Interpreting MBQIP Hospital Data Reports for Quality Improvement

Updated March 2018
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Overview

About MBQIP
The Medicare Beneficiary Quality Improvement Project (MBQIP) is a quality improvement activity under the Federal Office of Rural Health Policy’s (FORHP) Medicare Rural Hospital Flexibility (Flex) grant program. Implemented in 2011, the goal of MBQIP is to improve the quality of care provided in critical access hospitals (CAHs) by increasing voluntary quality data reporting by CAHs and then driving quality improvement activities based on the data.

MBQIP provides an opportunity for individual hospitals to look at their own data, compare their results against other CAHs and partner with other hospitals around quality improvement initiatives to improve outcomes and provide the highest quality care to each and every one of their patients. Demonstrating value by providing cost efficient, quality care is the future of health care reimbursement. MBQIP takes a proactive approach to ensure CAHs are well-prepared to meet future quality requirements.

Purpose of this Guide
This guide is intended to help CAH staff use MBQIP Hospital Data Reports to support quality improvement efforts and improve patient care. The guide includes:

- Examples of how to interpret MBQIP Hospital Data Reports with a focus on improvement. The examples within the text reference notated sample MBQIP Hospital Data Reports (which can be found in Appendix A). Hyperlinks within the text and the sample reports allow the reader to toggle back and forth on the screen. Some may find it helpful to print the sample reports for review purposes.
- A glossary of key words with definitions and external links, if applicable. Throughout the document key words are hyperlinked so the reader is able to click on the word and go directly to the glossary.
- This guide focuses on interpretation and use of the MBQIP Hospital Data Reports. For information regarding best practices on MBQIP measures and quality improvement strategies, see the Quality Improvement Implementation Guide and Toolkit for Critical Access Hospitals

Measures included in the MBQIP Data Interpretation Guide
This guide focuses on how to make use of data for measures reported for MBQIP as part of the fiscal year (FY) 2017 Flex grant cycle, which ends August 31, 2017. Recognizing the evolving nature of health care quality measures, this guide will be updated on a routine basis to align with changes made to MBQIP.

MBQIP Hospital Data Reports, which include state and national CAH comparisons, are distributed to CAHs approximately quarterly. Contact your state Flex Coordinator if you are unsure who is receiving these reports at your hospital. Contact information for your state Flex Coordinator can be on the State Flex Profile page of the TASC website. There are three separate MBQIP Hospital Data Reports:

- Patient Safety and Inpatient/Outpatient Care Quality Report
- Care Transitions (EDTC) Quality Report
- Patient Experience (HCAHPS) Quality Report
Using MBQIP Patient Safety and Inpatient/Outpatient Care Quality Reports

The MBQIP Patient Safety and Inpatient/Outpatient Care Quality Reports include data from CMS Hospital Compare measures that are relevant for CAHs under the MBQIP domains of patient safety and outpatient care. The reports include data from all CAHs that have signed a MBQIP Memorandum of Understanding (MOU) and have submitted data. Thus, the reports include data from CAHs that have not agreed to publicly report on Hospital Compare, in addition to data from CAHs that don’t have enough cases to be publically reported on Hospital Compare, providing a more complete picture of performance across CAHs nationally.

N/A, D/E, 0 Patients on Patient Safety and Inpatient/Outpatient Care Quality Reports

The following are brief explanations and examples of why an MBQIP Patient Safety and Inpatient/Outpatient Care Quality Report might show not available (N/A), zero (0) patients, or data excluded (D/E) for some measures.

N/A can mean two different things:

- Data was not submitted/reported by the CAH.
- Data was submitted but was rejected/not accepted into the Quality Improvement Organization (QIO) Clinical Warehouse.

**Examples – N/A**

- A CAH did not enter a zero into the Population and Sampling grid for a given measure set and did not submit/report any cases to QualityNet. (See the MBQIP Reporting Guide for more details on Population and Sampling.)
- A CAH may have submitted data to the QIO Clinical Warehouse, but the file could have had technical issues or a case was missing data in some of the abstraction fields. The case(s) would be rejected from the warehouse. CAHs are strongly encouraged to run a case status summary report each quarter after submission (and before the deadline) to ensure cases have been accepted into the warehouse. Instructions can be found here: [https://www.ruralcenter.org/tasc/resources/get-your-data-accepted-qualitynet-warehouse](https://www.ruralcenter.org/tasc/resources/get-your-data-accepted-qualitynet-warehouse)
- A CAH may have entered a number greater than zero into the Population and Sampling grid, but did not submit/report any cases to QualityNet.

Zero (0) means that a CAH entered a zero into the Population and Sampling grid, indicating that it had no eligible patients in a measure set population for the reporting quarter, and the CAH did not submit/report anything further to QualityNet.

**Example – 0 Patients**

A CAH entered a zero into the Population and Sampling grid for a particular measure set. The CAH did not submit/report anything further to QualityNet (because there were no eligible cases to submit). Because the CAH entered a zero into the Population and Sampling grid to indicate that no cases were eligible, the CAH is considered reporting, and a 0 is shown on the Patient Safety and Outpatient Report.

Data excluded (D/E) means that the CAH submitted eligible cases to QualityNet. Data was considered submitted and accepted to the QIO Clinical Warehouse; however, case(s) were excluded from a particular measure.
Examples – D/E

- A CAH submits eligible cases in the population for a measure set, but the cases do not meet the inclusion criteria for a specific measure. One way this might happen is: A CAH submits one outpatient acute myocardial infarction (AMI) care case and the case is accepted into the QIO Clinical Warehouse. However, since the patient was not given fibrinolytic therapy, the case does not meet the criteria for inclusion in OP-1 (median time to fibrinolytic therapy) and OP-2 (fibrinolytic therapy received within 20 minutes of ED arrival). The OP-1 and OP-2 measures are excluded for this case, and, if no other AMI care cases are submitted, the report would indicate D/E for the OP-1 and OP-2 measures.

Using Comparison Data for Patient Safety and Inpatient/Outpatient Measures

MBQIP Patient Safety and Inpatient/Outpatient Care Quality Reports include state and national comparison data for all reporting CAHs. The measures on these reports are process-based quality measures, which evaluate implementation of clinically proven best practices of care. Hospitals should strive to provide these best practices in clinical care to every patient, 100 percent of the time.

State and national comparison data are averages. In your reports, averages of the state and national median measures (OP-1, OP-3b, etc.) are medians of those hospital-level medians for CAHs in the state, and in the nation. To calculate such an average for a given measure, the medians of all hospitals reporting that measure would be arranged smallest to largest, and the middle median would be displayed on the report. Averages of the state and national percentage measures (OP-2, OP-4, etc.) are averages in the more usual sense of the term. To calculate the state and national averages for a given measure, the sum of all numerators for that measure is divided by the sum of all denominators. (state and national median measures are medians of the median, while state and national percentage measures are averages in the usual use of the term).

Although it can be helpful to understand your comparison to those norms, averages represent the middle ground for performance and everyone should strive to achieve at least the 90th percentile for each measure. For quality improvement purposes, such data benchmarks are more useful than average comparison data. (Note: Benchmarks for the top 10 percent by state and for the nation are included in your MBQIP Patient Safety and Outpatient reports, but your state Flex Coordinator may be able to provide additional state specific information)

Interpreting Reports to Support Improvement

Examples of how to interpret the data for use in quality improvement efforts are listed below. Each example is hyperlinked to the corresponding example in the sample reports found in Appendix A.

Example A: Lack of Consistent Process
Reports that show a measure routinely at low performance indicate that there is not a consistent process for completion and documentation of that best practice of care. Hospitals in this situation are encouraged to develop and implement standardized processes to ensure evidence-based care is being provided and documented.

Example B: Process May Need Adjustment
Reports that show a measure routinely at high performance, but not at 100 percent indicate processes for best practices are in place, but there is opportunity to ensure they are consistently followed. In this situation, a hospital may want to consider reviewing records for the patient stays that did not meet the measure. They can help the hospital to understand why those individual patients did not receive the evidence-based best
practice. This can help identify opportunities to improve processes and documentation, or may identify the need for staff education or reminders to follow the processes and procedures in place.

**Example C: Understanding Variation**

Reports that indicate a wide variation on timing measures should be reviewed to understand the cause(s) of that variation. In Example C, the percentage of patients receiving aspirin at arrival varies from 75% to 100%. Some things to consider:

- The state and national averages for receiving aspirin at arrival are 96% and 95% respectively, so the values of 75% in the first quarter of 2017 (abbreviated as 1Q17) and 93% in 2Q17 appear to be a bit low.
- In this situation, the transfer cases could be reviewed for a better understanding of what type of variation caused the percentage receiving aspirin at arrival to be so low, and identify if there are opportunities to improve the process. There are two causes of variation:
  - If the variation is **common cause**, such as the time to run and interpret test results, that may indicate an opportunity to improve the testing process.
  - If the variation is **special cause**, due to an unusual case or situation that impacted the results, it is important to understand that cause; however, rather than changing processes, it may lead to the need for development of a back-up plan.

**Example D: Variation Outside of a Set Limit**

- This example illustrates a **common cause variation** in the measure across the quarters of data on the report. For this measure, median time to electrocardiogram (ECG) has specific clinical recommendations attached – that the ECG should be completed within 10 minutes of arrival. A **median** time of 10 minutes indicates that half of the patients received their ECG more than 10 minutes after arrival to the emergency department (ED), which is outside the set guidelines for this process of care. A review of cases and workflow is warranted to identify opportunities to improve time to ECG and ensure excellent care for all patients.

**Example E: Considerations for Timing Measures**

To identify areas of improvement for timing measures (such as ED-1, or OP-18), look at your own hospital’s variation to understand opportunities. In Example X, the median time from ED arrival to ED departure for admitted ED patients is steadily increasing. This hospital might want to look into any possible reasons for that increase in time. In addition to looking at variation each quarter within the hospital, it can also be helpful to compare against the median and 90th percentiles for both the state and the nation to identify areas of improvement and identify benchmarking targets. In this case the hospital has a consistently larger median time than both the state and national averages, suggesting that the hospital might want to look at opportunities for decreasing that time.

**Using MBQIP Patient Engagement Quality Reports**

MBQIP Patient Engagement Quality Reports summarize Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey data reported by hospitals, which provides hospitals the opportunity to understand care provided from the patient’s point of view. In addition to four screening and seven demographic questions, the survey includes 21 questions that ask patients for their feedback on a variety of aspects related to their experience as an inpatient in the hospital. The 21 substantive questions are broken into seven **composite** areas, two individual topic areas and two global topic areas. The full survey is available on the [HCAHPS survey website](http://www.hcahps.gov). It is not expected that hospitals will perform at 100 percent on any individual measure because, unlike process measures, data from the HCAHPS is based on patient perception.
Using Comparison Data for HCAHPS Measures

- There is typically more variation in this type of survey data than in process measures. Therefore, you should look for trends that indicate consistent decline or improvement over time.

- Looking at comparison data on the MBQIP Patient Engagement Quality Reports can help provide a better understanding of how your hospital compares to other like facilities in your state and nationally. If benchmark data from top performers is available (such as the top 10 percent), that can be helpful in setting targets for improvement goals, particularly if your hospital is already above the state and national averages. If your hospital is below the state or national average in an area, that also indicates an improvement opportunity.

  - Note: State and national rates in the MBQIP Patient Engagement Quality Reports represent all hospitals in the state and nation, not just CAHs.

- Not all hospitals will be given an HCAHPS Star Rating. Hospitals must have 100 completed surveys in a rolling four quarter period to have an HCAHPS Star Rating calculated. Hospitals that generally have near 100 completed surveys in such a time period may have no Star Rating for some time periods that dip slightly below 100 completed surveys.

- HCAHPS data are presented as a rolling four quarters (see the sample MBQIP Patient Engagement Quality Report in Appendix A) and each report represents the most recent rolling four quarters available, so it will take time to see improvements/changes in the data. To look at HCAHPS performance over time, you can compare MBQIP Patient Engagement Quality Reports from different time periods. If quarterly reports are available from the survey vendor (or through the internal processes if a vendor is not used) those reports may be more useful for evaluating changes resulting from specific initiatives or efforts that have been launched. Always use caution when interpreting data from individual quarters, as the number of surveys completed in any individual quarter may be small.

Interpreting Reports to Support Improvement

Examples of how to interpret the data for use in quality improvement efforts are listed below. Each example is hyperlinked to the corresponding example in the sample report found in Appendix A.

Note: There are two pages in the sample MBQIP Patient Engagement Quality Report: hospital specific data on the first page and average comparison data on the second page. Each example references both sets of data. The hyperlink in each example will take you to the first page of the report.

Example F: Opportunity for Improvement

In this example of the HCAHPS composite scores for Composites 1 through 5:

- The hospital’s percent “Always” response rate is consistently lower than the state and national CAH averages for all of these composite indicators as shown on page two of the report.

- The hospital could revisit earlier HCAHPS reports to see if any similar trends in these composite scores are noticeable.

Example G: Translate to the Number of Patients

- For many, talking about percentages of responses on a survey can be difficult to translate into impact on individual patients. One strategy in using HCAHPS data to help staff understand the need for improvement is to translate the percentages into numbers of actual patients. In the example circled, 70
percent of respondents indicated that their pain was always well-controlled. 70 percent translates to 203 individual patients that always felt their pain was well-controlled. Consider taking this example one step further and calculate the number of patients who did not answer “Always.” Subtract 203 from 290 to learn that 87 patients did not answer that they always felt their pain was well-controlled. Considering the number of patients may help make a more compelling appeal to staff to improve communication and/or processes in this area.

Calculating the Number of Patients

By using information provided on the report we can compute how many patients answered a question in a certain way. In this case, we want to know how many patients answered “Always” to the questions making up the pain management composite. We know that 70 percent of patients said “Always”; this is represented as 70 divided by 100. We also know that 290 people completed the survey (as listed at the top of the report). So we are solving for X where 70 divided by 100 equals X divided by 290.

\[
\frac{70}{100} = \frac{X}{290} \quad \frac{70 \times 290}{100} = 203 \text{ Patients}
\]

We find that, in this example, 70 percent is equal to 203 patients. To calculate the number of patients who did not answer “Always” to the pain management composite, subtract 203 from 290: 290 – 203 = 87 patients.

Note: Survey respondents can opt out of answering questions on the HCAHPS. If using a HCAHPS vendor, CAHs can also identify the exact number of patients with specific responses by looking for that additional information in their vendor reports.

Using MBQIP Care Transitions Quality Reports for Emergency Department Transfer Communication (EDTC)

A fundamental role of CAHs in the health care safety net for rural communities is stabilization and transfer of patients in emergency situations. The Emergency Department Transfer Communication (EDTC) measure allows CAHs to evaluate and demonstrate the effectiveness of that important role.

The EDTC measure evaluates the process of transfer communication through documentation of key information (data elements) and the timeliness in which that information is communicated to the next setting of care.

Using Comparison Data for the EDTC Measure

Similar to the other reports, MBQIP Care Transitions Quality Reports for Emergency Department Transfer Communication (EDTC) also include state and national comparison data for all reporting CAHs. State and national comparison data are averages. Although it can be helpful to understand your comparison to those norms, averages represent the middle ground for performance. Strive to achieve at least the 90th percentile for each measure. For quality improvement purposes, such data benchmarks are more useful than average comparison data. (Note: Benchmarks for the top 10 percent by state and for the nation are included in your EDTC reports, but your state Flex Coordinator may be able to provide additional state specific information)

Although the EDTC measure has been utilized sporadically across the country for over 10 years, inclusion of the measures in MBQIP is the first systematic nationwide implementation of the EDTC measure. Since this
measure is newer to most CAHs compared to HCAHPS and OP measures, state and national averages are likely to increase consistently over the first few quarters of data collection as CAHs across the country update documentation and processes.

Interpreting Reports to Support Improvement
Examples of how to interpret the data for use in quality improvement efforts are listed below. Each example is hyperlinked to the corresponding example in the MBQIP Care Transitions Quality Report for Emergency Department Transfer Communication (EDTC) found in Appendix A.

Example H: Opportunity for Improvement
EDTC sub-measure 2 (Patient Information) is low-performing among the EDTC categories for this hospital, with a range of percentages for each quarter and an aggregate performance for the year of 77 percent. It is also lower than the state and national averages (90 percent and 94 percent respectively) and 90th percentiles (both at 100 percent). Therefore, it may be a target for improvement efforts such as updating documentation fields and processes to help ensure the data is captured and communicated. Depending on the tool a CAH is using to collect the data, they may also be able to see results at the data element level, which can be even more useful in targeting areas for improvement. For example, the data elements for EDTC sub-measure 2 (Patient Information) include: patient name, patient address, patient age, patient gender, patient contact information, and patient insurance information. If results are available at the data element level it may help target improvement opportunities for documentation and/or processes to address specific information that is most commonly missing.

Example I: Documentation or Process?
EDTC sub-measure 7 (Procedures and Tests) also has room for improvement, with an aggregate performance for the year at 79 percent. Although the hospital’s rate is closer to the state and national average for this sub-measure (88 percent and 95 percent respectively), it may still represent a good opportunity for improvement. The hospital may need to evaluate whether the lower score in this area is a result of failure to document or an issue with the process. CAHs participating in an eight-state pilot on this measure found that one common area for improvement was to ensure documentation of a plan for how tests results would be communicated to the next setting of care if they were not available at the time of transfer.

Additional Resources

CAHMPAS (Critical Access Hospital Measurement and Performance Assessment System)
Online data query tool from the Flex Monitoring Team which can be used to compare and visualize CAH performance on financial, quality, and community-benefit measures between groups of hospitals defined by users. Authorized users are state flex programs and CAH administrators. Contact monitoring@flexmonitoring.org for login credentials.

Emergency Department Transfer Communication Measure Resources
Data specifications manual, Excel-based data collection tool, recorded trainings, quality improvement toolkit

MBQIP Measures Fact Sheets
One-measure-per-page-overview of the data collection and reporting processes for the required MBQIP measures.
Interpreting MBQIP Hospital Data Reports for Quality Improvement

MBQIP Reporting Guide
This guide is intended to help Flex Coordinators, critical access hospital staff and others involved with MBQIP understand the measure reporting process. For each reporting channel, information is included on how to register for the site, which measures are reported to the site and how to submit those measures to the site.

Quality Improvement Implementation Guide and Toolkit for Critical Access Hospitals
Offers strategies and resources to help critical access hospital (CAH) staff organize and support efforts to implement best practices for quality improvement. It includes:
- A quality improvement implementation model for small, rural hospital settings
- A 10-step guide to leading quality improvement efforts
- Summaries of key national quality initiatives that align with MBQIP priorities
- Best practices for improvement for current MBQIP measures
- Simple, Excel-based tool to assist CAHs with tracking and displaying real time data for MBQIP and other quality and patient safety measures to support internal improvement efforts
- CAH quality prioritization tool
## Appendix A – Sample MBQIP Hospital Data Reports

**MBQIP Patient Safety and Inpatient/Outpatient Care Quality Report:**
**Improving Care Through Patient Safety and Inpatient/Outpatient Measures**

**Reporting Period:** Third Quarter 2016 through Second Quarter 2017 Discharges

<table>
<thead>
<tr>
<th>MBQIP Quality Measures</th>
<th>Your Hospital’s Performance by Quarter</th>
<th>State Current Quarter</th>
<th>National Current Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3Q16</td>
<td>4Q16</td>
<td>1Q17</td>
</tr>
<tr>
<td><strong>AMI Cardiac Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP-1 Median Time to Fibrinolysis</td>
<td>D/E</td>
<td>D/E</td>
<td>D/E</td>
</tr>
<tr>
<td>OP-2 Fibrinolytic Therapy Received Within 30 Min. of ED Arrival</td>
<td>D/E</td>
<td>D/E</td>
<td>D/E</td>
</tr>
<tr>
<td>OP-3b Median Time to Transfer to Another Facility for Acute Coronary Intervention</td>
<td>184 Min. based on 2 patients</td>
<td>136 Min. based on 1 patients</td>
<td>365 Min. based on 1 patients</td>
</tr>
<tr>
<td>OP-4 Aspirin at Arrival</td>
<td>86% of 7 patients</td>
<td>100% of 8 patients</td>
<td>100% of 7 patients</td>
</tr>
<tr>
<td>OP-6 Median Time to ECG</td>
<td>6 Min. based on 8 patients</td>
<td>24 Min. based on 8 patients</td>
<td>20 Min. based on 8 patients</td>
</tr>
<tr>
<td><strong>Pain Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP-21 Median Time to Pain Management for Long Benza Fracture</td>
<td>51 Min. based on 7 patients</td>
<td>89 Min. based on 3 patients</td>
<td>101 Min. based on 5 patients</td>
</tr>
</tbody>
</table>

**Example A:** Lack of Consistent Process

*Please direct questions regarding your MBQIP data reports to the Flex Coordinator in your State. You can find contact information for your Flex Coordinator at: [https://www.ruralcenter.org/fasc/flexprofile](https://www.ruralcenter.org/fasc/flexprofile)*

*Reporting not required for this quarter*

**The 90th percentile is the level of performance needed to be in the top 10% of CAHs for a given measure (i.e. 10% of CAHs perform at or better than the 90th percentile)**

N/A = the provider did not submit any data to the QualityNet warehouse

0 = the provider had no cases to submit for the measure population

D/E = data was submitted but excluded because it didn’t meet the measure criteria
### MBQIP Patient Safety and Inpatient/Outpatient Care Quality Report:
Improving Care Through Patient Safety and Inpatient/Outpatient Measures

**Reporting Period:** Third Quarter 2016 through Second Quarter 2017 Discharges

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<td></td>
<td></td>
</tr>
<tr>
<td>OP-1</td>
<td>D/E</td>
<td>D/E</td>
<td>D/E</td>
</tr>
<tr>
<td>OP-2</td>
<td>D/E</td>
<td>D/E</td>
<td>D/E</td>
</tr>
<tr>
<td>OP-3b</td>
<td>61 Min. based on 3 patients</td>
<td>20 Min. based on 6 patients</td>
<td>22 Min. based on 8 patients</td>
</tr>
<tr>
<td>OP-4</td>
<td>100% of 25 patients</td>
<td>92% of 26 patients</td>
<td>100% of 36 patients</td>
</tr>
<tr>
<td>OP-5</td>
<td>6 Min. based on 26 patients</td>
<td>5 Min. based on 27 patients</td>
<td>4 Min. based on 37 patients</td>
</tr>
<tr>
<td><strong>Pain Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP-21</td>
<td>58 Min. based on 29 patients</td>
<td>56 Min. based on 23 patients</td>
<td>38 Min. based on 24 patients</td>
</tr>
</tbody>
</table>

**Example B:** Process May Need Adjustment
## MBQIP Patient Safety and Inpatient/Outpatient Care Quality Report:
### Improving Care Through Patient Safety and Inpatient/Outpatient Measures

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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP-1 Median Time to Fibrinolysis</td>
<td>29 Min. based on 1 patients</td>
<td>D/E</td>
<td>D/E</td>
</tr>
<tr>
<td>OP-2 Warfarin Therapy Received Within 30 Min. of ED Arrival</td>
<td>100% of 1 patients</td>
<td>D/E</td>
<td>D/E</td>
</tr>
<tr>
<td>OP-3b Median Time to Transfer to Another Facility for Acute Coronary Intervention</td>
<td>72 Min. based on 1 patients</td>
<td>60 Min. based on 2 patients</td>
<td>77 Min. based on 1 patients</td>
</tr>
<tr>
<td>OP-4 Asplin at Arrival</td>
<td>100% of 10 patients</td>
<td>100% of 8 patients</td>
<td>75% of 8 patients</td>
</tr>
<tr>
<td>OP-5 Median Time to ECG</td>
<td>8 Min. based on 10 patients</td>
<td>8 Min. based on 9 patients</td>
<td>3 Min. based on 9 patients</td>
</tr>
<tr>
<td><strong>Pain Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP-21 Median Time to Pain Management for Long Bone Fracture</td>
<td>24 Min. based on 11 patients</td>
<td>16 Min. based on 6 patients</td>
<td>11 Min. based on 4 patients</td>
</tr>
</tbody>
</table>

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**Example C: Understanding Variation**

Please direct questions regarding your MBQIP data reports to the Flex Coordinator in your State. You can find contact information for your Flex Coordinator at: [https://www.ruralcenter.org/tasc/flexprofile](https://www.ruralcenter.org/tasc/flexprofile)

* Reporting not required for this quarter

** The 90th percentile is the level of performance needed to be in the top 10% of CAHs for a given measure (i.e. 10% of CAHs perform at or better than the 90th percentile)

N/A = the provider did not submit any data to the QualityNet warehouse

0 = the provider had no cases to submit for the measure population

D/E = data was submitted but excluded because it didn’t meet the measure criteria
**Example D: Variation outside of a set limit**

Please direct questions regarding your MBQIP data reports to the Flex Coordinator in your State. You can find contact information for your Flex Coordinator at: https://www.ruralcenter.org/tasc/flexprofile

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Interpreting MBQIP Hospital Data Reports for Quality Improvement

MBQIP Patient Safety and Inpatient/Outpatient Care Quality Report: Improving Care Through Patient Safety and Inpatient/Outpatient Measures

Reporting Period: Third Quarter 2016 through Second Quarter 2017 Discharges

### Immunization

<table>
<thead>
<tr>
<th>MBQIP Quality Measures</th>
<th>3Q16</th>
<th>4Q16</th>
<th>1Q17</th>
<th>2Q17</th>
<th>State Current Quarter</th>
<th>National Current Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMM-2 - influenza immunization</td>
<td>Di/E</td>
<td>55% of 147 patients</td>
<td>71% of 140 patients</td>
<td>Di/E</td>
<td>Di/E</td>
<td>16</td>
</tr>
</tbody>
</table>

### Emergency Department – Quarterly Measures

| OP-18b - Median Time from ED Arrival to ED Departure for Discharged ED Patients | 144 Min. based on 184 patients | 129 Min. based on 120 patients | 151 Min. based on 125 patients | 130 Min. based on 138 patients | 126 Min. | 21 | 91 Min. | 104 Min. | 990 | 75 Min. |
| OP-20 - Median Time from ED Arrival to Provider Contact for ED patients | 19 Min. based on 223 patients | 23 Min. based on 128 patients | 20 Min. based on 132 patients | 27 Min. based on 134 patients | 19 Min. | 19 | 149 Min. | 199 Min. | 655 | 115 Min. |
| ED-1b - Median Time from ED Arrival to ED Departure for Admitted ED Patients | 251 Min. based on 81 patients | 251 Min. based on 101 patients | 291 Min. based on 96 patients | 294 Min. based on 103 patients | 228 Min. | 19 | 149 Min. | 199 Min. | 655 | 115 Min. |
| ED-2b - Median Time from ED Admission to ED Departure for Admitted Patients | 75 Min. based on 76 patients | 76 Min. based on 100 patients | 78 Min. based on 92 patients | 75 Min. based on 103 patients | 64 Min. | 19 | 27 Min. | 48 Min. | 646 | 11 Min. |

**Example E:** Considerations for timing measures

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Rural Quality Improvement Technical Assistance, [www.stratishealth.org](http://www.stratishealth.org)
### General Information for State and National data:

The Average Time/Overall Rate and 90th percentile calculations in these reports are based on the number of CAHs submitting with eligible cases. However, note that the number of CAHs with MBQIP MOU submitting data includes those that have submitted data but have zero (0) eligible cases to report.
**General Information:**
Data is presented over rolling four quarters.

**Example F:**
Opportunity for Improvement

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<table>
<thead>
<tr>
<th>HCAHPS Composites</th>
<th>Star Rating (0 out of 5)</th>
<th>Your Hospital’s adjusted score</th>
<th>State Average</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Sometimes to Never</td>
<td>% Usually</td>
<td>% Always</td>
<td>% Sometimes to Never</td>
</tr>
<tr>
<td>Composite 1 (Q1 to Q3) Communication with Nurses</td>
<td>N/A</td>
<td>7</td>
<td>28</td>
<td>65</td>
</tr>
<tr>
<td>Composite 2 (Q5 to Q7) Communication with Doctors</td>
<td>N/A</td>
<td>9</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td>Composite 3 (Q4 &amp; Q11) Responsiveness of Hospital Staff</td>
<td>N/A</td>
<td>13</td>
<td>26</td>
<td>61</td>
</tr>
<tr>
<td>Composite 4 (Q13 &amp; Q14) Pain Management</td>
<td>N/A</td>
<td>17</td>
<td>39</td>
<td>44</td>
</tr>
<tr>
<td>Composite 5 (Q16 &amp; Q17) Communication about Medicines</td>
<td>N/A</td>
<td>25</td>
<td>26</td>
<td>49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospital Environment Items</th>
<th>Star Rating (0 out of 5)</th>
<th>Your Hospital’s adjusted score</th>
<th>State Average</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8 Cleanliness of Nursing</td>
<td>N/A</td>
<td>7</td>
<td>20</td>
<td>73</td>
</tr>
<tr>
<td>Q9</td>
<td></td>
<td>51</td>
<td>6</td>
<td>28</td>
</tr>
</tbody>
</table>

**General Information:**
The data publicly reported on Hospital Compare includes percentage of “Always”, “Yes”, “Yes Definitely” and “9” or “10” ratings depending on the type of question for the most recent rolling four quarters. These are known as the **top box** scores.
## MBQIP Patient Engagement Hospital Quality Report: Improving Care Through Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey

**Reporting Period for HCAHPS Measures and Star Ratings: First Quarter 2015 through Fourth Quarter 2015 Discharges**

<table>
<thead>
<tr>
<th>Number of Completed Surveys</th>
<th>290</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey Response Rate</td>
<td>43</td>
</tr>
<tr>
<td>HCAHPS Summary Star Rating</td>
<td>4 Stars</td>
</tr>
</tbody>
</table>

### HCAHPS Composites

<table>
<thead>
<tr>
<th>HCAHPS Composites</th>
<th>Star Rating (0 out of 5)</th>
<th>% Sometimes to Never</th>
<th>% Usually</th>
<th>% Always</th>
<th>% Sometimes to Never</th>
<th>% Usually</th>
<th>% Always</th>
<th>% Sometimes to Never</th>
<th>% Usually</th>
<th>% Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite 1 (Q1 to Q3)</td>
<td>5</td>
<td>2</td>
<td>13</td>
<td>85</td>
<td>2</td>
<td>16</td>
<td>82</td>
<td>4</td>
<td>16</td>
<td>80</td>
</tr>
<tr>
<td>Composite 2 (Q5 to Q7)</td>
<td>4</td>
<td>2</td>
<td>13</td>
<td>85</td>
<td>3</td>
<td>13</td>
<td>84</td>
<td>4</td>
<td>14</td>
<td>82</td>
</tr>
<tr>
<td>Composite 3 (Q4 &amp; Q11)</td>
<td>4</td>
<td>6</td>
<td>22</td>
<td>72</td>
<td>6</td>
<td>21</td>
<td>70</td>
<td>9</td>
<td>27</td>
<td>71</td>
</tr>
<tr>
<td>Composite 4 (Q13 &amp; Q14)</td>
<td>3</td>
<td>4</td>
<td>26</td>
<td>70</td>
<td>3</td>
<td>26</td>
<td>70</td>
<td>3</td>
<td>26</td>
<td>70</td>
</tr>
<tr>
<td>Composite 5 (Q16 &amp; Q17)</td>
<td>4</td>
<td>10</td>
<td>23</td>
<td>67</td>
<td>5</td>
<td>21</td>
<td>62</td>
<td>6</td>
<td>24</td>
<td>65</td>
</tr>
</tbody>
</table>

### Hospital Environment Items

<table>
<thead>
<tr>
<th>Hospital Environment Items</th>
<th>Star Rating (0 out of 5)</th>
<th>% Sometimes to Never</th>
<th>% Usually</th>
<th>% Always</th>
<th>% Sometimes to Never</th>
<th>% Usually</th>
<th>% Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8 Cleanliness of Hospital Environment</td>
<td>4</td>
<td>4</td>
<td>14</td>
<td>82</td>
<td>4</td>
<td>16</td>
<td>80</td>
</tr>
<tr>
<td>Q9 Quietness of Hospital Environment</td>
<td>5</td>
<td>4</td>
<td>18</td>
<td>78</td>
<td>5</td>
<td>20</td>
<td>70</td>
</tr>
</tbody>
</table>

**Example G:** Translate to Number of Patients

*How do you calculate how many patients are 70% of completed surveys?*

\[ 70 \times \frac{290}{100} = 203 \] patients
### General Information:
This column shows the **aggregate** of data for all four quarters of data on the report. The total number of records represents all cases reviewed in those four quarters.

### Example H:
**Opportunity for Improvement**

<table>
<thead>
<tr>
<th>MBQIP Quality Measures</th>
<th>4Q15</th>
<th>1Q16</th>
<th>2016</th>
<th>3Q16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Medical Records Reviewed</td>
<td>N = 32</td>
<td>N = 35</td>
<td>N = 26</td>
<td>N = 41</td>
</tr>
<tr>
<td>EDTC-1 (Administrative Communication)</td>
<td>56% (n=18)</td>
<td>51% (n=18)</td>
<td>46% (n=12)</td>
<td>49% (n=20)</td>
</tr>
<tr>
<td>EDTC-2 (Patient Information)</td>
<td>75% (n=24)</td>
<td>80% (n=28)</td>
<td>77% (n=20)</td>
<td>76% (n=31)</td>
</tr>
<tr>
<td>EDTC-3 (Vital Signs)</td>
<td>78% (n=25)</td>
<td>86% (n=30)</td>
<td>77% (n=20)</td>
<td>76% (n=31)</td>
</tr>
<tr>
<td>EDTC-4 (Medication Information)</td>
<td>78% (n=25)</td>
<td>86% (n=30)</td>
<td>77% (n=20)</td>
<td>76% (n=31)</td>
</tr>
<tr>
<td>EDTC-5 (Practitioner Information)</td>
<td>78% (n=25)</td>
<td>86% (n=30)</td>
<td>77% (n=20)</td>
<td>76% (n=31)</td>
</tr>
<tr>
<td>EDTC-6 (Nurse Information)</td>
<td>31% (n=10)</td>
<td>43% (n=17)</td>
<td>62% (n=16)</td>
<td>76% (n=31)</td>
</tr>
<tr>
<td>EDTC-7 (Procedures and Tests)</td>
<td>78% (n=25)</td>
<td>86% (n=30)</td>
<td>77% (n=20)</td>
<td>76% (n=31)</td>
</tr>
<tr>
<td>All EDTC Composite*</td>
<td>22% (n=7)</td>
<td>34% (n=12)</td>
<td>38% (n=10)</td>
<td>49% (n=20)</td>
</tr>
</tbody>
</table>

* N = denominator  
  n = numerator  
  N/A = the provider did not submit any data  
  DE = the provider reported 0 records reviewed

*The state and national roll-up for the All-EDTC sub-measure is not inclusive of every reporting CAH, as some CAHs did not report this data element.

**The 90th percentile is the level of performance needed to be in the top 10% of CAHs for a given measure (i.e. 10% of CAHs perform at or better than the 90th percentile)**

### Example I:
**Documentation or Process?**

<table>
<thead>
<tr>
<th>Your Hospital Performance Aggregate for All Four Quarters</th>
<th>Average Current Quarter</th>
<th># CAHs with MBQIP MOU Submitting Data</th>
<th>80th Percentile</th>
<th>Average Current Quarter</th>
<th># CAHs with MBQIP MOU Submitting Data</th>
<th>80th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 134</td>
<td>N = 1312</td>
<td>36</td>
<td>100%</td>
<td>N = 460</td>
<td>1147</td>
<td>100%</td>
</tr>
</tbody>
</table>

**General Information for State and National data:**
The Average Current Quarter and 90th percentile calculations in these reports are based on the number of CAHs submitting with eligible cases. However, note that the number of CAHs with MBQIP MOU submitting data includes those that have submitted data but have zero (0) eligible cases to report.

**General Information:**
The All EDTC measure is the percentage of cases that have every data element from every sub-measure (a total of 27 data elements). Thus, this indicator will never be higher than the lowest of the sub-measures.
Appendix B – Glossary

This glossary includes a list of commonly used terms and their explanations as they apply to the Medicare Beneficiary Quality Improvement Project (MBQIP) and quality data reporting.

- **Accepted**: Individual case(s) submitted and accepted into the QIO Clinical Warehouse.
- **Aggregate**: Sum; total combined.
- **Average**: State and national averages are calculated by adding up all the numerators and denominators of every reporting critical access hospital then dividing to get the percentage.
- **CART**: The Centers for Medicare & Medicaid Services (CMS) Abstraction & Reporting Tool; a free tool that hospitals can utilize to collect and submit the chart abstracted inpatient and outpatient Hospital Compare measures.
- **CMS Measure Specifications Manuals**: Manuals created by the Centers for Medicare & Medicaid Services (CMS) to provide definitions for a uniform set of quality measures to be implemented in hospital settings. The inpatient and outpatient manuals can be found on the QualityNet website.
- **Common cause variation**: Arises from factors inherent in the process; ‘usual’ differences in a standard process, but can be an opportunity for improvement if a reduction in variation is desired.
- **Composite**: A composite measure combines more than one item in order to measure a concept that is too complex to be measured with one item. In reference to Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), a composite measure is a grouping of related questions.
- **Denominator**: The bottom term in a fraction; the total number of parts created from the whole.
- **Excluded**: Individual case(s) accepted into the QIO Clinical Warehouse that did not meet the criteria to be included in a specific quality indicator; not included in the denominator.
- **Failed**: Individual case(s) accepted into the QIO Clinical Warehouse that met the criteria to be included in a specific quality indicator, but did not meet the measure criteria; included in the denominator, but not in the numerator.
- **Hospital Compare**: A website developed by the Centers for Medicare & Medicaid Services (CMS) that compiles information about hospitals and their reported quality measures and allows consumers to compare hospitals to assist in making a decision about where to seek care. For more information visit the Hospital Compare website.
- **Included**: Individual case(s) accepted into the QIO Clinical Warehouse and met the criteria to be included in specific quality indicator; included in the denominator.
- **Median**: The middle number in a set of values; half the numbers are less and half the numbers are greater.
- **Numerator**: The top term in a fraction; how many parts of the whole being considered.
- **Passed**: Individual case(s) accepted into the QIO Clinical Warehouse, met the criteria to be included in a specific quality indicator and met the measure criteria; included in the denominator and the numerator.
- **QIO Clinical Warehouse**: The Quality Improvement Organization (QIO) Clinical Warehouse is the national data repository for health care quality data. Hospitals participating in the Centers for Medicare & Medicaid Services (CMS) quality improvement initiatives must submit specified data in the prescribed format to the QIO Clinical Warehouse via the QualityNet website.

- **QualityNet**: Established by the Centers for Medicare & Medicaid Services (CMS), QualityNet provides health care quality improvement news, resources and data reporting tools and applications used by health care providers and others. QualityNet is the only CMS-approved website for secure communications and health care quality data exchange between: quality improvement organizations (QIOs), hospitals, physician offices, nursing homes, data vendors and end stage renal disease (ESRD) networks and facilities. For more information visit the QualityNet website.

- **Rejected**: Individual case(s) submitted, but for some reason not accepted into the QIO Clinical Warehouse.

- **Rolling quarters**: Inclusion of a certain number of the most recent quarters.

- **Special cause variation**: Arises from factors outside the process; outside the ordinary; requires a need to understand what happened, but not typically the focus of improvement. May lead to planning for specific circumstances.

- **Submit**: Transmission of data via the secure QualityNet website. Hospitals may transmit data themselves if using the CART tool for data collection or have a vendor transmit the data on their behalf if they are using a vendor supported data collection process. For more information visit the Data Submission webpage of the QualityNet website.

- **Top box**: The most positive answer choice; in reference to the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) this means the answers: “Always” for those questions with options always, usually, sometimes or never; “Yes” for those questions with the options yes or no; “Yes Definitely” for those with the options yes definitely, yes somewhat or no; and “9” or “10” for those with the options of a number 0 through 10.