

MBQIP Performance Score Methodology and Summary Summer 2020

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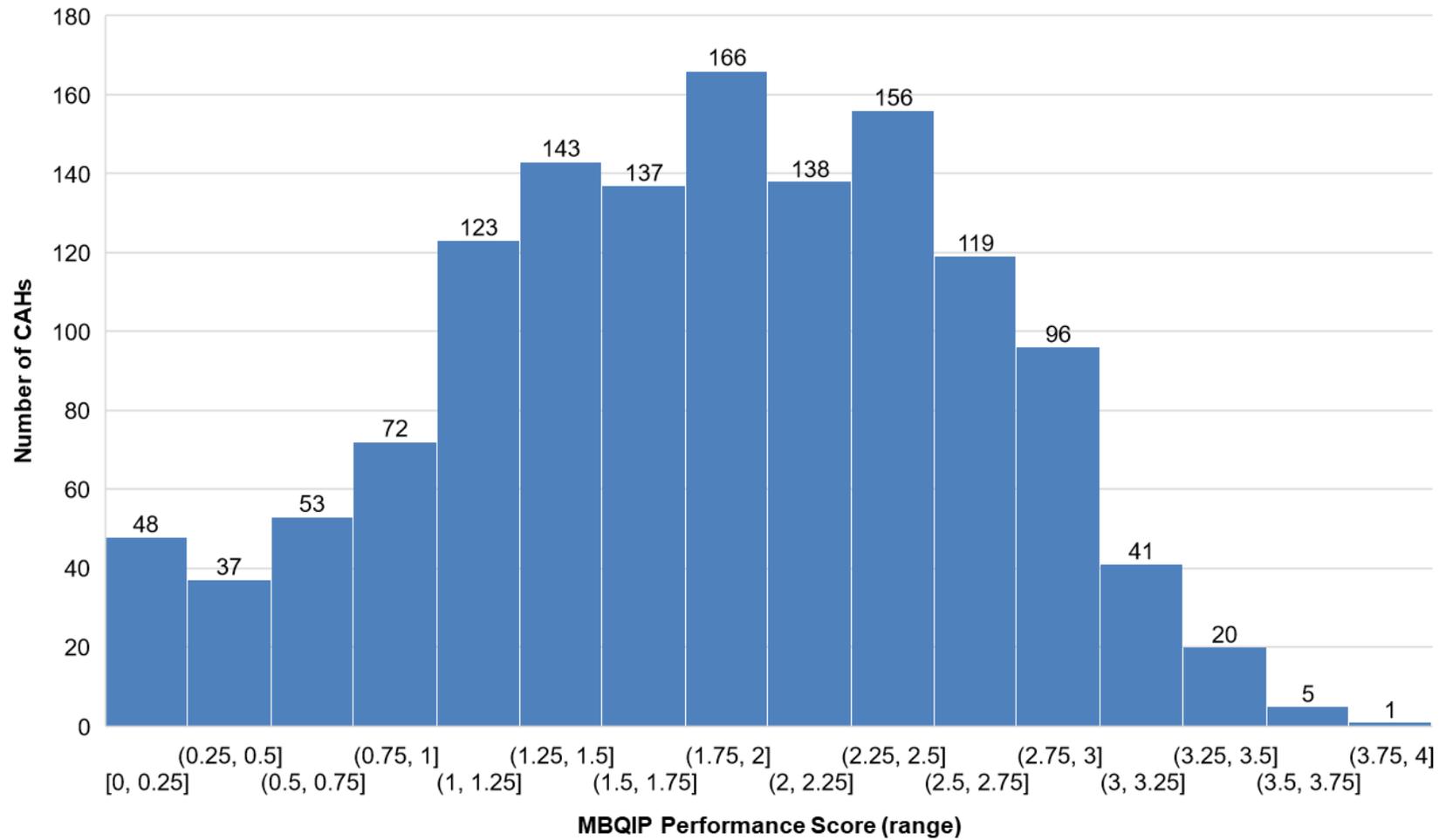
Summer 2020 Summary

The primary purpose of the MBQIP Performance Score (formerly referred to as MBQIP Performance Standards) is to set national goals for MBQIP and evaluate performance and improvement from a national level down to a specific measure. Initially launched in 2019, the MBQIP Performance Score is still in development and FORHP is continuing to explore ways to incorporate the Score into the MBQIP program. In the interim, states are encouraged to use these scores in whatever way makes most sense to them, and ongoing opportunities to provide feedback to FORHP will be offered.

The MBQIP Performance Score employs a methodology whereby all hospitals that meet the minimum standards for inclusion are evaluated across included measures for both achievement in a performance timeframe as compared to a benchmark set by FORHP and improvement in the same performance timeframe as compared to the same hospital's performance in a defined baseline timeframe (see [Figure 1](#)). For each hospital, points are calculated at the measure level (see [Figure 2](#)). These measure scores are added up into a domain score, which are then weighted, and added up into the MBQIP Performance Score (see [Figure 3](#)). The Methodology section below includes a detailed description of the methodology and the specifications for inclusion at each point of the process.

The following chart displays MBQIP Performance Score distribution for the 1,355 CAHs that were participating in MBQIP at any point within the timeframes used for Summer 2020 calculations.

Distribution of MBQIP Performance Scores (Summer 2020)



Methodology

Figure 1

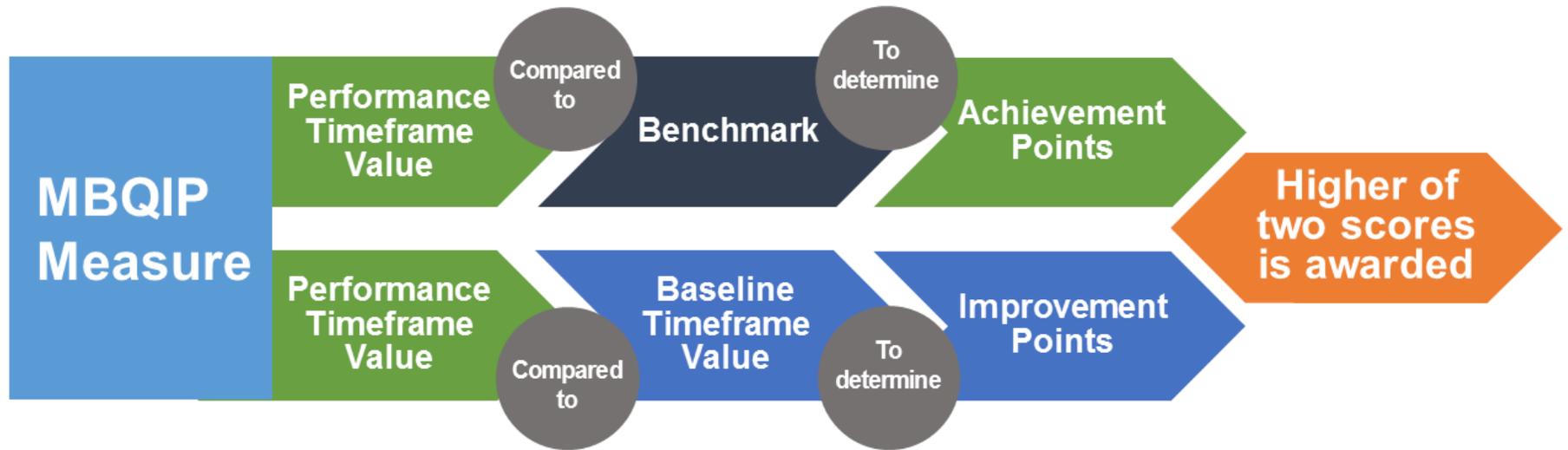


Figure 2

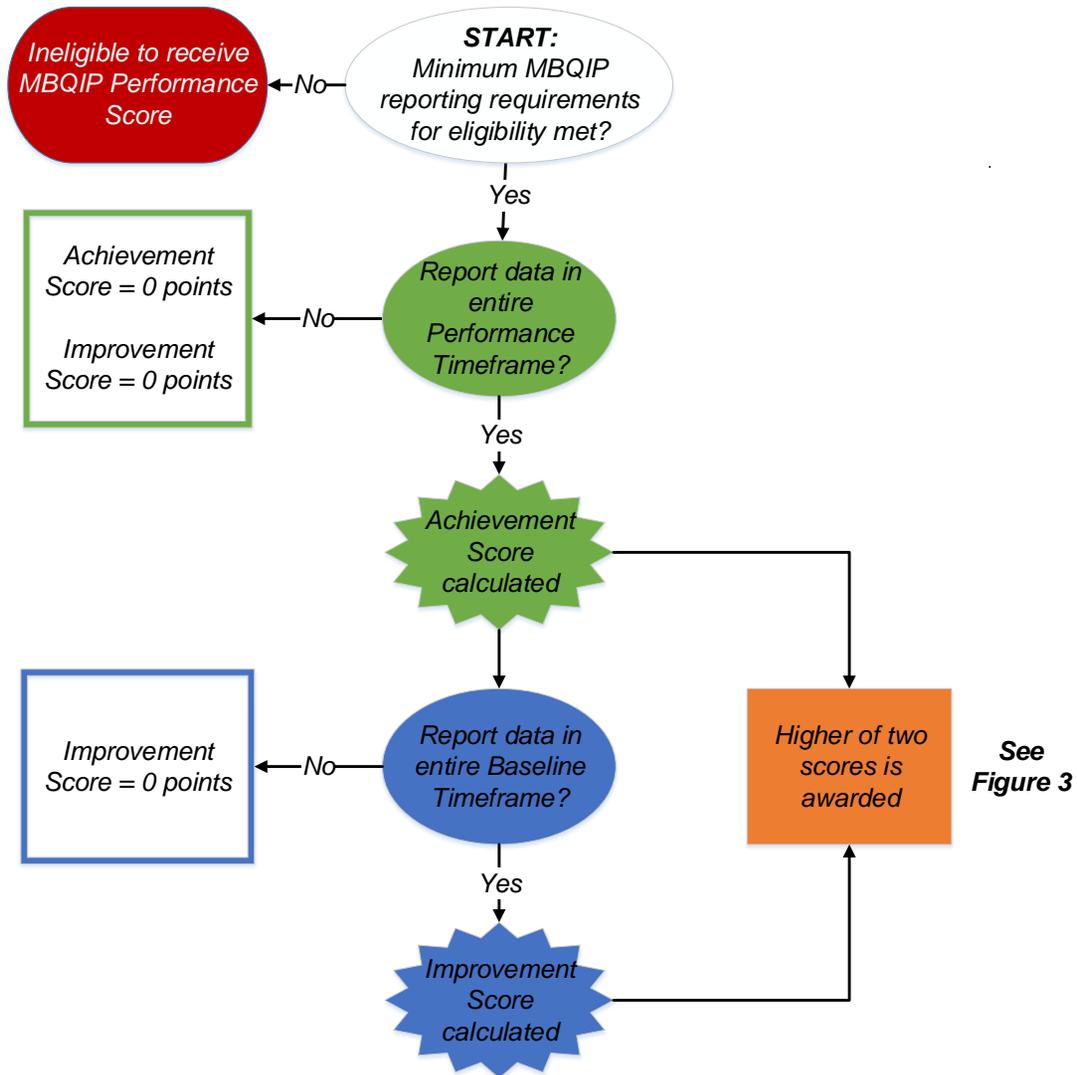
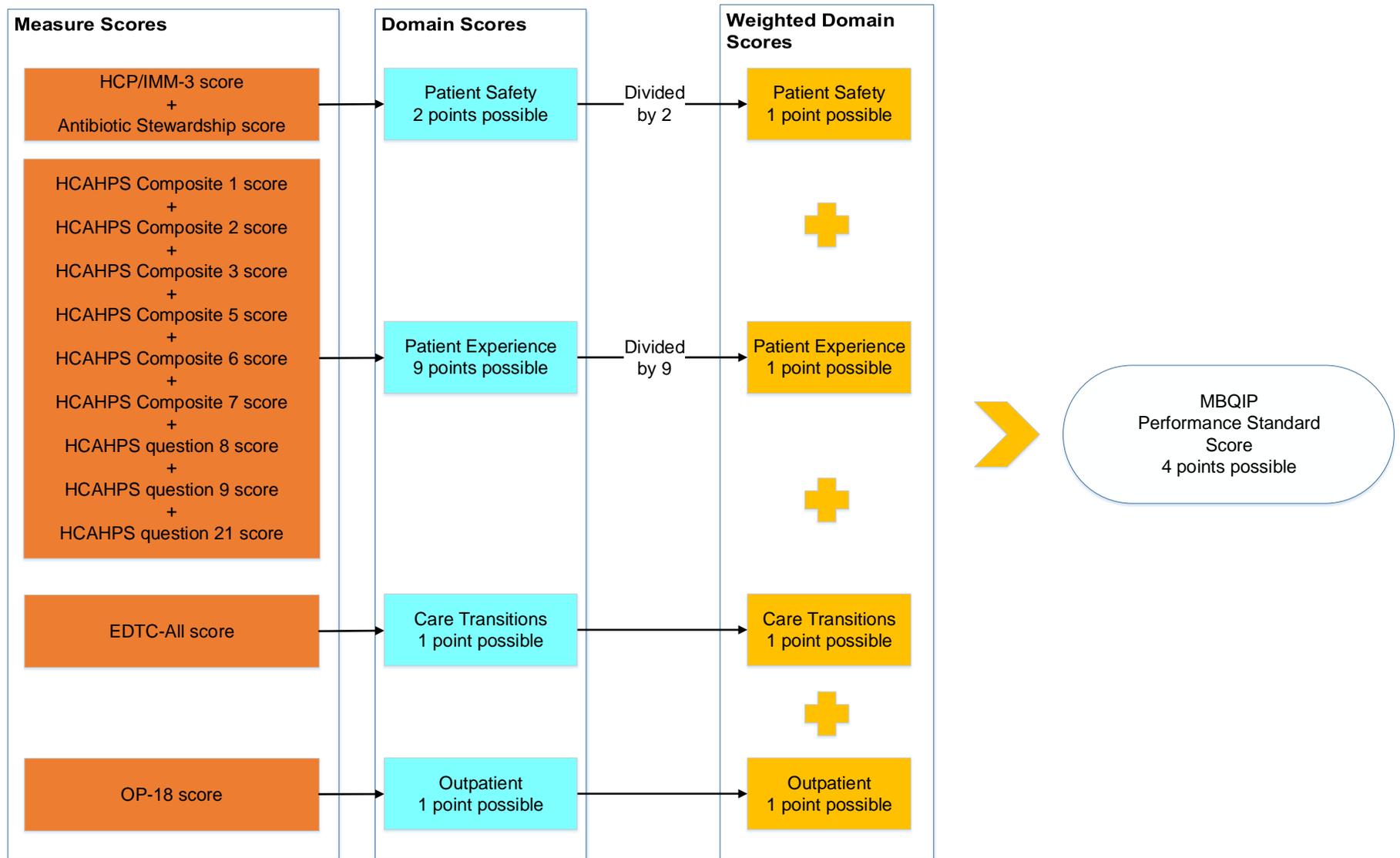


Figure 3



Methodology (detailed)

- A critical access hospital (CAH) must meet the [minimum MBQIP reporting requirements for Flex Program eligibility](#) to be eligible to receive an MBQIP Performance Score. **For Summer 2020 calculations, MBQIP Performance Scores are calculated for all hospitals participating in MBQIP as there are currently no minimum MBQIP reporting requirements.**
- For each hospital, points are calculated at the measure level. These measure scores are added up into a domain score. Domain scores are then weighted. Weighted domain scores are added up into the MBQIP Performance Score. See [Definitions and Terminology](#) section for more details on these terms.
- **Measure score:** For each measure in the MBQIP Performance Score, hospitals are awarded the higher of two potential scores:
 - **Achievement score:** Up to 1 point per measure
 - Quarterly measures (Currently: EDTC, OP-18)
 - **Eligibility:** A hospital must report all four consecutive quarters of data in the performance timeframe to be eligible for receiving an achievement score.
 - **Scoring:** Counts the number of quarters for which the hospital's performance timeframe value was at or better than a benchmark set by FORHP. The hospital receives 0.25 points for each quarter this is achieved. If this is never achieved the hospital receives 0 points.
 - Annual measures (Currently: HCP/IMM-3, Antibiotic Stewardship, and HCAHPS)
 - **Eligibility:** A hospital must report one full year for in the performance timeframe to be eligible for receiving an achievement score.
 - **Scoring:** If a hospital's performance timeframe value was at or better than a benchmark set by FORHP, the hospital receives 1 point. Otherwise the hospital receives 0 points.
 - **Improvement score:** Up to 0.5 points per measure
 - Quarterly measures (Currently: EDTC)
 - **Eligibility:** A hospital must report all four consecutive quarters of data in the baseline timeframe and all four consecutive quarters of data in the performance timeframe to be eligible for receiving an improvement score.

Example: MBQIP Performance Score Calculations

Please note that all examples are based on timeframes and benchmarks from the first production of the MBQIP Performance Score (FY19).

Patient Safety: Antibiotic Stewardship (annual measure)

Hospital A reports the following data via its annual facility survey:

<i>Baseline timeframe (2016)</i>	<i>Performance timeframe (2017)</i>	<i>Benchmark</i>
Did not report	6 out of 7 core elements	7 out of 7 core elements

Achievement score

- Because Hospital A reported data in the performance timeframe, it is eligible to receive an achievement score.
- Hospital A's performance timeframe value was not at or above the benchmark of 7 out of 7 for antibiotic stewardship, so it receives a total of **0 points** for an achievement score.

Improvement score

- Because Hospital A did not report data in the baseline timeframe (even though it did in the performance timeframe), it is not eligible to receive an improvement score. It receives a total of **0 points** for an improvement score as a result.

Measure score for Antibiotic Stewardship

The hospital will be awarded the higher of these two scores for the measure: achievement or improvement. For Hospital A, the achievement score is 0 points, and the improvement score is 0 points so it will be awarded **0 points for the measure**.

Patient Safety: HCP/IMM-3 (annual measure)

Hospital A reports the following data:

<i>Baseline timeframe (4Q16 – 1Q17)</i>	<i>Performance timeframe (4Q17 – 1Q18)</i>	<i>Benchmark</i>
80%	90%	100%

Achievement score

- Because Hospital A reported data in the performance timeframe, it is eligible to receive an achievement score.
- Hospital A’s performance timeframe value was not at or above the benchmark of 100%, so it receives a total of **0 points** for an achievement score.

Improvement score

- Because Hospital A reported data in the baseline timeframe as well as in the performance timeframe, it is also eligible to receive an improvement score.
- Comparing Hospital A’s aggregate performance timeframe value to its aggregate baseline timeframe value, we see that Hospital A improved. 90% – 80% is a 10 percentage point improvement. Hospital A receives a total of **0.5 points** for an improvement score.

Measure score for HCP/IMM-3

The hospital will be awarded the higher of these two scores for the measure: achievement or improvement. For Hospital A, the achievement score is 0 points, and the improvement score is 0.5 points so it will be awarded **0.5 points for the measure**.

Domain score for Patient Safety

The hospital received 0 points for the Antibiotic Stewardship measure score, and 0.5 points for the HCP/IMM-3 measure score.

- Domain score: 0 points + 0.5 points = **0.5 points**
- Weighted domain score: 0.5 points / 2 possible points = **0.25 points**

Patient Safety: HCAHPS (annual measure)

Hospital A reports the following baseline and performance data for HCAHPS. For illustration purposes, only Composite 1 calculations are described below (but all calculations are shown in the table that follows).

<i>HCAHPS Composite/Question</i>	<i>Baseline timeframe</i>	<i>Performance timeframe</i>	<i>Benchmark</i>	<i>Achievement score</i>	<i>Difference</i>	<i>Improvement score</i>	<i>Measure score</i>
Composite 1 – Communication with Nurses	80%	90%	87.12%	1	10%	0.5	1
Composite 2 – Communication with Doctors	80%	85%	88.44%	0	5%	0.5	0.5
Composite 3 – Responsiveness of Hospital Staff	80%	85%	80.14%	1	5%	0.5	1
Composite 5 – Communication about Medicines	N/A	N/A	73.86%	0	5%	0	0
Composite 6 – Discharge Information	90%	95%	92.11%	1	5%	0.5	1
Composite 7 – Care Transitions	60%	65%	62.50%	1	5%	0.5	1
Question 8 – Cleanliness of Hospital Environment	70%	70%	79.42%	0	0%	0	0
Question 9 – Quietness of Hospital Environment	70%	65%	79.42%	0	-5%	0	0
Question 21 – Overall Hospital Rating	80%	85%	85.12%	0	5%	0.5	0.5

Achievement score for Composite 1

- Because Hospital A reported data in the performance timeframe, it is eligible to receive an achievement score.
- Hospital A’s performance timeframe value was at or above the benchmark for Composite 1, so it receives a total of **1 point** for an achievement score.

Improvement score for Composite 1

- Because Hospital A reported data in the baseline timeframe as well as in the performance timeframe, it is also eligible to receive an improvement score.
- Comparing Hospital A’s aggregate performance timeframe value on Composite 1 to its aggregate baseline timeframe value, we see that Hospital A improved. Hospital A receives a total of **0.5 points** for an improvement score.

Measure score for HCAHPS Composite 1

The hospital will be awarded the higher of these two scores for the measure: achievement or improvement. For Hospital A, the achievement score is 1 point and the improvement score is 0.5 points, so it will be awarded **1 point for the measure**.

Domain score for Patient Experience

The hospital received points as shown in the last column of the table above for each of the HCAHPS Composite measures.

- Domain score:
1 points + 0.5 points + 1 point + 0 point + 1 point + 1 point + 0 points + 0 points + 0.5 points = **5 points**
- Weighted domain score:
5 points / 9 possible points = **0.56 points**

Care Transitions: EDTC-All (quarterly measure)

Hospital A reports the following data for EDTC-All:

<i>Baseline timeframe</i>	<i>Performance timeframe</i>	<i>Benchmark</i>
Q1 2017: 36/45 = 80%	Q1 2018: 45/45 = 100%	100%
Q2 2017: 27/45 = 60%	Q2 2018: 36/45 = 80%	
Q3 2017: 36/45 = 80%	Q3 2018: 45/45 = 100%	
Q4 2017: 40/45 = 89%	Q4 2018: 45/45 = 100%	

Achievement

- Because Hospital A reported all four consecutive quarters of data in the performance timeframe, it is eligible to receive an achievement score.
- Hospital A's performance timeframe value was at or above the benchmark of 100% for EDTC-All during three quarters of the performance timeframe, so it receives a total of **0.75 points** (0.25 + 0.25 + 0.25) for an achievement score.

Improvement

- Because Hospital A reported all four consecutive quarters of data in the baseline timeframe as well as in the performance timeframe, it is also eligible to receive an improvement score.
- Comparing Hospital A's aggregate performance timeframe value to its aggregate baseline timeframe value, we see that Hospital A improved. See below for this calculation.

Performance Timeframe Value:

$$\frac{45 + 36 + 45 + 45}{45 + 45 + 45 + 45} = \frac{171}{180} = \mathbf{95\%}$$

Baseline Timeframe Value:

$$\frac{36 + 27 + 36 + 40}{45 + 45 + 45 + 45} = \frac{139}{180} = \mathbf{77\%}$$

- 95% – 77% is an 18 percentage point improvement. Hospital A receives a total of **0.5 points** for an improvement score.

Measure score for EDTC-All

The hospital will be awarded the higher of these two scores for the measure: achievement or improvement. For Hospital A, the achievement score is 0.75 points and the improvement score is 0.5 points, so it will be awarded **0.75 points for the measure**.

Domain score for Care Transitions

Because EDTC-All is the only measure in the Care Transitions domain, Hospital A's Care Transitions domain score will also be **0.75 points**.

Outpatient: OP-18 (quarterly measure)

Hospital A reports the following data for OP-18:

<i>Performance timeframe</i>	<i>Benchmark</i>
Q3 2017: 120 minutes	112 Minutes
Q4 2017: 108 minutes	
Q1 2018: 140 minutes	
Q2 2018: 110 minutes	

Achievement

- Because Hospital A reported all four consecutive quarters of data in the performance timeframe, it is eligible to receive an achievement score.
- Hospital A's performance was at or better than the benchmark of 112 minutes for OP-18 during two quarters of the performance timeframe (Q4 2017 and Q2 2018), so it receives a total of **0.5 points** (0.25 + 0.25) for an achievement score.

Improvement

- No improvement score is calculated for OP-18. It is a median measure and variation can be reasonably expected from quarter to quarter, such that improvement (or lack thereof) calculated using the difference between the performance timeframe value and the baseline timeframe value may not be meaningful.

Measure score for OP-18

The hospital will be awarded the achievement score for OP-18, since no improvement score is calculated. For Hospital A, the achievement score is 0.5 points, so it will be awarded **0.5 points for the measure**.

Domain score for Outpatient

Because OP-18 is the only measure in the Outpatient domain, Hospital A's Outpatient domain score will also be **0.5 points**.

MBQIP Performance Score for Hospital A

<i>Domain</i>	<i>Weighted domain score</i>	<i>MBQIP Performance Score</i>
Patient Safety	0.25	0.25 + 0.56 + 0.75 + 0.50 = 2.06
Patient Experience	0.56	
Care Transitions	0.75	
Outpatient	0.50	

Definitions & Terminology

Timeframes

- **Baseline timeframe:** Baseline timeframe is the year prior to the performance timeframe. For example:

Baseline Timeframe	Performance Timeframe
4Q16 – 3Q17	4Q17 – 3Q18

- **Performance timeframe:** Performance timeframes align with those of MBQIP minimum eligibility reporting requirements for participation.
- **Baseline timeframe value:** Measure results from baseline timeframe compared against performance timeframe for improvement points.
- **Performance timeframe value:** Measure results from performance timeframe that serves as the basis for comparison against baseline timeframe (for improvement) and benchmark (for achievement).
- **Benchmark:** A performance goal set by FORHP for each measure.
 - For EDTC, HCP/IMM-3, and Antibiotic Stewardship, the benchmark is 100%.
 - HCAHPS benchmarks are set using criteria from the Hospital [Value-Based Purchasing \(VBP\) program](#).
 - OP-18 benchmark is set using the Hospital Compare published low-volume hospital performance for the final quarter in the performance timeframe.

Scoring

- **Achievement score:** Points received if a hospital's performance timeframe value(s) is at or better than the established benchmark.
- **Improvement score:** Points received if a hospital's performance timeframe value(s) is better than its baseline timeframe value.
- **Measure score:** Final points awarded for a measure, defined as the higher of the possible two scores: achievement or improvement.
- **Domain score:** The total number of points a hospital was awarded for the measure(s) within a domain.
 - Patient Safety: 2 points possible maximum. HCP/IMM-3 and Antibiotic Stewardship are the two measure scores.
 - Patient Experience: 9 points possible maximum. Nine HCAHPS composites are included as measure scores.
 - Care Transitions: 1 point possible maximum. EDTC is the only measure score.
 - Outpatient: 1 point possible maximum. OP-18 is the only measure score.
- **Weighted domain score:** The domain score for a hospital, divided by the maximum number of points possible in that domain. A weighted domain score will be 1 point at most.
- **MBQIP Performance Score:** The sum of the four weighted domain scores for a hospital. An MBQIP Performance Score will be 4 points at most.

Eligibility

- **MBQIP Performance Score inclusion:** A hospital has met the [minimum MBQIP reporting requirements for Flex Program eligibility](#).
- **Eligible to receive a positive achievement score:** For a given measure, a hospital included in the MBQIP Performance Standard has data in the entire performance timeframe.
- **Hospital ineligible to receive a positive achievement score:** For a given measure, a hospital included in the MBQIP Performance Standard does not have data in the entire performance timeframe. A hospital ineligible to receive a positive achievement score automatically receives an achievement score of 0.
- **Eligible to receive a positive improvement score:** For a given measure, a hospital included in the MBQIP Performance Standard has data in both the entire baseline and performance timeframes.
- **Hospital ineligible to receive a positive improvement score:** For a given measure, a hospital included in the MBQIP Performance Standard does not have data in both the entire baseline and performance timeframes. A hospital ineligible to receive a positive achievement score automatically receives an improvement score of 0.
- **Did not report sufficient data to receive a positive score:** For a given measure, a hospital included in the MBQIP Performance Standard was not eligible to receive a positive achievement score nor a positive improvement score. A hospital that did not report sufficient data to receive a positive score automatically receives a measure score of 0.

Timeframes and Benchmarks for Summer 2020

Performance timeframes below correspond to the most recent data available to FORHP as of June 2020. Baseline timeframes are the year before the performance timeframes.

Domain	Measure	<u>Baseline Timeframe</u>	<u>Performance Timeframe</u>	<u>Benchmark</u>	<u>Benchmark Source</u>
Patient Safety	HCP/IMM-3 (formerly OP-27)	4Q17 – 1Q18	4Q18 – 1Q19	100%	Achievable process measure
Patient Safety	Antibiotic Stewardship	CY 2017	CY 2018	7 out of 7	Achievable process measure
Patient Experience	HCAHPS – Composite 1			87.36%	FY 2021 Hospital Value-Based Purchasing (VBP) program
	HCAHPS – Composite 2			88.10%	
	HCAHPS – Composite 3			81.10%	
	HCAHPS – Composite 5			74.75%	
	HCAHPS – Composite 6	4Q17 – 3Q18	4Q18 – 3Q19	92.17%	
	HCAHPS – Composite 7			63.32%	
	HCAHPS – Question 8			79.58%	
	HCAHPS – Question 9			79.58%	
	HCAHPS – Question 21			85.67%	
Care Transitions	EDTC-All	1Q18 – 4Q18	1Q19 – 4Q19	100%	Achievable process measure
Outpatient	OP-18	4Q17 – 3Q18	4Q18 – 3Q19	113 minutes	Hospital Compare low-volume hospital performance for second to last quarter (2Q19) of performance timeframe (most recent available on Hospital Compare at time of analysis)

Key to HCAHPS Composites/Questions

- **Comp 1:** Composite 1 – Communication with Nurses
- **Comp 2:** Composite 2 – Communication with Doctors
- **Comp 3:** Composite 3 – Responsiveness of Hospital Staff
- **Comp 5:** Composite 5 – Communication about Medicines
- **Comp 6:** Composite 6 – Discharge Information
- **Comp 7:** Composite 7 – Care Transitions
- **Q 8:** Question 8 – Cleanliness of Hospital Environment
- **Q 9:** Question 9 – Quietness of Hospital Environment
- **Q 21:** Question 21 – Overall Hospital Rating