

Quality Improvement Implementation Guide and Toolkit for Critical Access Hospitals

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Table of Contents

- Overview 2
 - About MBQIP 2
 - Purpose of This Guide 2
 - How to Use This Guide..... 2
- Rural Hospital Quality Improvement – A Model for Implementation 3
 - Prioritizing Opportunities for Improvement 5
- Ten Steps to Leading Quality Improvement Topics 7
 - Additional Resources 11
- Appendix A – Federal and National Quality Programs 12
- Appendix B – Tools 14

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.

Critical access hospitals have historically been exempt from national quality improvement reporting programs due to challenges related to measuring improvement in low volume settings and limited resources. It is clear, however, that some CAHs are not only participating in national quality improvement reporting programs, but are excelling across multiple rural relevant topic areas. Small rural hospitals that participate in Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) often outperform prospective payment system (PPS) hospitals on survey scores. 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.

As the US moves rapidly toward a health care system that pays for value versus volume of care provided, it is crucial for CAHs to participate in federal public quality reporting programs to demonstrate the quality of the care they are providing. Low numbers are not a valid reason for CAHs to not report quality data. It is important to provide evidence-based care for every patient, 100 percent of the time. MBQIP takes a proactive approach to ensure CAHs are well-prepared to meet future quality requirements.

For more information about MBQIP, please see the FORHP infographic in [Appendix A](#).

Purpose of This Guide

This guide is intended to help CAH staff structure and support quality improvement efforts, as well as identify best practices and strategies for improvement of MBQIP measures.

Measures included in the MBQIP Quality Guide

This guide focuses on measures currently reported for MBQIP. 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. A current list of MBQIP measures is posted [here](#).

How to Use This Guide

This guide provides basic directions and resources for conducting and streamlining quality improvement (QI) projects in rural hospitals, with a particular focus on MBQIP. This guide and toolkit includes:

- A quality improvement implementation model focused on small, rural hospital settings
- Suggestions and considerations for identifying and prioritizing areas for improvement

- A table detailing key national quality initiatives that align with MBQIP priorities, including links to external websites for further information ([Appendix B](#))
- A ten-step guide to leading quality improvement topics
- An internal monitoring tool to assist with tracking and displaying MBQIP and other quality and patient safety measures (toolkit)
- Quality improvement measure summaries of current MBQIP measures by domain including best practices for improvement (toolkit)

Rural Hospital Quality Improvement – A Model for Implementation

When structured in a way that leverages the advantages of smaller scales such as easier access to key people, and less cumbersome decision-making hierarchies, rural hospital quality improvement can be achieved efficiently and effectively. A hub and spoke model can be used as an illustration. Rather than initiating full teams for every topic area or initiative, one core quality and patient safety committee (hub), led by a designated chair, might initiate and oversee multiple topics or projects, active and sustained, by designating a leader or “owner” (spokes) for each of them. Individual project leaders might be chosen based on topic expertise, enthusiasm, or proximity to the process being improved. Active project implementation can be conducted in ad hoc working sessions, with the leader attending quality and patient safety meetings only upon special request, if the leader is not a standing member of the quality and safety committee. The flow of information from the quality and safety chair to each project or topic leader is critical to the success of the hub and spoke model. Below is an illustration of the model, suggesting possible MBQIP topic area designations.

Hub and Spoke Quality Improvement Model



Some key factors to the success of the hub and spoke model of quality improvement in critical access hospitals are creativity, administrative buy in and support, a documentation system that tracks progress on various quality and patient safety topics, and a general expectation that all staff involved in quality improvement projects will complete assignments on time.

- **Flexible Structure:** In rural hospitals, where topic specific project leaders often balance quality improvement work with patient care assignments, it is challenging to attend standing meetings and creative approaches are needed to get the work done. The quality and safety committee chair might communicate with each leader prior to and after meetings, or extend a onetime invitation for a project representative to discuss the project with the committee. This arrangement works particularly well with physicians, whose involvement is critical to quality improvement success, but are often unable to leave their clinical practices during the day.
- **Leadership Engagement:** Administrative buy in and support is necessary to ensure that staff involved in quality improvement activities are given enough time to complete project assignments and not routinely reassigned for patient care. It is helpful to agree upon guidelines that specify the “level of crisis” warranting such reassignments, in order to preserve and support the progress of quality improvement efforts. The Switch¹ change model offers many suggestions for gaining leadership buy in, such as the compelling use of data and stories to enhance the sense of urgency around quality improvement efforts.
- **Systematic Process:** It has been said that a plan without a timeline is only a dream, and this idea underlines the importance of a systematic, but concise documentation system to streamline and direct multifaceted quality improvement efforts. A standing quality and patient safety committee meeting agenda/minute template can effectively organize and propel multiple active projects, while monitoring the sustaining power of completed projects. **An adaptable [quality and patient safety agenda/minute template](#) that includes current MBQIP and other common quality and patient safety topics is included in the accompanying CAH QI Toolkit.** Each “spoke” project should also be documented consistently; tools and templates to support such documentation are also included in the toolkit.
- **Expectations that Prioritize QI:** Finally, without a general expectation that assignments related to quality improvement projects be completed on time, it is difficult to gain and sustain momentum toward goal attainment. The temptation to allow a shift in patient census to trump quality improvement work sends a clear message to staff that quality improvement work is optional. “Patient care comes first” can become a reflexive and acceptable excuse for quality improvement work avoidance; hospital departments, especially nursing departments, can find themselves chronically too busy to improve, like an exhausted wood cutter, too busy cutting wood to sharpen his axe. The delicate balance between healthcare professional shortages and consistent accountability standards is possibly one of the most daunting barriers to moving quality and patient safety metrics in rural hospitals. This is a critical area where top leadership must consistently define, drive, and model the culture of the organization if excellence is to be attained.

¹ *Switch: How to Change Things When Change Is Hard*, C. Heath and D. Heath, February 2010



Key Points:

- The hub and spoke model can be used to guide rural hospital quality improvement to leverage the advantages of smaller scales, easier access to key people, and less cumbersome decision-making hierarchies
- The flow of information from the quality and safety chair to each project or topic leader is critical to the success of the hub and spoke model
- Be creative and flexible to accommodate rural hospital schedules in project planning
- Documentation templates can be very effective tools to organize and propel multiple projects
- Resist the temptation to repeatedly allow a shift in patient census to trump quality improvement work



Tools and Resources:

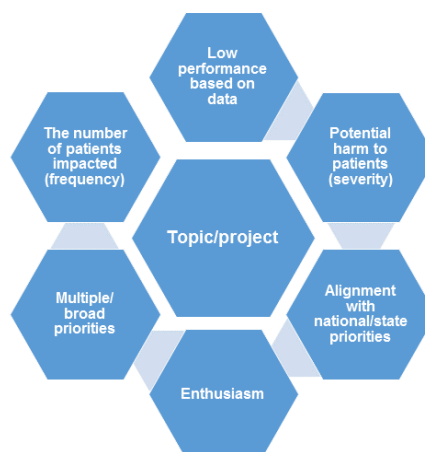
- [Quality and Patient Safety Committee Meeting Agenda/Minute Template](#)

Prioritizing Opportunities for Improvement

With the explosion of quality and patient safety topics, resources and measures the improvement opportunities for hospitals are seemingly endless. A variety of factors should be considered when identifying focus areas for improvement:

- Low performance based on data
- Potential harm to patients (severity)
- The number of patients impacted (frequency)
- Multiple/broad priorities
- Alignment with national, state or regional level quality initiatives
- Enthusiasm in the field for the topic

Quality Improvement Prioritization Factors



Low Performance Based on Data

A foundational step in prioritization is data collection for key patient safety and quality topics, including the MBQIP core improvement activity measures. Objective measurement provides clear direction on which topics have the most opportunity for improvement. Comparisons can be made to state or national averages or high performing benchmarks (when available). Particular attention should be given to measures/services that align with core services provided by individual CAHs.

Potential Harm to Patients (severity)

Consider the level of risk or patient harm for low performance on measures and prioritize improvement on processes that may have the most impact on individual patients, even if those cases are rare. Quality improvement work that aligns with a recent negative patient safety event will likely be readily embraced by staff and providers.

The number of patients impacted (frequency)

Choose measures that will influence the quality of care on more patients. For example, the inpatient influenza immunization measure and HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) pertains to a much higher volume of patients than any diagnosis-specific measure.

Multiple/Broad Priorities

Identify measures that align with common priorities. Examples of how multiple MBQIP measures align with different focus areas include:

- Reducing Hospital Readmissions/Improving Care Transitions:
 - HCAHPS Composites 6 and 7 (discharge information and care transitions)
 - EDTC measure
 - Inpatient measure ED-1 and ED-2 (emergency department decision to admit and admit times)
- Improving Safe Medication Practices
 - HCAHPS Composite 5 (communication about medicines)
 - EDTC Sub-4 (medication information)
 - Antibiotic Stewardship
- Timely Care and Time Sensitive Conditions
 - Outpatient measures 1, 2, 3, 4 and 5 (AMI Care)
 - Outpatient measure 22 (Patient left without being seen)
 - Inpatient measures ED-1 and ED-2 (emergency department decision to admit and admit times)

Alignment with National, State or Regional Level Quality Initiatives

A number of federal and national programs and their quality priorities are listed in a table in [Appendix B](#). Frequently there are state or regional level initiatives that align with these programs that can be an opportunity to identify tools, resources, and technical assistance.

Enthusiasm in the Field for the Topic

This should be a secondary consideration, but topics that generate strong interest among staff, physicians and other stakeholders are more likely to realize improvement than areas met with resistance or indifference. Furthermore, allowing staff or practitioner passion to influence resource allocation tends to foster an atmosphere of goodwill that generates buy in for other projects.

Ten Steps to Leading Quality Improvement Topics

Once a decision has been made to focus on a particular topic for quality improvement, or initiate a “spoke” in the hub and spoke model, it is helpful to follow a consistent series of steps to guide the work. The following are suggested steps to conducting a quality improvement project. Depending on the type of quality improvement effort, steps might be combined or eliminated. For example, measure selection is pre-defined for MBQIP, so that step is not necessary. [A template to document completion of project steps can be found in the CAH QI Toolkit.](#)

Research the topic or measure

It is important to understand the background and rationale behind changes being made to improve patient safety or quality to gain buy in and enthusiasm on the part of the staff and providers being asked to change. For each of the required MBQIP measures, summary information and best practices are provided in the [Quality Improvement Measure Summaries for MBQIP](#) intervention strategies that can help drive improvement across multiple areas at once, such as implementing intentional hourly rounding (see the [Quality Improvement Measure Summaries for MBQIP](#) resource to learn more). By honing in on one intervention that can check a lot of boxes, staff will be more likely to buy into the strategy and avoid burn out from “flavor of the month” quality improvement efforts.

1) Select specific measures, and define the goal

Measure selection

Measures for quality improvement projects such as those related to MBQIP are predetermined, eliminating the need for this step. Standardized measures have been established for many quality and patient safety topics, and it is wise to align with them to be consistent with state and national efforts, and allow for comparison with other hospitals. [The National Quality Forum \(NQF\)](#) maintains an inventory of current measures and is a great place to start looking for established measures on various hospital quality and patient safety topics.

It is also important to consider what type of measure(s) to utilize in order to support implementation and measure improvement:

- Process measures are measures that reflect consistency in staff adherence to tasks, assessments, or treatments associated with providing care. Process measures are often more effective as a feedback tool for staff because improvements will be reflected sooner than in outcome measures, especially in low volume settings. All required MBQIP measures other than HCAHPS survey scores are process measures.
- Outcome measures reflect patient outcomes, such as morbidity, mortality, healthcare-associated infections, or readmission rates. In rural hospitals, low volumes can diminish the usefulness of outcome measures, since the occurrences measured, such as death or readmissions, can be rare in any specific subset of the population.
- HCAHPS surveys are a measure of patient perception, which do not tidily fit into either the process or outcome measure category, but provide a valuable view of quality from the patient perspective.

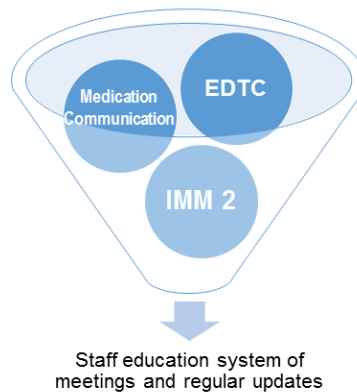
Setting Goals

Broadly speaking, goals should ultimately be “the right care for every patient, every time”, which for process measures translates into 100% or below benchmark time medians for every measure. The median is the middle number in a set of values; half the numbers are less and half the numbers are greater. It is helpful to have this in mind for a general long-term goal, but to initially focus on measurable improvement. Any improvement translates into one more patient that received high quality care, and that is an encouraging message for staff.

2) **Educate widely and creatively**

Staff education is a challenge given the pace of change and the amount of information that must be shared to keep staff current in terms of quality and patient safety.

To support the mindset and expectation of “continuous improvement”, it is a fruitful investment to develop a consistent system of staff education that combines periodic in-person education sessions that are recorded for those unable to attend, with monthly electronic updates (written or short video recordings) that include a feedback mechanism to communicate receipt and review. All quality improvement education can be funneled into this ongoing education system.



Determine whether there are other groups that can influence the success of the project or topic implementation as education is being planned. Other departments, healthcare settings, hospital leadership and boards, and community members are potential considerations, as well as patients and family members.

However, staff education is delivered, there are some concepts that are important to keep in mind:

- Enthusiasm is an insightful prediction of change success, and can be generated early in the quality improvement process by soliciting stakeholder input formally or informally, and continued throughout the course of the project.
- The inclusion of pertinent compelling patient stories or sharing goals and progress using real numbers of lives saved or harm averted helps to generate enthusiasm.
- Sharing baseline hospital performance metrics with national and state comparisons and benchmarks provides a sense of direction for the project.
- Simplicity in the design and delivery of staff education will help them to learn and remember the information. Consider what staff absolutely need to know to support the change, and design education around that core.

- Critical project implementation steps should be hardwired into paper or electronic documentation systems to provide “just in time” guidance.

3) **The kick off**

Timelines should be arranged so that the launch of the project, sometimes termed “kick off” or “go-live” begins shortly after staff education has been completed, when the information and inclination are fresh. Project leaders should review the new process beforehand to make sure that staff have everything they need to ensure success. A fun kick off mini-event, such as a treat in the cafeteria or a name draw for a gift basket or tickets to a sports event can be an inexpensive and positive way to bring attention to the project.

4) **Rapid tests of change**

It is important to evaluate the changes being made using a rapid tests of change tool, which aids in guiding the documentation, communication, and correction of unforeseen technical or process errors. A [sample rapid tests of change tool](#) is included in the **CAH QI Toolkit**.

It is helpful for members of the project team or ad hoc group to be available to answer questions, document issues, and communicate frequently to respond to complications during initial implementation. Daily or weekly huddles can be held to communicate with staff about the new processes. Rapid tests of change continue until it appears that the new process is running smoothly and implementation can be considered complete.

5) **Evaluation**

The best way to build momentum on quality improvement efforts is to actively monitor staff adherence to process measures as close to real time as possible, and provide feedback to staff and providers individually or during regular communications. As audits or observations are being done, “catching people doing right” and thanking them personally and/or publicly builds morale and encourages a continuation of the behavior. When interventions are missed, a timely and friendly conversation to learn more about potential barriers and elicit suggestions can lend valuable insight into process improvement. Staff and provider performance feedback at least monthly is extremely important in the beginning stages of project implementation. Once improvement has plateaued, a decision has to be made whether to move the project into sustain mode and monitor less frequently, or to reconvene the group for a discussion on how to improve further.

The MBQIP reports distributed by state Flex Programs can provide valuable state and national comparison data. However, these reports are generated months after the delivery of the patient care they reflect, which is not helpful in providing frequent feedback during active quality improvement efforts.

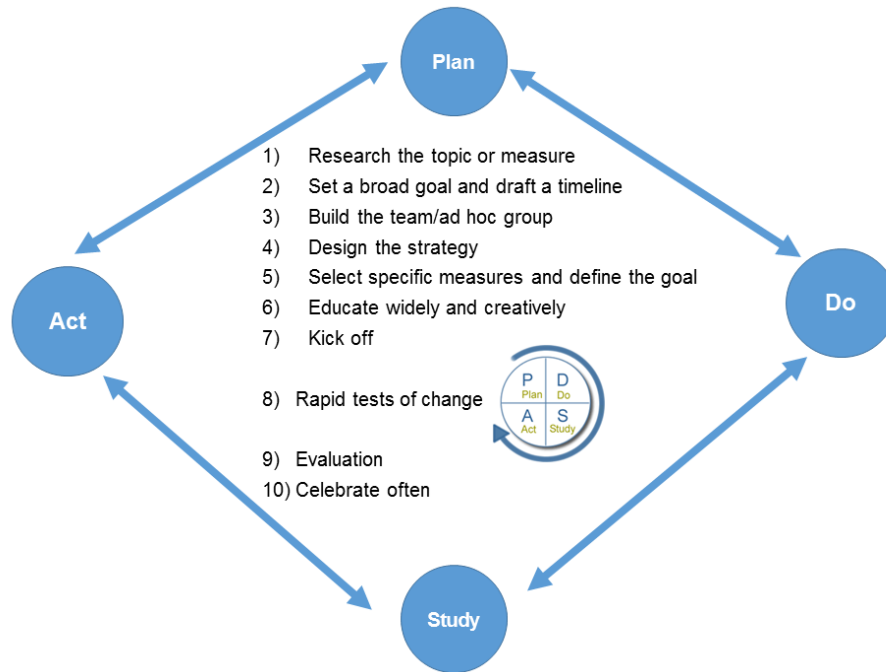
A user friendly [internal quality monitoring tool](#) included in the **CAH QI Toolkit** has been developed to assist in tracking and reporting more frequent progress on MBQIP and other quality and patient safety measures. The tool generates run charts that can be shared with staff and leadership.

6) **Celebrate often**

It is very exciting when quality improvement efforts pay off and run charts begin to show

an improvement in process and outcome measures! Frequent and prominent displays of run charts or graphs that acknowledge and celebrate great work foster pride and encourage staff to continue to improve. Administrative involvement in celebratory communications, staff meetings, and events reinforces the message that quality improvement is a high organizational priority.

The ten steps to leading quality improvement topics can be viewed as a project-specific Plan – Do – Study – Act (PDSA) cycle, within which intervention-specific PDSA cycles are implemented in Step 8 - “Rapid Tests of Change”. The following table illustrates the connection between the Ten Steps to Quality Improvement Projects and Plan – Do – Study – Act cycles.



Key Points:

- With creative meeting alternatives, and a commitment to keeping work flowing, it is entirely possible to bring a change to full implementation in two or three months
- It is important to find a way to obtain input from patients on changes that will impact their care
- Gather staff input frequently so that potential challenges can be detected early
- Strive to keep implementation strategies as simple as possible
- Develop a consistent system of staff education that combines periodic in-person, recorded education sessions with monthly electronic updates that include a feedback mechanism to communicate receipt and review
- The best way to build momentum on quality improvement efforts is to actively monitor staff and provider adherence to process measures and provide timely feedback



Tools and Resources:

- [Quality Improvement Measure Summaries for MBQIP](#)
- [Brainstorming Tool](#)
- [Internal Quality Monitoring Tool](#)
- [Project Action Plan Template](#)
- [Quality and Patient Safety Committee Meeting Agenda/Minute Template](#)
- [Rapid Tests of Change Tool](#)
- [Ten Step Quality Improvement Project Documentation Template](#)

Additional Resources

- A wide variety of resources related to MBQIP can be found on the TASC [MBQIP page](#) (<http://www.ruralcenter.org/tasc/mbqip>). Categories of these resources include:
 - [Care Transitions](#)
 - [Data Reporting and Use](#)
 - [Outpatient](#)
 - [Patient Engagement/HCAHPS](#)
 - [Patient Safety and Inpatient Care](#)
 - [MBQIP Monthly](#)
 - [MBQIP Measures Fact Sheets](#)

Appendix A – Federal and National Quality Programs

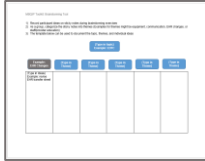
The quality programs below are listed in alphabetical order by supporting organization. Direct links to outside sources are provided for more information.

Supporting Organization	Initiative/Program	Focus Area(s) & Initiative/Program Website
Agency for Healthcare Research & Quality (AHRQ)	<p>Hospital Survey on Patient Safety Culture</p> <p>Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS)</p> <p>Comprehensive Unit Based Safety Program (CUSP)</p>	<p>A staff survey designed to help hospital assess the culture of safety in their institutions, including a comparative database. An Action Planning Tool is also available.</p> <p>AHRQ Hospital Survey on Patient Safety Culture website</p> <p>Action Planning Tool for the AHRQ Surveys on Patient Safety Culture Agency for Healthcare Research & Quality</p> <p>TeamSTEPPS is an evidence-based set of teamwork tools, aimed at optimizing patient outcomes by improving communication and teamwork skills among health care professionals.</p> <p>AHRQ TeamSTEPPS website</p> <p>The CUSP toolkit includes training tools to make care safer by improving the foundation of how physicians, nurses, and other clinical team members work together.</p> <p>AHRQ CUSP Toolkit website</p>
American Heart Association	Get with the Guidelines (GWTG), Antibiotic Stewardship	<p>Reporting, improvement and recognitions programs related to cardiac conditions including AMI, heart failure, stroke and atrial fibrillation</p> <p>American Heart Association – Get With the Guidelines website</p>
Centers for Disease Control and Prevention (CDC)	<p>National Healthcare Safety Network (NHSN)</p> <p>Be Antibiotics Aware</p> <p>Antibiotic Stewardship Implementation Resources</p>	<p>System for tracking a variety of measures related to healthcare associated infections, including annual survey with questions related to antibiotic stewardship</p> <p>NHSN website</p> <p>Initiative to raise awareness about antibiotic stewardship and strategies to combat resistance</p> <p>Be Antibiotics Aware website</p> <p>The CDC developed guides for various settings identifying core elements and strategies for implementing antibiotic stewardship programs, including a guide specific to critical access hospitals.</p> <p>Implementation of Antibiotic Stewardship Core Elements at Small and Critical Access Hospitals</p>

Centers for Medicare & Medicaid Services (CMS)	<p>Quality Innovation Network – Quality Improvement Organizations (QIN-QIOs)</p> <p>Partnership for Patients (P4P) Hospital Improvement Innovation Networks (HIINs)</p>	<p>Hospital focused priorities include:</p> <ul style="list-style-type: none"> • Hospital readmissions • Reporting and using clinical quality data/value based purchasing <p>QIO website</p> <p>Reduce all cause-preventable inpatient harm and readmissions. 11 core areas of focus include:</p> <ul style="list-style-type: none"> • Adverse drug events • Central-line associated blood stream infections • Catheter-associated urinary tract infections • <i>Clostridium difficile</i> including antibiotic stewardship • Injuries from falls and immobility • Pressure ulcers • Sepsis and Septic Shock • Surgical Site Infections (SSI) • Venous thromboembolism (VTE) • Ventilator-associated events (VAE) • Hospital readmissions <p>Partnership for Patients website</p>
Office of the National Coordinator for Health Information Technology (ONC)	Medicare and Medicaid EHR Incentive Programs	<p>Electronic medical record capability relating to processes, experience and/or outcomes of patient care, relative to one or more quality aims</p> <p>Achieve Meaningful Use</p>
Robert Wood Johnson Foundation (RWJF) and Institute for Healthcare Improvement (IHI)	Transforming Care at the Bedside (TCAB)	<p>Improvement initiative that focuses on nursing staff. Priorities include:</p> <ul style="list-style-type: none"> • Improve the reliability and safety of patient care on medical and surgical units • Increase the vitality and retention of nurses • Engage and improve the patients’ and family members’ experience of care • Improve the effectiveness of the entire care team <p>RWJF TCAB website</p>

Appendix B – Tools

Brainstorming Tool



The brainstorming tool is designed to help categorize and document ideas elicited during brain storming sessions.

[Download the tool](#)

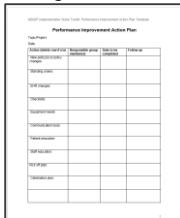
Internal Quality Monitoring Tool



This excel spreadsheet assists in tracking and reporting progress on MBQIP and other quality and patient safety measures. The tool generates run charts that can be shared with staff and leadership.

[Download the tool](#)

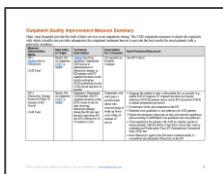
Project Action Plan Template



This template provides a structure for documenting progress on a project action plan.

[Download the template](#)

Quality Improvement Measure Summaries for MBQIP



This tool summarizes MBQIP measures by focus area and identifies best practices for improvement by measure.

[Download the tool](#)

Quality and Patient Safety Committee Meeting Agenda/Minute Template



This template is designed to provide a thorough inventory of possible agenda items to cover during Quality and Patient Safety Committee meetings.

[Download the template](#)

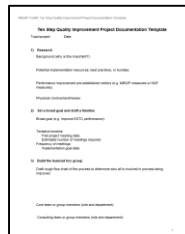
Rapid Tests of Change Tool



Use this tool during initial implementation of a quality improvement project or topic to document unforeseen problems identified, and track solutions.

[Download the tool](#) [Tool example](#)

Ten Step Quality Improvement Project Documentation Template



This template assists with documenting the completion of quality improvement project steps [Download the template](#)