns? Please contact the [CRISP Customer Care Team](#)
at support@crisphealth.org or 877-952-7477.

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Step 2. By clicking the Static Report icon as shown below, you will either access the MHAC Summary or MHAC Details Report. Users with PHI-level access to this report will have the MHAC Details report option. Users who can only see the MHAC Summary report (and not the MHAC Details report) are configured for summary level access (cannot see PHI reports).

The screenshot displays the CRISP Reports interface. On the left, a sidebar titled "Populations & Programs" lists various report categories: Public Health, All-Payer Population, Medicare Population, HSCRC Regulatory Reports (highlighted in green), MDPCP Reports, Internal Reports, and Administration Reports. The main content area is titled "Reports" and lists several report types: Readmissions, Demographics Adjustment, Market Shift, Maryland Hospital Acquired Conditions (MHAC) (highlighted with a red box), Potentially Avoidable Utilization (PAU), Quality Based Reimbursement (QBR), Transfer, and ODS-A Reports. On the right, a panel titled "Maryland Hospital Acquired Conditions (MHAC)" shows a list of reports: MHAC Monthly Details, MHAC Monthly Summary (with a red box around its static report icon), MHAC Quarter Final Details, and MHAC Quarter Final Summary. Each report in this panel has a download icon and a refresh icon.



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Report Tabs

1. Cover Sheet
2. 3M Cost Weights
3. Benchmarks
4. Percent At-Risk Scaling
5. Excluded PPCs
6. Hospital Results by PPC
7. Hospital Scores
8. Statewide PPC Norms
9. Calculation Sheet
- 10a. By Hospital by PPC
- 10b. Statewide by PPC
- 10c. By Hospital By PPC By Quarter



1. Cover Sheet

The cover sheet provides an overview of each sheet available in the MHAC report. It also lists the base year, performance year methodology version, and CGS.

RY2025		
BASE PERIOD	July 2020- June 2022	
PERFORMANCE YEAR	CY2023 (small hospitals will have CY2022+ CY2023)	
METHODOLOGY VERSION	PPC and APR version 40	
CGS		
INCLUDED IN THIS EXCEL WORKBOOK:	Sheet Name	Description
	2. 3M Cost weights	V40 3M cost weights as proxy for patient harm used for weighing PPCs.
	3. Attainment Standards	Benchmarks and Thresholds for each PPC based on Base Period (July 2020- June 2022) data.
	4. Percent At-Risk Scaling	This scale allows hospitals to *estimate* revenue adjustments.
	5. Excluded PPCs	List of PPCs excluded from calculations for each Hospital. Hospitals not listed on the sheet have all payment PPCs included.
	6. Hospital Results by PPC	Hospital PPC results: At-risk, Observed, Expected, O/E ratio, and weighted attainment points.
	7. Hospital Scores	Hospital scores for attainment only.
	8. Statewide Norms	PPC Norms based on Base Period (July 2020- June 2022) data
	9. Calculation Sheet	Calculation Sheet for hospitals
10. PPC Monitoring Tabs	10A. By Hosp by PPC by Year	This tab provides annual by hospital and by PPC results for all payment and non-payment PPCs. HSCRC will monitor the non-payment program PPCs and use this data to track overall PPC performance. Hospitals should monitor this data to fully assess patient complications. There is a flag that indicates payment program PPCs, as well as the previously defined serious reportable events.
10. PPC Monitoring Tabs	10B. Statewide by PPC	This tab provides statewide PPC results for all payment and non-payment PPCs. HSCRC will monitor the non-payment program PPCs and use this data to track overall PPC performance.
10. PPC Monitoring Tabs	10C. By Hosp by PPC by Quarter	This tab is updated quarterly and provides quarterly by-hospital and by PPC results for all payment and non-payment PPCs. HSCRC will monitor the non-payment program PPCs and use this data to track overall PPC performance. Hospitals should monitor this data to fully assess patient complications. There is a flag that indicates payment program PPCs as well as the previously defined serious reportable events.
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 hsrcr.quality@maryland.gov		



2. 3M Cost Weights

This sheet displays each 3M cost weights as proxy for patient harm used for weighing PPCs (using cost weights assigned under v40 of the APR Grouper).

2. 3M PPC Cost Weights

As of 1/09/2023

PPC NUMBER	PPC Description	3M v40 PPC Marginal Costs
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	0.5005
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1.5519
7	Pulmonary Embolism	1.1248
9	Shock	1.0478
16	Venous Thrombosis	1.5503
28	In-Hospital Trauma and Fractures	0.3379
35	Septicemia & Severe Infections	1.4394
37	Post-Operative Infection & Deep Wound Disruption without Procedure	1.5936
41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D	0.9745
42	Accidental Puncture/Laceration During Invasive Procedure	0.4264
47	Encephalopathy	0.7724
49	Iatrogenic Pneumothorax	0.4717
60	Major Puerperal Infection and Other Major Obstetric Complications	0.8978
61	Other Complications of Obstetrical Surgical & Perineal Pneumonia Combo (with and without Aspiration)	0.2099
67		1.1330

Metric	Description
3M v40 PPC Marginal Costs	Weighting the 15 PPCs differentially using 3M cost weights as a proxy for degree of patient harm.



3. Benchmarks

This sheet displays the benchmarks and thresholds for each PPC, based on base period July 2020 – June 2022 data. These metrics are used to assign attainment points, comparing the base period with CY 2023 performance; small hospitals will be assessed on CY 2022- 2023 for performance.

3. Benchmarks and thresholds for Payment Program PPCs

As of 1/25/2023

PPC Number	PPC Description	Threshold	Benchmark
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1.8412	0.3688
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1.6823	0.3746
7	Pulmonary Embolism	1.9105	0.3419
9	Shock	1.9497	0.3746
16	Venous Thrombosis	1.7583	0.0928
28	In-Hospital Trauma and Fractures	1.8455	0.4319
35	Septicemia & Severe Infections	1.6128	0.5586
37	Post-Operative Infection & Deep Wound Disruption Without Procedure	2.1254	0.1655
41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc	1.8211	0.3251
42	Accidental Puncture/Laceration During Invasive Procedure	1.4303	0.3886
47	Encephalopathy	1.8960	0.2459
49	Iatrogenic Pneumothrax	1.8156	0.3213
60	Major Puerperal Infection and Other Major Obstetric Complications	2.0890	0.0000
61	Other Complications of Obstetrical Surgical & Perineal Wounds	2.1321	0.3002
67	Combined Pneumonia (PPC 5 and 6)	1.6123	0.3541

Metric	Description
Threshold	The value of the observed to expected ratio at the 10th percentile of hospital performance.
Benchmark	The value of the observed to expected ratio at the 90th percentile of hospital performance.



4. Percent At-Risk Scaling

This scale allows hospitals to estimate revenue adjustments. The RY 2025 scale uses a full distribution of potential scores (scale of 0-100%), with a hold harmless zone between 60 and 70 percent.

Metric	Description
Final MHAC Score	PPCs are calculated by summing the total weighted points earned by a hospital, divided by the total possible weighted points.
Revenue Adjustment	Revenue adjustment scale with a maximum penalty at 2 percent and maximum reward at 2 percent and continuous linear scaling with a hold harmless zone between 60 and 70 percent.

4. RY 2025 Pre-Set Revenue Adjustment Scale*

between 60 and 70 percent

*Subject to change due to potential retrospective adjustments.

Full Scale		Abbreviated Version	
Final MHAC Score	% Revenue Adjustment	Final MHAC Score	% Revenue Adjustment
0%	-2.00%	0%	-2.00%
1%	-1.97%	5%	-1.83%
2%	-1.93%	10%	-1.67%
3%	-1.90%	15%	-1.50%
4%	-1.87%	20%	-1.33%
5%	-1.83%	25%	-1.17%
6%	-1.80%	30%	-1.00%
7%	-1.77%	35%	-0.83%
8%	-1.73%	40%	-0.67%
9%	-1.70%	45%	-0.50%
10%	-1.67%	50%	-0.33%
11%	-1.63%	55%	-0.17%
12%	-1.60%	60%	0.00%
13%	-1.57%	65%	0.00%
14%	-1.53%	70%	0.00%
15%	-1.50%	75%	0.33%
16%	-1.47%	80%	0.67%
17%	-1.43%	85%	1.00%
18%	-1.40%	90%	1.33%
19%	-1.37%	95%	1.67%
20%	-1.33%	100%	2.00%
21%	-1.30%		
22%	-1.27%		
23%	-1.23%		
		Penalty Cut-point	60%
		Reward Cut-point	70%



5. Excluded PPCs

Under MHAC, the attainment score is measured on 15 PPCs. The sheet provides a list of PPCs excluded from calculations for each hospital based on the MHAC inclusion/exclusion criteria, which can be found in the MHAC memo on the HSCRC website. Hospitals not listed on the sheet have all 15 PPCs included.

5. List of Excluded PPCs by Hospital, based on Base Period Data

Hospitals not listed have no excluded PPCs.

As of 1/25/2023

Hospital ID	Hospital	Excluded PPC Number
210010	UM-Cambridge	7
210010	UM-Cambridge	9
210010	UM-Cambridge	16
210010	UM-Cambridge	28
210010	UM-Cambridge	35
210010	UM-Cambridge	37
210010	UM-Cambridge	41
210010	UM-Cambridge	42
210010	UM-Cambridge	47
210010	UM-Cambridge	49
210010	UM-Cambridge	60
210010	UM-Cambridge	61
210010	UM-Cambridge	67
210011	Ascension Saint Agnes Hospital	60
210011	Ascension Saint Agnes Hospital	61
210012	Sinai	60
210015	MedStar Fr Square	60
210016	Adventist White Oak	60
210016	Adventist White Oak	61
210017	Garrett	4
210017	Garrett	7
210017	Garrett	16
210017	Garrett	28
210017	Garrett	35
210017	Garrett	37



6. Hospital Results by PPC

Hospital PPC results based on Policy Modeling: At-risk, Observed, Expected, O/E ratio, and weighted attainment points. The policy modeled using June 2020-July 2022 data to establish norms and performance standards and CY2023 performance period data. These results are provided for reference only.

HOSPITAL PERFORMANCE RESULTS BY PPC: CY2022 -- through 30Nov2022 (Prelim) Excluded ACS/POD cases and Palliative Care cases										
HOSPITAL ID	HOSPITAL NAME	NUMBER OF Years of Performance Data	PPC NUMBER	PPC DESCRIPTION	THRESHOLD	BENCHMARK	AT RISK	OBSERVED PPCs	EXPECTED PPCs	O/E RATIO
210004	Holy Cross	1	41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or IUD Proc	14481	0.4137	5174	1	24174	0.4137
210004	Holy Cross	1	42	Accidental Puncture/Laceration During Invasive Procedure	15251	0.4434	16142	6	63385	0.9469
210004	Holy Cross	1	49	Iatrogenic Pneumothorax	17954	0.216	15700	2	1574	12707
210004	Holy Cross	1	60	Major Puerperal Infection and Other Major Obstetric Complications	22771	0	6703	1	23617	0.4234
210004	Holy Cross	1	61	Other Complications of Obstetrical Surgical & Perineal Wounds	26310	0	7100	2	41985	0.4766
210004	Holy Cross	1	67	Combined Pneumonia (PPC 5 and 6)	14308	0.2438	12805	14	108417	1293
210005	Frederick	1	3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	20233	0.3067	7306	9	69474	10059
210005	Frederick	1	4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	16886	0.2771	7250	4	3331	12009
210005	Frederick	1	7	Pulmonary Embolism	19689	0.2811	9258	4	2837	14099
210005	Frederick	1	9	Shock	19697	0.3681	8741	7	92686	0.7562
210005	Frederick	1	16	Venous Thrombosis	23028	0	5455	4	1748	22883
210005	Frederick	1	28	In-Hospital Trauma and Fractures	19102	0	10553	1	26755	0.3738

Metric	Description
Threshold	The value of the observed to expected ratio at the 10th percentile of hospital performance.
Benchmark	The value of the observed to expected ratio at the 90th percentile of hospital performance.
At Risk	Number of discharges at risk for PPCs.
Observed PPCs	Observed number of PPCs.
Expected PPCs	Expected number of PPCs are calculated using historical data on statewide PPC rates APR-DRG SOI.
O/E Ratio	Observed PPCs/Expected PPCs.
Unweighted Attainment Points	Points before adjusting with 3M cost weight.
Total Possible Points	Total possible weighted points (100 per PPC * 3M cost weight).
3M Cost Weight	Weight for each of the 15 PPCs using 3M cost weights as a proxy for degree of patient harm.
Weighted Points	Points for each PPC multiplied by the associated 3M Cost weight for the PPC.
Weighted Denominator	Total number of weighted points associated for each PPC.



7. Hospital Scores

Hospital scores for attainment only based on policy modeling. The policy modeled using June 2020 – July 2022 data to establish norms and performance standards and CY2023 as performance period data. These results are provided for reference only.

Hospital scores CY2022 YTD Excluded ACS/POD cases and Palliative Care cases						
HOSPITAL ID	HOSPITAL NAME	Number of Years of Performance Data	TOTAL NUMBER OF PPCs (max 14)	WEIGHTED FINAL HOSPITAL POINT	WEIGHTED DENOMINATOR	WEIGHTED SCORE
210001	Meritus	1	13	931.18	1367.09	68%
210002	UMMC	1	14	646.48	1460.22	44%
210003	UM-Capital Region Medical Center	1	9	608.7	1021.28	60%
210004	Holy Cross	1	14	910.47	1460.22	62%
210005	Frederick	1	13	472.76	1367.09	35%
210006	UM-Harford	2	5	287.28	502.18	57%
210008	Mercy	1	13	475.62	1411.29	34%
210009	Johns Hopkins	1	14	314.02	1460.22	22%
210011	Ascension Saint Agnes Hospital	1	12	775.46	1345.78	58%
210012	Sinai	1	13	635.37	1367.09	46%
210015	MedStar Fr Square	1	13	740.38	1367.09	54%
210016	Adventist White Oak	1	12	740.42	1345.78	55%
210017	Garrett	2	3	315.88	330.82	95%
210018	MedStar Montgomery	1	6	603.8	625.76	96%
210019	Peninsula	1	13	1084.34	1367.09	79%
210022	Suburban	1	12	584.92	1345.78	43%
210023	Anne Arundel	1	14	1064.38	1460.22	73%
210024	MedStar Union Mem	1	12	751.66	1345.78	56%
210027	Western Maryland	1	11	1050.39	1241.72	85%
210028	MedStar St. Mary's	1	8	791.78	846.88	93%
210029	JH Bayview	1	12	629.22	1345.78	47%
210032	ChristianaCare, Union	2	5	173.9	502.18	35%

Metric	Description
Total Number of PPCs (max 15)	Number of PPCs included for each hospital based on MHAC inclusion methodologies.
Weighted Final Hospital Points	Total points hospitals received after the 3M Cost Weight adjustments.
Weighted Denominator	Total number of weighted points associated for each hospital based on the PPCs included.
Weighted Score	Weighted final hospital points/weighted denominator.



8. Statewide PPC Norms

This sheet shows each PPC Norm value based on June 2020 – July 2022 data.

ADMISSION APR-DRG v39.0	ADMISSION APR SOI revised v39.0	NUMADM	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK	ATRISK
1	1	7																		
1	2	61																		
1	3	92																		
1	4	111																		
2	1	12																		
2	2	21																		
2	3	83																		
2	4	18																		
4	1	1																		
4	2	2																		
4	3	16																		
4	4	38																		
5	2	9																		
5	3	75																		
5	4	202																		
6	1	1																		
6	2	11																		
6	3	35																		
7	1	31																		
7	2	86																		
7	3	55																		
7	4	18																		
8	1	65																		
8	2	150																		
8	3	65																		
8	4	20																		
9	1	7																		
9	2	18																		
9	3	37																		
9	4	178																		

Metric	Description
NUMADM	Number admitted with the APR-DRG and APR SOI.
ATRISK1-ATRISK67	Risk status indicates whether a discharge is at-risk or eligible to be assigned a specific PPC (i.e., only obstetrical cases could be at-risk for an obstetrical PPC) The sum indicates a total number of at-risk discharges.
PPC1-PPC67	Number of PPCs that occurred for each APR-DRG and APR SOI.
NORMPPC1-NORMPPC67	The normative values are the statewide rate for each PPC during the base period.



9. Calculation Sheet

This sheet gives the opportunity for hospitals to estimate their attainment score. All the information to calculate attainment score is provided in the sheet. If a hospital is not measured on a PPC, then it should be removed from the calculation.

9. Calculation Sheet for Estimating Hospital Scores
As of 1/19/2023

If your hospital is not measured on a specific PPC (i.e., it is excluded because the hospital does not have >30 at-risk discharges or >2 expected PPC), then you can delete that PPC row and the score should calculate correctly

PPC Number	PPC Description	Performance Standards		PERFORMANCE PERIOD RESULTS				ATTAINMENT POINTS	POSSIBLE DENOMINATOR	3M Cost Weight	WEIGHTED TOTAL POINTS BY TIER	TOTAL WEIGHTED DENOMINATOR
		Threshold	Benchmark	AT RISK	OBSERVED	EXPECTED	RATIO					
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1.8412	0.3688				#DIV/0!	#DIV/0!	100	0.5005	#DIV/0!	50.05
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1.6823	0.3746				#DIV/0!	#DIV/0!	100	1.5519	#DIV/0!	155.19
7	Pulmonary Embolism	1.9105	0.3419				#DIV/0!	#DIV/0!	100	1.1248	#DIV/0!	112.48
9	Shock	1.9497	0.3746				#DIV/0!	#DIV/0!	100	1.0478	#DIV/0!	104.78
16	Venous Thrombosis	1.7583	0.0928				#DIV/0!	#DIV/0!	100	1.5503	#DIV/0!	155.03
28	In-Hospital Trauma and Fractures	1.8455	0.4319				#DIV/0!	#DIV/0!	100	0.3379	#DIV/0!	33.79
35	Septicemia & Severe Infections	1.6128	0.5586				#DIV/0!	#DIV/0!	100	1.4394	#DIV/0!	143.94
37	Post-Operative Infection & Deep Wound Disruption Without Procedure	2.1254	0.1655				#DIV/0!	#DIV/0!	100	1.5936	#DIV/0!	159.36
41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D	1.8211	0.3251				#DIV/0!	#DIV/0!	100	0.9745	#DIV/0!	97.45
42	Post-Operative Hemorrhage & Hematoma with Invasive Procedure	1.4303	0.3886				#DIV/0!	#DIV/0!	100	0.4264	#DIV/0!	42.64
47	Encephalopathy	1.896	0.2459				#DIV/0!	#DIV/0!	100	0.7724	#DIV/0!	77.24
49	Iatrogenic Pneumothorax	1.8156	0.3213				#DIV/0!	#DIV/0!	100	0.4717	#DIV/0!	47.17
60	Major Post-Operative Infection and Other Major Obstetric Complications	2.089	0				#DIV/0!	#DIV/0!	100	0.8978	#DIV/0!	89.78
61	Uterine Complications or Obstetrical Surgical & Perineal Wounds	2.1321	0.3002				#DIV/0!	#DIV/0!	100	0.2099	#DIV/0!	20.99
67	Combined Pneumonia	1.6123	0.3541				#DIV/0!	#DIV/0!	100	1.1330	#DIV/0!	113.3
Total												1403.19
TOTAL WEIGHTED SCORE											#DIV/0!	

Metric	Description
At Risk	Number of patients at risk for a PPC
Observed	Observed number of PPCs that occurred
Expected	Calculated using historical data on statewide PPC rates by APR-DRG SOI
Ratio	Observed/Expected PPC values
Attainment Points	Attainment Points that can be earned for each PPC
Possible Denominator	Total number of points possible in the denominator for each PPC
3M Cost Weight	Weight for each of the 15 PPCs using 3M cost weights as a proxy for degree of patient harm.
Weighted Total Points	Total number of points that can be earned after the 3M Cost Weight is applied
Total Denominator	Total possible denominator after the 3M Cost Weight Adjustment is applied



PPC Monitoring Tabs (10a, 10b & 10c)

The following metrics are used for the PPC Monitoring Tabs (10a, 10b & 10c)

Metric	Description
At Risk	Number of patients at risk for a PPC
Observed PPC	Observed number of PPCs that occurred
Expected PPC	Calculated using historical data on statewide PPC rates by APR-DRG SOI
O/E Ratio	Observed/Expected PPC values
Case-Mix Adjusted Rate	Used to calculate expected PPC values
Flag for one of 15 Payment PPCs	Indicates PPCs defined by MHAC
Flag for Serious Reportable Events	Indicates serious events that should be reported
State Average Rate	State average for PPC observed

10a. By Hosp by PPC

This sheet provides by hospital and PPC results for all payment and non-payment PPCs. HSCRC will monitor the non-payment program PPCs and use this data to track overall PPC performance. Hospitals should monitor this data to fully assess patient complications. There is a flag that indicates payment program PPCs as well as the previously defined serious reportable events.

All PPCs by Hospital Excluded ACS/POD cases and Palliative Care cases												
HOSPITAL ID	HOSPITAL NAME	PPC NUMBE	PPC DESCRIPTION	Year	AT RISK	OBSERVED P	EXPECTED P	O/E RATIO	Case-Mix Adjusted Rat	Flag for one of 15 Payment PPC	Flag for Serious Reportable Events	State Average rate
20001	Methus	3	Failure without Ventilation	2016	9199		23	10.799	2.1456	3.9512	1	0.00147320
20001	Methus	4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	2016	10151		7	3.6261	1.9304	1.225	1	0.00063456
20001	Methus	5	Pneumonia & Other Lung Infections	2016	4725		10	4.0769	3.6909	4.6593	0	0.0026036
20001	Methus	6	Aspiration Pneumonia	2016	9825		7	4.5957	15262	13407	0	0.00074255
20001	Methus	7	Pulmonary Embolism	2016	9274		2	4.3744	4.9712	0.2274	1	0.00049174
20001	Methus	8	Other Pulmonary Complications	2016	9407		11	4.2959	2.256	15471	0	0.00009495
20001	Methus	9	Shock	2016	12303		10	9.7663	10239	12370	1	0.0026986
20001	Methus	10	Congestive Heart Failure	2016	1107		4	2.13	1.970	0.3727	0	0.0009844
20001	Methus	11	Acute Myocardial Infarction	2016	12634		10	8.9812	1134	10216	0	0.00091748
20001	Methus	13	Other Cardiac Complications	2016	12169		2	3.7095	0.5393	0.1952	0	0.0000204
20001	Methus	14	Ventricular Fibrillation/Cardiac Arrest	2016	10827		11	24.3042	0.4626	1.2232	0	0.00282365
20001	Methus	15	Peripheral Vascular Complications Except Venous Thrombosis	2016	12077		1	3.4550	0.2890	0.1030	0	0.0004151
20001	Methus	16	Venous Thrombosis	2016	6886		2	2.6019	0.7697	0.340	1	0.0004527
20001	Methus	17	Major Gastrointestinal Complications without Transfusion or Significant Bleeding	2016	9244		7	5.3429	1.901	0.73	0	0.0005716
20001	Methus	18	Major Gastrointestinal Complications with Transfusion or Significant Bleeding	2016	12386		3	4.2426	0.7071	0.3179	0	0.00044959
20001	Methus	19	Major Liver Complications	2016	12773		4	3.0402	1.3157	0.5485	0	0.00049689
20001	Methus	20	Other Gastrointestinal Complications without Transfusion or Significant Bleeding	2016	12097		5	8.6211	0.5197	0.5988	0	0.0012319
20001	Methus	21	Clostridium Difficile Colitis	2016	1768		13	7.3424	1.7705	7.702	0	0.0042606
20001	Methus	23	GU Complications Except UTI	2016	12875		1	3.1433	0.3381	0.1171	0	0.00006794



10b. Statewide by PPC

This tab provides statewide PPC results for all payment and non-payment PPCs by PPC. HSCRC will monitor the non-payment program PPCs and use this data to track overall PPC performance.

All PPCs by PPC Number Excluded ACS/POD cases and Palliative Care cases											
PPC NUMBER	PPC DESCRIPTION	Year	AT RISK	OBSERVED P	EXPECTED P	O/E RATIO	Case-Mix Adjusted Rat	Flag for one of 14 Payment PPC	Flag for Serious Reportable events	State Average	rate
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	2016	338667	608	413.8273	1.4692	2.1647	1	0	0.00147338	
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	2016	322569	301	187.1675	1.9149	1.2151	1	0	0.00063456	
5	Pneumonia & Other Lung Infections	2016	178754	388	214.7642	1.8066	2.2277	0	0	0.00126036	
6	Aspiration Pneumonia	2016	349889	277	204.2614	1.3554	1.0065	0	0	0.00074255	
7	Pulmonary Embolism	2016	406615	220	177.6619	1.2383	0.6159	1	0	0.00049474	
8	Other Pulmonary Complications	2016	277210	192	147.5413	1.3013	0.7868	0	0	0.00060458	
9	Shock	2016	402808	415	373.0245	1.1125	1.3449	1	0	0.00120886	
10	Congestive Heart Failure	2016	288042	137	50.2451	2.7266	0.5411	0	0	0.00019844	
11	Acute Myocardial Infarction	2016	408866	277	303.2555	0.9131	0.8378	0	0	0.00091748	
13	Other Cardiac Complications	2016	379904	70	118.8484	0.5885	0.2131	0	0	0.00036204	
14	Ventricular Fibrillation/Cardiac Arrest	2016	355781	515	738.279	0.6976	2.0394	0	0	0.00292385	
15	Peripheral Vascular Complications Except Venous Thrombosis	2016	394786	70	137.8608	0.5078	0.2108	0	0	0.00044512	
16	Venous Thrombosis	2016	186012	140	83.7193	1.6723	0.757	1	0	0.0004527	
17	Major Gastrointestinal Complications without Transfusion or Significant Bleeding	2016	403912	118	183.3806	0.6435	0.3585	0	0	0.00055716	
18	Major Gastrointestinal Complications with Transfusion or Significant Bleeding	2016	403968	82	133.348	0.6149	0.2785	0	0	0.00044959	
19	Major Liver Complications	2016	400450	62	115.4124	0.5372	0.224	0	0	0.00041689	
20	Other Gastrointestinal Complications without Transfusion or Significant Bleeding	2016	403323	208	333.4125	0.6239	0.7044	0	0	0.00112919	
21	Clostridium Difficile Colitis	2016	63931	395	264.552	1.4931	6.495	0	0	0.00435006	
23	GU Complications Except UTI	2016	412779	64	120.8808	0.533	0.1961	0	0	0.00036794	
24	Renal Failure without Dialysis	2016	354219	1598	2384.1954	0.5355	5.1861	0	0	0.0097035	
25	Renal Failure with Dialysis	2016	360528	49	37.3476	1.312	0.1875	0	0	0.0010429	
26	Diabetic Ketoacidosis & Coma	2016	349449	21	45.4667	0.4619	0.0783	0	0	0.00016348	



10c. By Hosp by PPC/by Quarter

This sheet provides by hospital and PPC results for all payment and non-payment PPCs by Quarter. HSCRC will monitor the non-payment program PPCs and use this data to track overall PPC performance. Hospitals should monitor this data to fully assess patient complications. There is a flag that indicates payment program PPCs as well as the previously defined serious reportable events.

HOSPITAL ID	HOSPITAL NAME	PPC NUMBE	PPC DESCRIPTION	Year	Quarter	All PPCs by Hospital by Quarter Excluded ACS/POD cases and Palliative Care cases				Case-Mix Adjusted Rat	Flag for one of Payment PPC	Reportable	State Average
						AT RISK	OBSERVED P	EXPECTED P	O/E RATIO				
20001	Mehtus	1	Stroke & Intracranial Hemorrhage	2016	Jan-Mar	3176	1	2.9521	0.3981	0.4637	0	0	0.0019332
20001	Mehtus	2	Esophageal CMS Complications	2016	Jan-Mar	2983	0	0.9741	0	0	0	0	0.0003025
20001	Mehtus	3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	2016	Jan-Mar	2541	6	2.7299	2.199	3.2395	1	0	0.0047239
20001	Mehtus	4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	2016	Jan-Mar	2532	2	0.9453	2.1302	1.3484	1	0	0.00063456
20001	Mehtus	5	Pneumonia & Other Lung Infections	2016	Jan-Mar	183	6	1.182	5.3756	6.7752	0	0	0.0026036
20001	Mehtus	6	Aspiration Pneumonia	2016	Jan-Mar	2459	1	1.287	0.6296	0.6993	0	0	0.0074295
20001	Mehtus	7	Pulmonary Embolism	2016	Jan-Mar	3207	1	1.0326	0.9395	0.4036	1	0	0.0004974
20001	Mehtus	8	Other Pulmonary Complications	2016	Jan-Mar	2962	2	1.944	1.5276	1.81	0	0	0.0004469
20001	Mehtus	9	Shock	2016	Jan-Mar	3306	4	2.8565	1.6959	1.6202	1	0	0.0020886
20001	Mehtus	10	Congenitive Heart Failure	2016	Jan-Mar	2801	2	0.468	4.0982	0.8333	0	0	0.0009844
20001	Mehtus	11	Acute Myocardial Infarction	2016	Jan-Mar	3173	2	2.3026	0.8686	0.7969	0	0	0.0009749
20001	Mehtus	13	Other Cardiac Complications	2016	Jan-Mar	3089	0	0.966	0	0	0	0	0.0002624
20001	Mehtus	14	Ventricular Fibrillation/Cardiac Arrest	2016	Jan-Mar	2782	2	6.2882	0.399	0.9329	0	0	0.0023285
20001	Mehtus	15	Peripheral Vascular Complications Except Venous Thrombosis	2016	Jan-Mar	3300	0	0.874	0	0	0	0	0.0004852
20001	Mehtus	16	Venous Thrombosis	2016	Jan-Mar	1759	0	0.6869	0	0	1	0	0.0004827
20001	Mehtus	17	Major Gastrointestinal Complications without Transfusion or Significant Bleeding	2016	Jan-Mar	3327	3	1.4094	2.1002	1.9168	0	0	0.0009576
20001	Mehtus	18	Major Gastrointestinal Complications with Transfusion or Significant Bleeding	2016	Jan-Mar	3324	1	1.6956	0.9474	0.4259	0	0	0.0004499
20001	Mehtus	19	Major Liver Complications	2016	Jan-Mar	3326	2	0.7261	2.7546	1.9484	0	0	0.0004909
20001	Mehtus	20	Other Gastrointestinal Complications without Transfusion or Significant Bleeding	2016	Jan-Mar	3055	2	2.8454	0.7857	0.8872	0	0	0.001239
20001	Mehtus	21	Clostridium Difficile Colitis	2016	Jan-Mar	444	1	1.8859	0.5303	2.3667	0	0	0.0042006
20001	Mehtus	23	GU Complications Except UTI	2016	Jan-Mar	3249	0	0.7924	0	0	0	0	0.0003674