MVC Component of the BCBSM P4P Program
Program Years 2022 and 2023 Member Evaluation

Program Overview:

Beginning in 2018, Blue Cross Blue Shield of Michigan (BCBSM) allocated 10% of its Pay-for-Performance (P4P) Program to an episode of care payment metric based on Michigan Value Collaborative (MVC) data. This metric measures hospital performance using price standardized and risk-adjusted 30-day episode payments for Commercial and Medicare Advantage BCBSM Preferred Provider Organization (PPO), Commercial and Medicare Advantage Blue Care Network (BCN) Health Maintenance Organization (HMO), and Medicare Fee-for-Service (FFS) patients. Each hospital's condition-specific total episode payments were assessed for year-over-year improvement compared to their baseline year. Hospitals were also able to earn achievement points by being less expensive than the other hospitals in their cohort. The MVC cohorts are groups of hospitals determined to be peers based on bed size and case mix index.

For the MVC Component of the BCBSM P4P program, hospitals earned the greater of their improvement or achievement points for each selected condition; additionally, a bonus point was awarded for each selected condition if a questionnaire regarding quality improvement initiatives was completed and returned to MVC. Hospitals could have earned 0-6 points for each selected condition. This brought the total possible points in Program Years 2022 and 2023 to 12 points, though the program was scored out of 10 points. Hospitals had to meet a quality threshold minimum for both in-hospital mortality and readmission rates for the selected conditions to be eligible earn any points. Table 1 shows the timeline for the current program cycle.

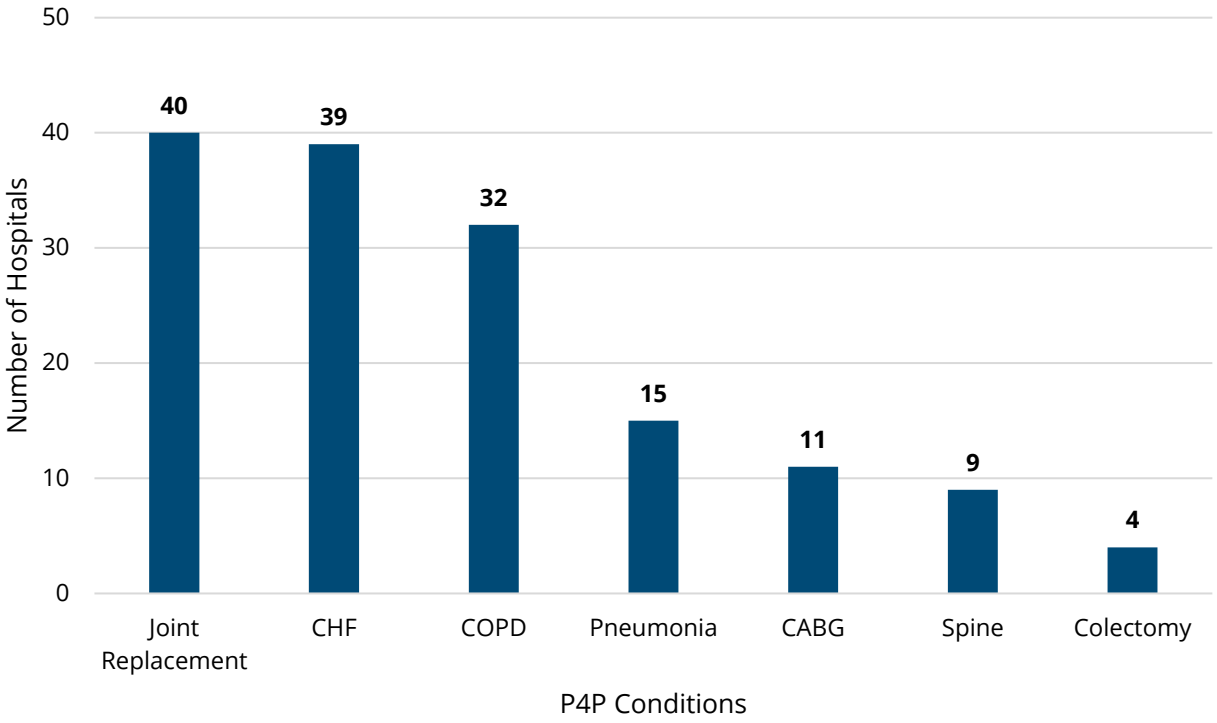
Table 1. MVC Component of the BCBSM P4P Program: Program Year 2022/2023 Timeline

	Baseline Year	Performance Year	Program/Scoring Year	Payment Year
Program Year 2022	2019	2021	2022	2023
Program Year 2023	2020	2022	2023	2024

Condition Selection:

Hospitals selected two of seven conditions before the two-year scoring cycle began. The seven conditions to choose from included chronic obstructive pulmonary disease (COPD), coronary artery bypass graft (CABG), congestive heart failure (CHF), colectomy (non-cancer), joint replacement (hip and knee), spine surgery, and pneumonia. Hospitals were eligible to select a given condition if they had at least 20 episodes in 2019. Figure 1 shows the distribution of conditions selected by participants. The two most common selections were joint replacement and CHF. In contrast, spine and colectomy were the least selected options. The medical options represented 57% of the selected conditions, with the remaining 43% of selections made up of surgical options. This is likely explained by fewer hospitals being eligible to select the more specialized surgical options.

Figure 1. Distribution of Selected Conditions at MVC Hospitals for Program Year 22/23



Episode Payment Metric Breakdown:

Hospitals were evaluated on their average 30-day risk-adjusted, price standardized total episode payments for their selected conditions. Episode payments were standardized to the Medicare fee schedule, meaning that the dollars shown throughout this report are measures of utilization rather than true dollar amounts. These episode payments were also risk-adjusted to account for patient characteristics. The analyses in this report reflect P4P eligible episodes among hospitals that selected each condition**.** Episodes were excluded from scoring for the MVC Component of the BCBSM P4P program if there was the presence of COVID-19 on the primary diagnosis code position of a facility claim at any point in the episode's index period, if the index admission was a transfer, or if the patient died during their inpatient stay or was discharged to hospice.

Tables 2 and 3 show the average price standardized payment change for each condition between the baseline and performance year as well as the cumulative price standardized cost savings. These cost savings were calculated using the change in 30-day price standardized episode payments and the performance year case counts across hospitals that selected each condition.

Table 2 and 3 show that the collective price standardized cost savings for Program Years 2022 and 2023 was approximately 26 million and 12 million dollars respectively. Joint replacement was the largest contributor to these cost savings with a decrease of 24 million dollars in Program Year 2022 and 9 million dollars in Program Year 2023. Both Program Years 2022 and 2023 saw an average decrease in payments among four of the seven conditions. Additional analyses in this report help explain these differences.

Table 2. Average 30-Day Price Standardized Episode Payment Changes for P4P Conditions in Program Year 2022

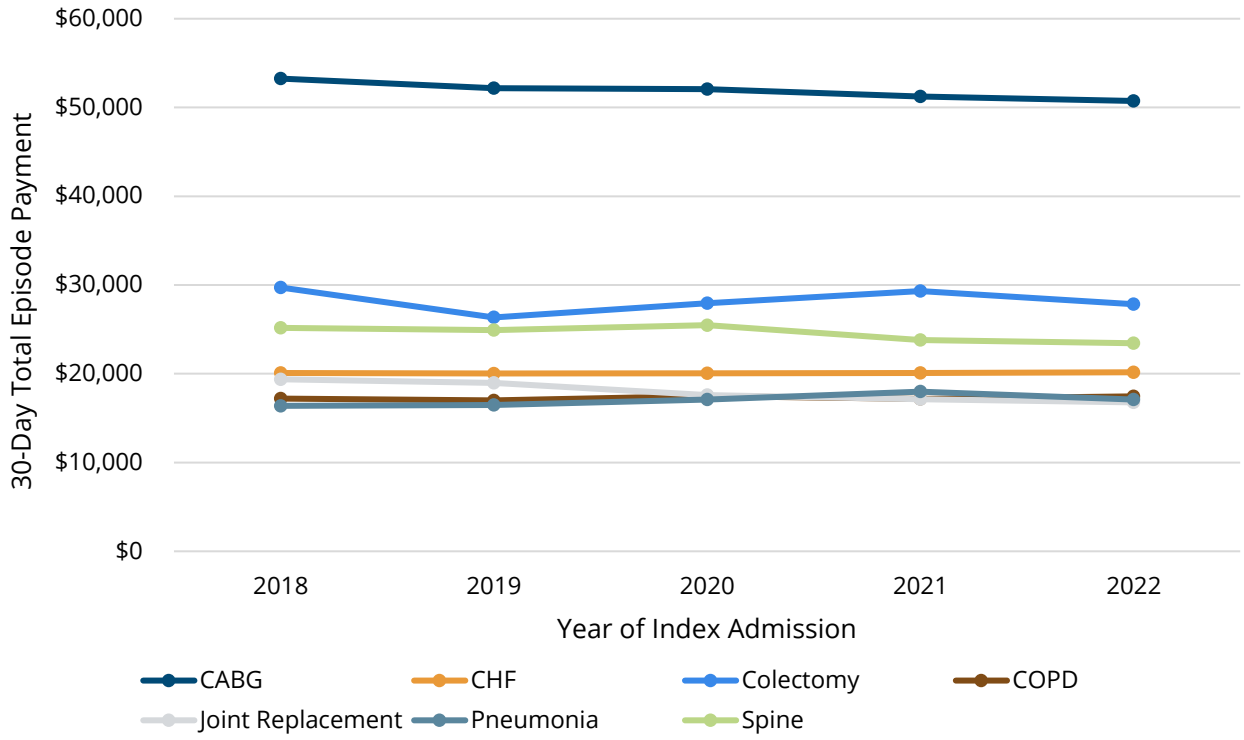
P4P Condition	Program Year 2022 Average Payment Change	Program Year 2022 Cumulative Payment Change
CABG	-$1,305	-$974,835
CHF	-$242	-$1,440,868
Colectomy	$1,831	$461,412
COPD	$111	$286,269
Joint Replacement	-$2,034	-$24,340,878
Pneumonia	$857	$839,003
Spine	-$1,749	-$1,294,260
Total	**-$2,531**	**-$26,464,157**

Table 3. Average 30-Day Price Standardized Episode Payment Changes for P4P Conditions in Program Year 2023

P4P Condition	Program Year 2023 Average Payment Change	Program Year 2023 Cumulative Payment Change
CABG	-$1,325	-$846,867
CHF	$130	$703,279
Colectomy	-$126	-$32,876
COPD	-$40	-$86,496
Joint Replacement	-$814	-$9,564,256
Pneumonia	$14	$16,449
Spine	-$2,037	-$2,685,043
Total	**-$4,198**	**-$12,495,810**

Figure 2 outlines the price standardized payment trend across the 2022 and 2023 program cycles for the seven P4P conditions. CABG and joint replacement demonstrated a consistent payment decrease over time. In addition, there were relatively consistent trends in payments for CHF and COPD. Finally, there was a recent downward trend in pneumonia, spine and colectomy payments.

Figure 2. Average Price Standardized Episode Payment Trends for P4P Conditions (2018-2022)



Figures 3 and 5 demonstrate the change in major episode component payments in Program Years 2022 and 2023. Furthermore, figures 4 and 6 break down post-discharge payments into individual components for home health, emergency department (ED), skilled nursing facility (SNF), inpatient rehab (IP Rehab) and outpatient rehab (OP Rehab) to examine where post-discharge payments were occurring. The bars above the horizontal axis represent increases in payment, and the bars below the horizontal axis signify decreases in payment. For an explanation of the episode components included in these figures, please refer to the MVC Data Guide.

Figure 3 highlights that in Program Year 2022, all conditions decreased in at least one episode component, with joint replacement and spine decreasing across all components. Post-discharge payments for CABG, and joint replacement decreased noticeably, while the index payment for colectomy increased significantly.

Figure 4 shows that in Program Year 2022, CABG decreased in every post-discharge payment category, while joint replacement decreased in all but OP rehab, contributing to the significant decreases that were noted in post-discharge payments. CHF and colectomy also saw reduced SNF usage but increased in other payment categories. In addition to these figures, some condition-specific analyses follow that describe important findings specific to certain P4P conditions.

Figure 3. Change in Average Price Standardized Episode Components in Program Year 2022

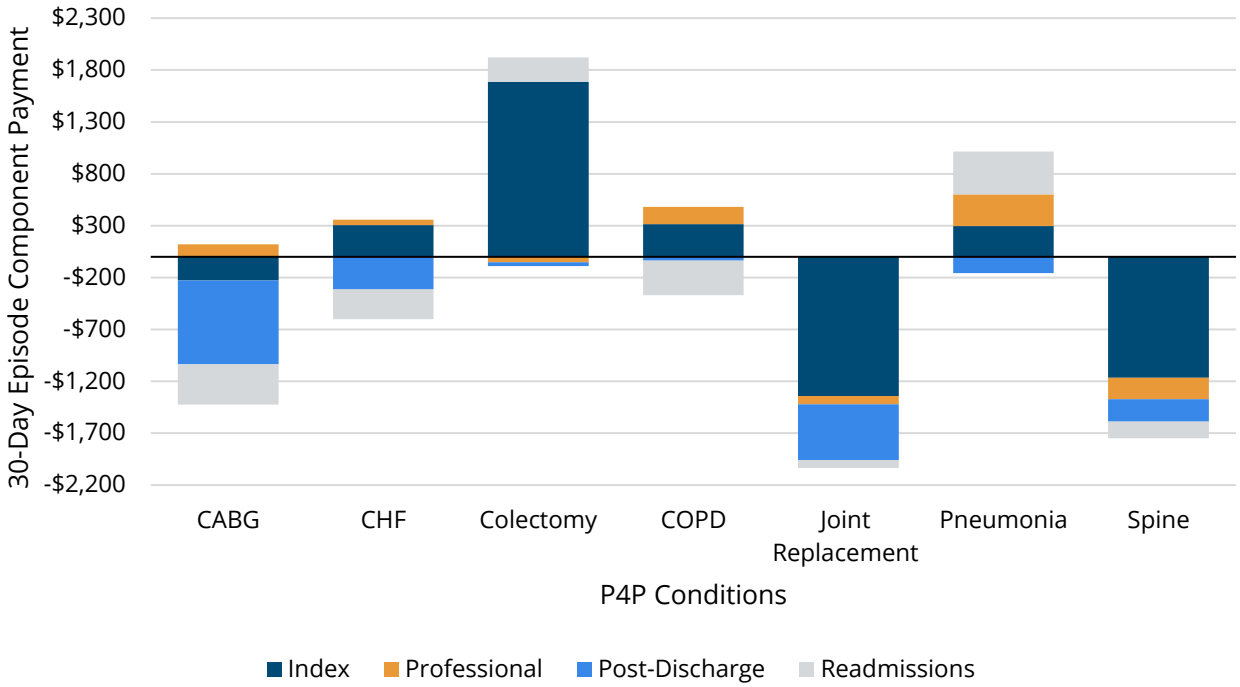


Figure 4. Change in Average Price Standardized Post-Discharge Components in Program Year 2022

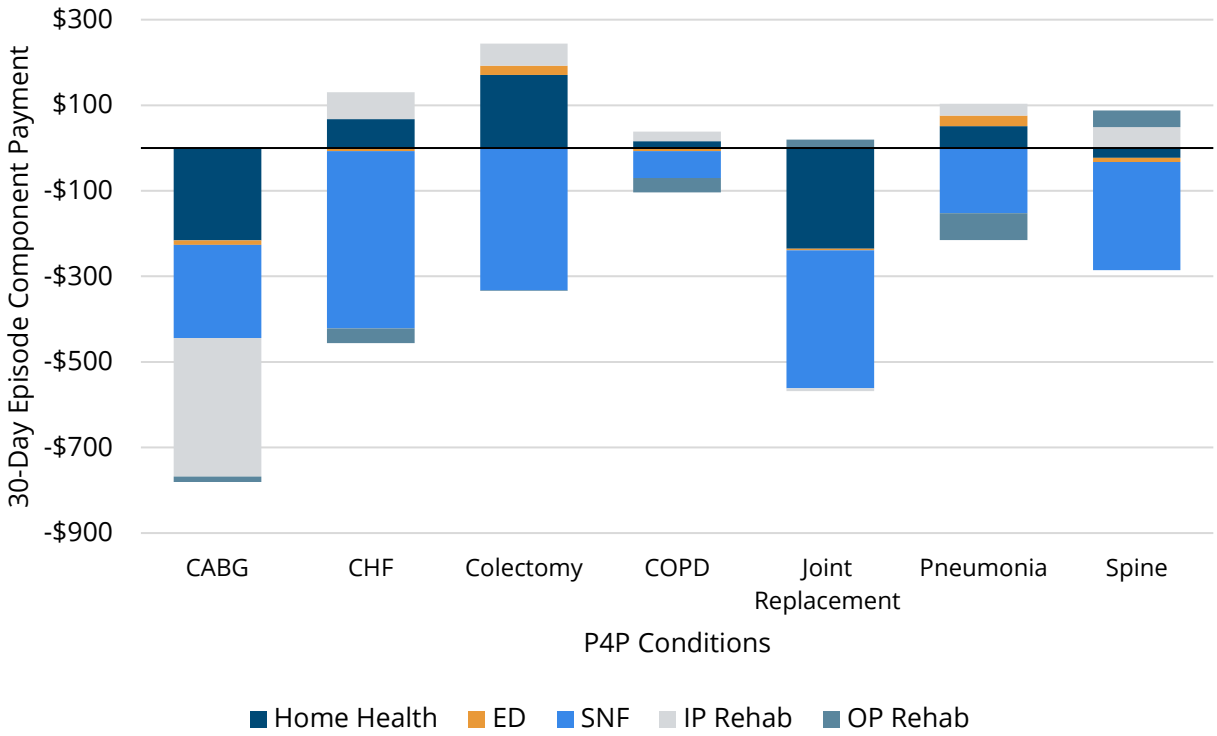


Figure 5 demonstrates that in Program Year 2023, payments for all conditions decreased in at least one episode component, with spine decreasing across all components. Post-discharge payments for spine and colectomy decreased noticeably, while the index payment for CABG, spine and joint replacement decreased significantly.

Figure 6 shows that in program year 2023, COPD marginally decreased in every post-discharge payment category, while colectomy increased in all but except SNF payments. All other conditions except pneumonia and COPD showed an increase in ED payment category. In addition to these figures, some condition-specific analyses follow that describe important findings specific to certain P4P conditions.

Figure 5. Change in Average Price Standardized Episode Components in Program Year 2023

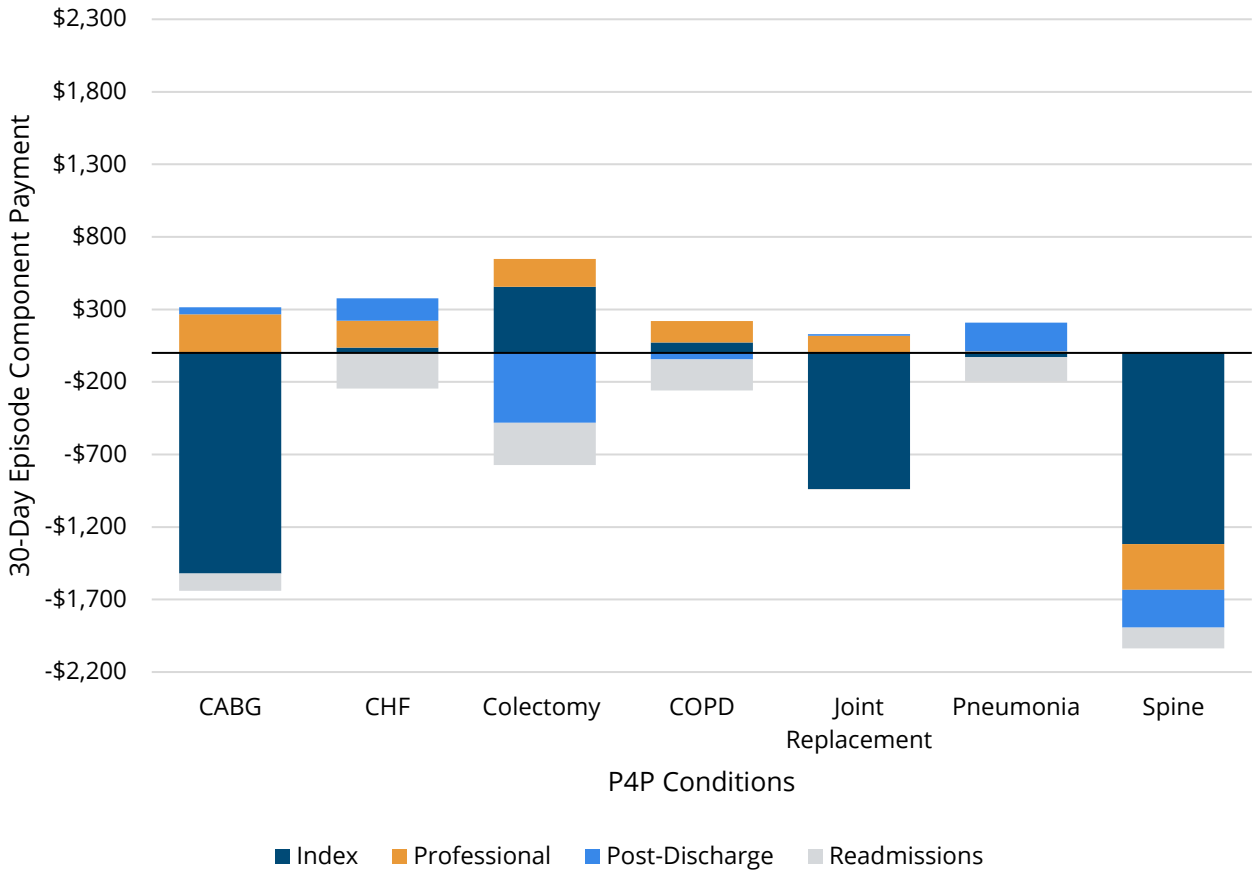
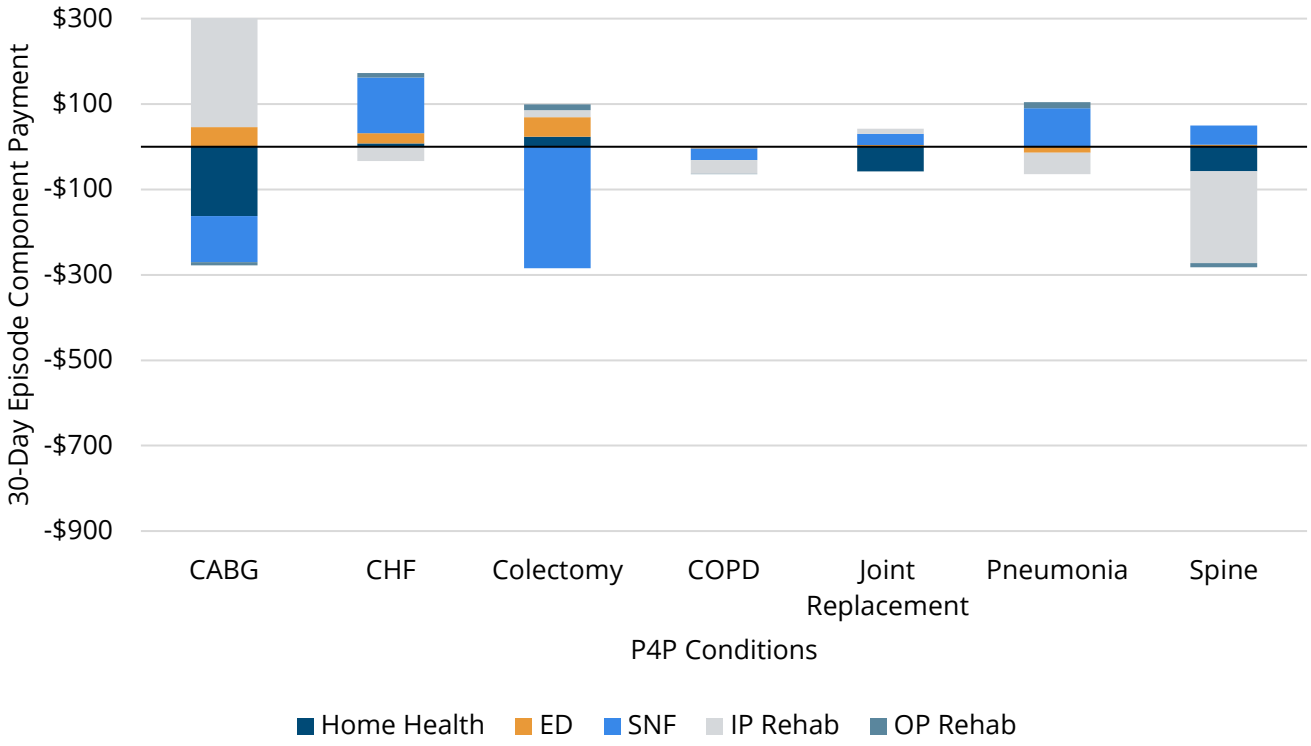


Figure 6. Change in Average Price Standardized Post-Discharge Components in Program Year 2023



Condition Specific Payment Analyses:

Colectomy:

Program Year 2022 resulted in a net increase in total episode payments for colectomy, which was driven by an increase in the index payment. Upon further examination, a small group of complicated, high-payment episodes in 2021 were determined to be the main reason for the large shift in index payment.

Joint Replacement:

Program Year 2022 resulted in a steep decrease in payments for joint replacement likely due to shifts in site of care for these surgeries. MVC has observed joint replacements increasingly moving towards the outpatient setting since 2018. Program Year 2022 specifically observed an increase in utilization of the outpatient setting for joint replacement from 23.2% of episodes in 2019 to 71.6% of episodes in 2021 as seen in Table 4. Program Year 2023 also demonstrated an increase in utilization of the outpatient setting for joint replacement from 49.4% of episodes in 2020 to 85.4% episodes in 2022 as seen in Table 5. Average 30-day price standardized total episode payments for outpatient joint replacements were significantly lower compared to those in the inpatient setting, as seen in Tables 4 and 5.

When separating the payments of inpatient and outpatient by year, it was determined that the average episode payment within each setting type did not change much from 2019 to 2021, but the average inpatient episode cost drastically increased with a slight increase in outpatient episode payments from 2020 to 2022. Calculating the average and cumulative payment change within each setting type yielded the results in Tables 6 and 7. From this analysis it can be concluded that the large payment decrease observed for joint replacement surgery can likely be explained by the lower payments attributable to outpatient surgeries combined with the significant shift to outpatient over the course of Program Years 2022 and 2023. The reduction in payments is largely reflected in the index payment, which can be observed above in Figures 3 and 5.

Table 4. Average 30-Day Price Standardized Episode Payments by Setting of Joint Replacement Surgery in Program Year 2022

Year	Average Inpatient Episode Cost	Number of Inpatient Episodes	Average Outpatient Episode Cost	Number of Outpatient Episodes	Percent Episodes Outpatient
2019	$19,585	10,958	$15,266	3,317	23.2%
2021	$19,457	3,400	$15,392	8,567	71.6%

Table 5. Average 30-Day Price Standardized Episode Payments by Setting of Joint Replacement Surgery in Program Year 2023

Year	Average Inpatient Episode Cost	Number of Inpatient Episodes	Average Outpatient Episode Cost	Number of Outpatient Episodes	Percent Episodes Outpatient
2020	$19,408	5,766	$15,729	5637	49.4%
2022	$21,974	1,716	$15,886	10035	85.4%

Table 6. Average 30-Day Price Standardized Episode Payment Changes by Setting of Joint Replacement Surgery in Program Year 2022

Setting of Joint Replacement	Program Year 2022 Average Payment Change	Program Year 2022 Cumulative Payment Change
Inpatient	-$128	-$435,200
Outpatient	$126	$1,079,442

Table 7. Average 30-Day Price Standardized Episode Payment Changes by Setting of Joint Replacement Surgery in Program Year 2023

Setting of Joint Replacement	Program Year 2023 Average Payment Change	Program Year 2023 Cumulative Payment Change
Inpatient	$2,566	$4,403,256
Outpatient	$157	$1,575,495

Spine Surgery:

Similar to joint replacement surgeries, there was an upwards trend in the utilization of the outpatient setting for spine surgeries in Program Years 2022 and 2023 as seen in Figure 7. Table 8 shows that outpatient utilization during Program Year 2022 increased from 30.4% of episodes in 2019 to 46.4% of episodes in 2021. Similarly, Table 9 shows that outpatient utilization increased from 40% of episodes in 2020 to 51.4% in 2022 highlighting the shift Program Year 2023. The difference in total episode payments between an inpatient and outpatient spine surgery was much larger than joint replacement in both Program Years 2022 and 2023. This shift to outpatient likely explains the significant decrease in average episode payment for spine surgery. In addition, there was a large increase in inpatient spine surgery payments from 2019 to 2021, and a small decrease in outpatient payments.

Figure 7. Utilization of the Outpatient Setting for Spine Surgery by Year

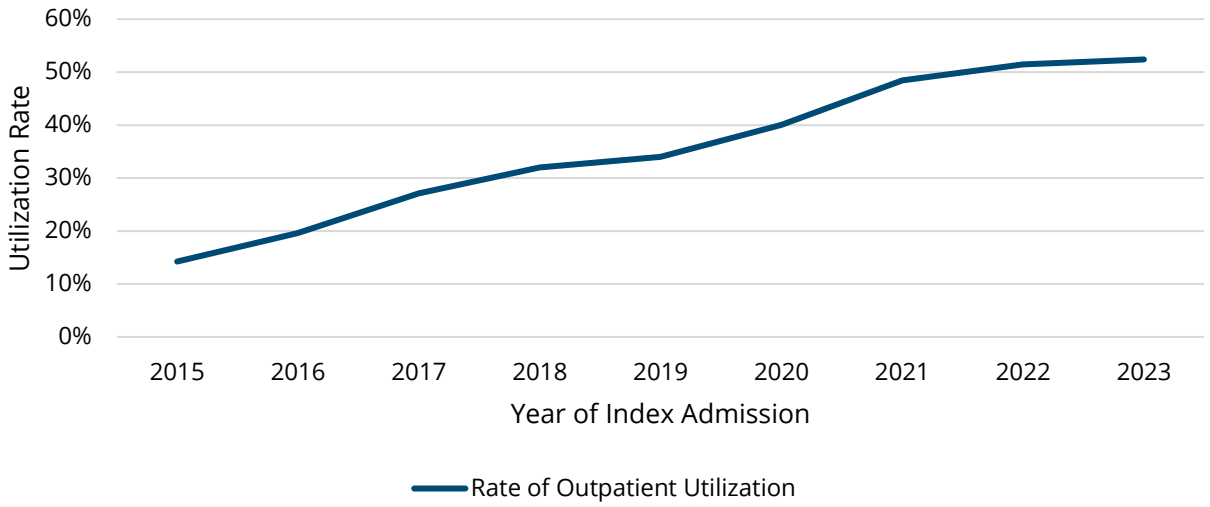


Table 8. Average 30-Day Price Standardized Episode Payments by Setting of Spine Surgery in Program Year 2022

Year	Average Inpatient Episode Cost	Number of Inpatient Episodes	Average Outpatient Episode Cost	Number of Outpatient Episodes	Percent Episodes Outpatient
2019	$31,776	706	$11,970	308	30.4%
2021	$34,550	397	$11,815	343	46.4%

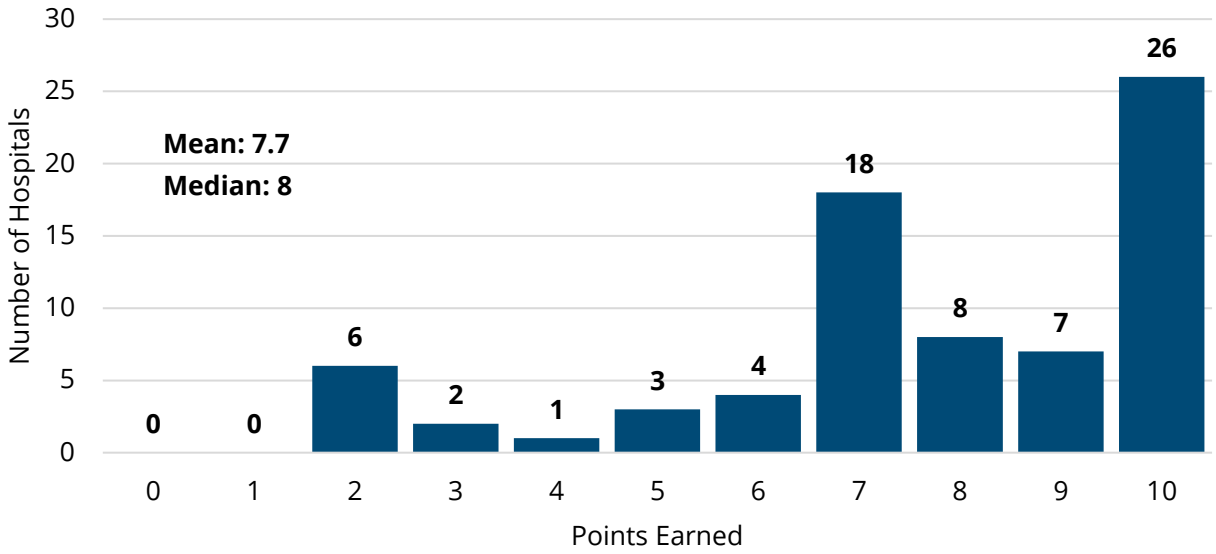
Table 9. Average 30-Day Price Standardized Episode Payments by Setting of Spine Surgery in Program Year 2023

Year	Average Inpatient Episode Cost	Number of Inpatient Episodes	Average Outpatient Episode Cost	Number of Outpatient Episodes	Percent Episodes Outpatient
2020	$35,078	755	$11,092	504	40.0%
2022	$36,463	640	$11,146	678	51.4%

Overview of Total Points Earned:

Figure 8 shows that every participating hospital earned at least two points in Program Year 2022, and over one-third of hospitals earned the max of 10 points. The average points earned after bonus points was 7.7.

Figure 8. Program Year 2022 Total Point Distribution (Includes Bonus Points)



Figures 9 and 10 show that in Program Year 2022, there was a more evenly distributed spread of points for achievement compared to improvement points. Nearly half of participating hospitals earned 5 improvement points, and nearly one fourth of the hospitals scored 5 achievement points in Program Year 2022. When examining the mean points, more hospitals earned points through achievement than improvement.

Figure 9. Program Year 2022 Achievement Point Distribution

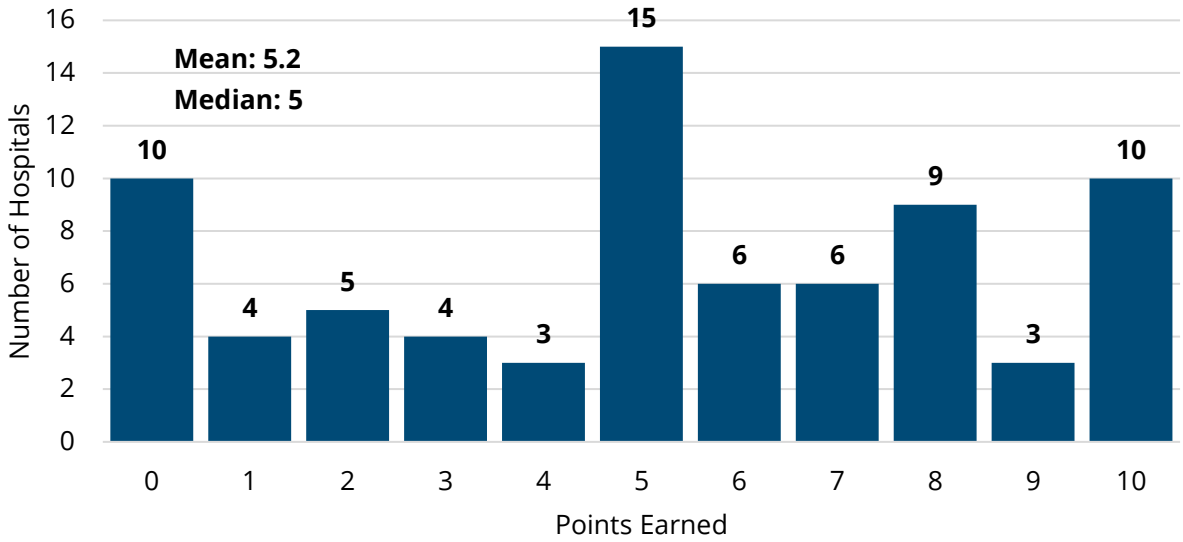


Figure 10. Program Year 2022 Improvement Point Distribution

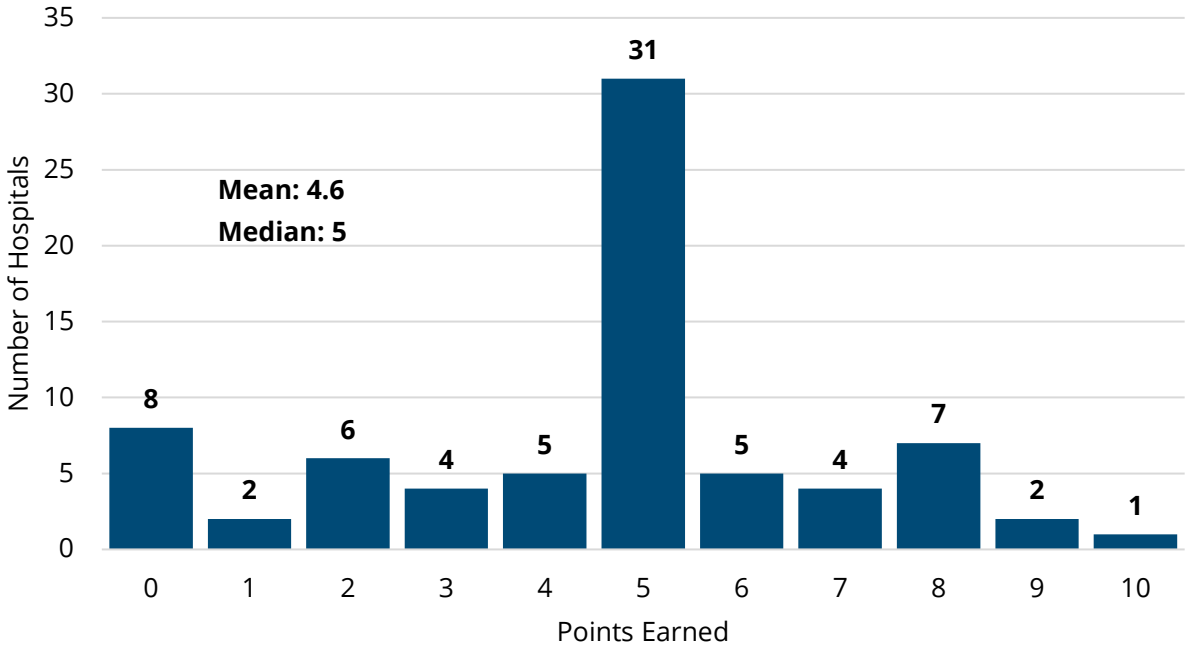
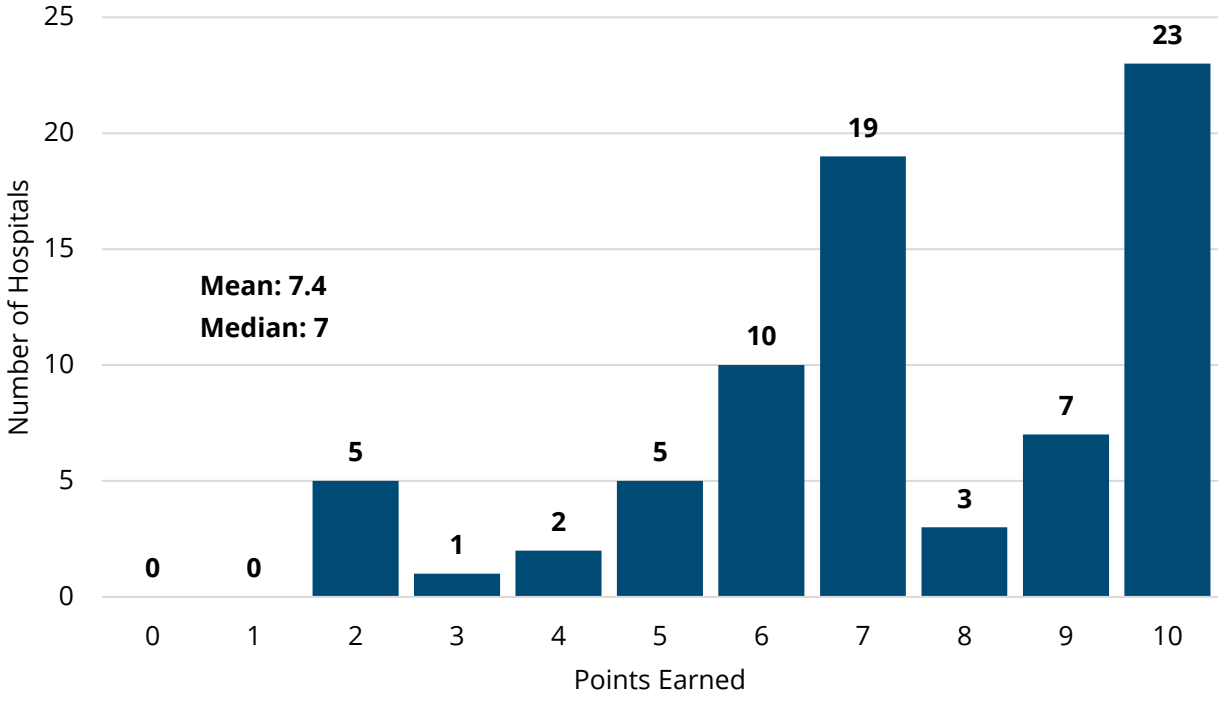


Figure 11 shows that every participating hospital earned at least two points in Program Year 2023, and about one-third of hospitals earned the max of 10 points. The average points earned after bonus points was 7.4.

Figure 11. Program Year 2023 Total Point Distribution (Includes Bonus Points)



Figures 12 and 13 show that there was a more evenly distributed spread of points for improvement than achievement in Program Year 2023. About one fourth of hospitals earned 5 improvement points, and about one fifth of the hospitals scored 5 achievement points. However, there was not much difference in the mean improvement and achievement points and hospitals earned points similarly on average through achievement and improvement.

Figure 12. Program Year 2023 Improvement Point Distribution

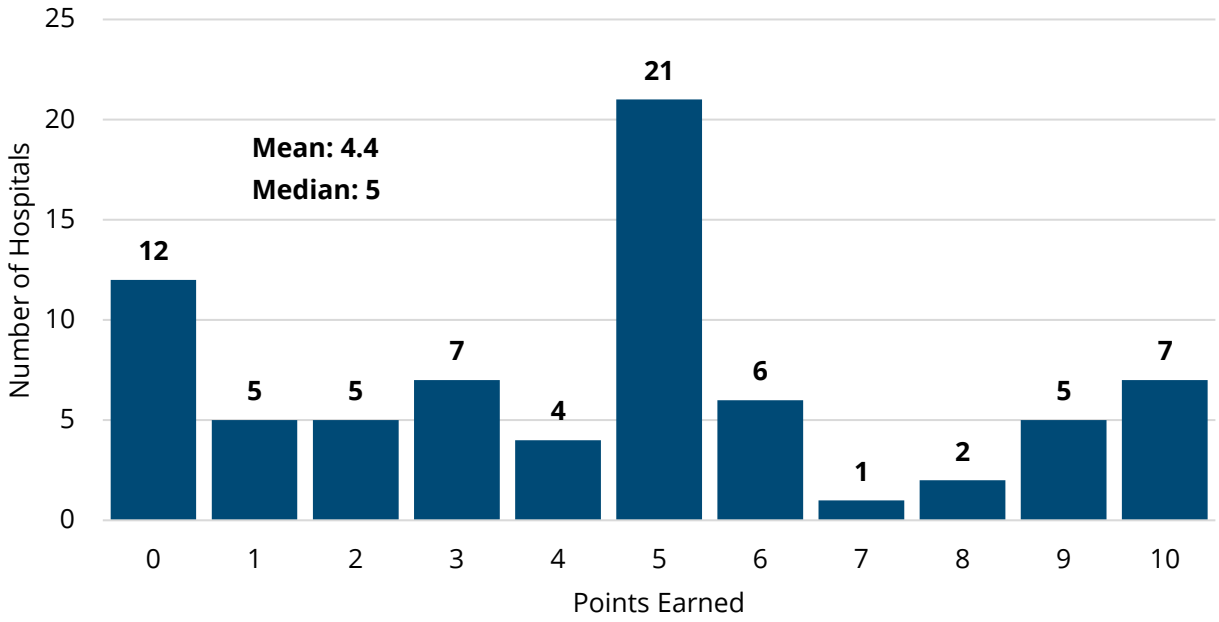
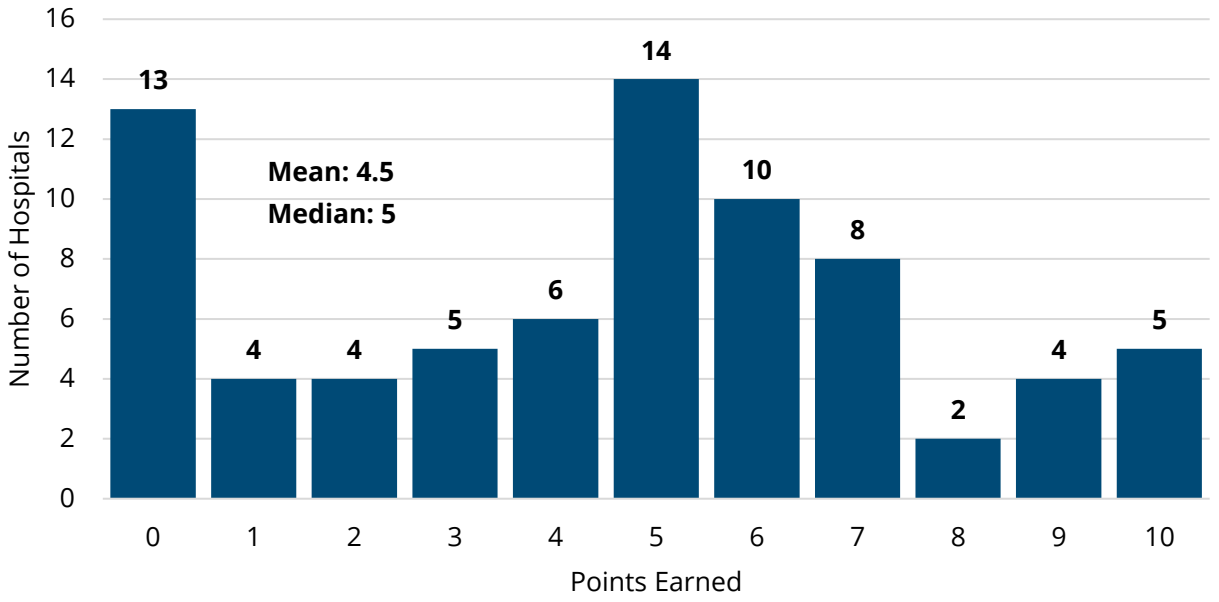


Figure 13. Program Year 2023 Achievement Point Distribution



Questionnaire Bonus Points

Hospitals had the opportunity to earn a bonus point for each selected condition if they filled out a questionnaire about quality initiatives for selected conditions at their hospital. The majority of hospitals earned both of these bonus points in program year 2022 (96%). However, in program year 2023, only 85% of the hospitals earned both bonus points. MVC is currently collating the results from these questionnaires and will share them with the collaborative at a later date.

Quality Threshold

In order to earn any P4P points, hospitals were required to meet the quality thresholds for both readmissions and inpatient mortality. All of the 75 evaluated hospitals met both quality thresholds in both Program Years 2022 and 2023.

Hospital Characteristics

Tables 10 and 11 show the point distribution by hospital characteristics including teaching status, bed size, and the type of geographic location for Program Years 2022 and 2023, respectively. MVC used the American Hospital Association (AHA) 2022 survey to identify hospital teaching status, bed size, and urban/rural classification. Teaching status and urban/rural designation was defined using the AHA guidelines described below.

Teaching Status

Major teaching hospitals were determined to be hospitals that had the Council of Teaching Hospitals designation and minor teaching hospitals had any one of the following accreditations:

- Participating site recognized for one or more Accreditation Council for Graduate Medical Education accredited programs
- Medical school affiliation reported to the American Medical Association
- Internship approved by American Osteopathic Association
- Residency approved by American Osteopathic Association

Urban/Rural Designation

- Rural hospitals were those located outside a Core-Based Statistical Area (CBSA), as designated by the U.S. Office of Management and Budget (OMB), effective June 6, 2003
- Urban hospitals were inside a CBSA
- Micropolitan areas, which were new to the OMB June 6, 2003 definitions, continue to be classified as “rural” in AHA data offerings
- Further information on urban and rural designations in Michigan is available here

Table 10 shows that in Program Year 2022, the point distribution was fairly consistent across hospitals of different teaching status. Hospitals with 500 or more beds earned slightly fewer points than hospitals with smaller bed sizes, and rural hospitals earned fewer points than metro or micro hospitals.

Table 10. Average Point Totals by Hospital Characteristics in Program Year 2022

Hospital Characteristic	Program Year 2022 Mean (SD)
Teaching status	
Major-teaching (N=5)	8.0 (2.0)
Minor-teaching (N=47)	7.6 (2.5)
Non-teaching (N=23)	7.7 (2.6)
Bed Size	
Fewer than 100 (N=21)	7.5 (2.5)
100-199 (N=13)	7.6 (2.8)
200-299 (N=13)	8.1 (1.8)
300-399 (N=10)	7.9 (2.4)
400-499 (N=7)	8.1 (2.5)
500 or more (N=11)	7.0 (2.9)
Location	
Metro (N=57)	7.7 (2.5)
Micro (N=13)	7.8 (2.0)
Rural (N=5)	6.4 (3.1)

Table 11 shows that in Program Year 2023, the point distribution remained relatively consistent across hospitals of different teaching status. Hospitals with 200-299 beds scored the lowest in the bed size category, and rural hospitals earned fewer points than metro and micro hospitals.

Table 11. Average Point Totals by Hospital Characteristics in Program Year 2023

Hospital Characteristic	Program Year 2023 Mean (SD)
Teaching status	
Major-teaching (N=5)	7.8 (1.6)
Minor-teaching (N=49)	7.4 (2.4)
Non-teaching (N=21)	7.4 (2.6)
Bed Size	
Fewer than 100 (N=21)	6.9 (2.8)
100-199 (N=14)	8.3 (2.6)
200-299 (N=10)	5.9 (2.2)
300-399 (N=13)	8.0 (1.8)
400-499 (N=6)	8.0 (2.0)
500 or more (N=11)	7.6 (1.4)
Location	
Metro (N=56)	7.5 (2.4)
Micro (N=14)	7.6 (2.3)
Rural (N=5)	5.8 (1.6)

Looking Forward

The MVC Coordinating Center will continue to evaluate the mechanisms by which hospitals were successful in the MVC Component of the BCBSM P4P program in order to share best practices with members. Additionally, the Coordinating Center will work to modify the program as necessary to ensure it is as fair and transparent as possible. For details regarding Program Years 2022 and 2023, please see the MVC P4P Technical Document. For details on the next cycle of the MVC Component of the BCBSM P4P program (Program Years 2024 and 2025), please see the 2024-2025 MVC P4P Technical Document.