Quality Improvement

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Objectives

- Explain the history of quality improvement in health care and MBQIP
- Define key terms associated with quality improvement
- Discuss Critical Access Hospital designation
- Describe key indicators for quality improvement
- Discuss the importance of quality measurement
- Identify the four key principles of quality improvement
- Identify available resources to facilitate quality improvement

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Key Terms

- **Quality improvement** (QI) consists of systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups.

- The **Institute of Medicine** (IOM), a recognized leader and advisor on improving the nation's health care, defines quality in health care as, “a direct correlation between the level of improved health services and the desired health outcomes of individuals and populations.”

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(HRSA, 2011.)

Key Terms

The Institute of Medicine (IOM) outlines six aims for improvement for health care:

- Safe: Avoiding injuries to patients
- Timely: Reducing waits for both recipients and providers of care
- Effective: Providing care based on scientific knowledge
- Efficient: Avoiding waste
- Equitable: Ensuring that the quality of care does not vary because of characteristics such as gender, ethnicity, socio-economic status, or geographic location
- Patient-centered: Providing respectful and responsive care that ensures the patient values guide clinical decisions.

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Key Terms

- **Performance measurement:** The regular collection of data to assess whether the correct processes are being performed and desired results are being achieved
- **The Performance Improvement Measurement System (PIMS)** is used to develop grantee baseline measurements, track progress, and develop an evidence base for effective rural health interventions
- **HCAHPS:** aims to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives on hospital care
- **MBQIP** aims to improve the quality of care provided in critical access hospitals (CAHs) by increasing quality data reporting by CAHs and then driving quality improvement activities based on the data

Key Terms

- **Critical Access Hospital** (CAH) is a designation given to certain rural hospitals by the Centers for Medicare and Medicaid Services (CMS).
  - This designation was created by Congress in the 1997 Balanced Budget Act in response to a string of hospital closures in the 1980s and early 1990s.
  - The CAH designation is designed to reduce the financial vulnerability of rural hospitals and improve access to health care by keeping essential services in rural communities. This is accomplished through cost-based Medicare reimbursement and technical assistance services provided to these hospitals ensure financial and operational viability.

Key Terms

- The **Medicare Rural Hospital Flexibility Program (Flex)** was designed to help establish Critical Access Hospital designation.
  - The prevention of CAH closure or assisting CAHs to identify other viable models to serve the health care needs of their rural communities is an important role for state Flex Programs to play in this shifting health care environment.
  - Flex Programs also use their grant dollars to: improve networks, improve population health and integrate emergency medical services (EMS); provide benefit to the community; increase performance improvement, financial improvement, and operational improvement; and address quality improvement issues.

The Pennsylvania Critical Access Hospitals' CEOs made a commitment to participate in the MBQIP program. The CEOs and their Quality Improvement Directors have worked diligently to achieve above-average QI outcomes. As a result of this collaborative effort, Pennsylvania was one of the first four states in the nation to have 100% of the CAHs agree to participate in MBQIP!

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History of QI and 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.
- The goal of MBQIP is to improve the quality of care provided in critical access hospitals (CAHs) by increasing data reporting and driving quality improvement activities based on the data.

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History of QI and MBQIP

- CAHs have historically been exempt from national quality improvement reporting programs due to challenges related to measuring improvement in low-volume settings and limited resources
- However, some CAHs are not only participating in national quality improvement reporting programs, but are excelling across multiple rural topic areas.
  - For example, small rural hospitals that participate in the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey often outperform prospective payment system (PPS) hospitals on survey scores.
- MBQIP allows individual hospitals to review and assess their data, compare their results against other CAHs, and partner with other hospitals on quality improvement initiatives to improve patient outcomes and provide the highest quality care to every patient, every time.

Phases of MBQIP

Outpatient Measures (Patient Safety, Care Transitions and Outpatient AMI & Chest Pain)

- **(Patient Safety) Influenza Vaccination Coverage Among Healthcare Professionals**
  OP-27: Facilities report a single rate for their CAH to the CDC National Healthcare Safety Network (NHSN).
  Reported to the National Healthcare Safety Network (NHSN)
- **(Care Transitions) Emergency Department Transfer Communication (EDTC)**
  To improve the transitions of care from the CAH to other healthcare settings in order to improve patient outcomes.
  Reported to Quality Health Associates (REDCap program) on behalf of the CAH Quality Network/Flex

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Phases of MBQIP

7 Elements of Care Transitions

- Seven Elements:
  - Administrative communication
  - Patient information
  - Vital signs
  - Medication information
  - Physician- or Practitioner-generated information
  - Nurse-generated information
  - Procedures and tests

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Phases of MBQIP

(Outpatient ED Chest Pain and Heart Attack AND ED Throughput Measures
Reported to CMS Using Outpatient CART Module

- **ED Chest Pain and Heart Attack**
  OP-1: Median time to fibrinolysis in the Emergency Department (ED)
  OP-2: Fibrinolytic therapy received within 30 minutes of ED arrival in the ED
  OP-3: Median time to transfer to another facility for acute coronary intervention in the ED
  OP-4: Aspirin on arrival
  OP-5: Median time to ECG in the ED
- **ED Throughput**
  OP-18: Median time from ED arrival to departure for discharged patients
  OP-20: Door-to-diagnostic evaluation by a qualified medical personnel
  OP-21: Pain management for long bone fracture
  OP-22: Left without being seen

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Phases of MBQIP

Inpatient Measures (Patient Engagement)

- **(Inpatient) IMM-2 Influenza Immunization**

  IMM-2: This prevention measure addresses acute care hospitalized inpatients age 6 months and older who were screened for seasonal influenza immunization status and were vaccinated prior to discharge if indicated.

  Reported to CMS Using Inpatient CART Module

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Phases of MBQIP

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

The survey contains 21 patient perspectives on care and patient rating items that encompass nine key topics.
Reported Using a Vendor of Your Choice with Partial Funds from Flex

- Communication with doctors
- Communication with nurses
- Responsiveness of hospital staff

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Emergency Department Transfer Communication (EDTC)

- **Emergency Department Transfer Communication (EDTC):** National Quality Forum-endorsed measures set forth as part of the MBQIP for hospitals to evaluate communication for transitions of care during emergency department transfer.

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Sample EDTC Report

Report Run Date: 11/29/2016

Telligen

MBQIP Care Transitions Quality Report: Improving Care Through Emergency Department Transfer Communication (EDTC)

Reporting Period: Fourth Quarter 2015 through Third Quarter 2016 Discharges

State: PA

MBQIP Quality Measures		Your State Performance by Quarter				Your State Performance Aggregate for All Four Quarters	State Current Quarter			National Current Quarter		
		4Q15	1Q16	2Q16	3Q16		Average Current Quarter	# CAHs with MBQIP MOU Submitting Data	90th Percentile**	Average Current Quarter	# CAHs with MBQIP MOU Submitting Data	90th Percentile**
Total Medical Records Reviewed		N = 571	N = 575	N = 577	N = 580	N = 2303	N = 580			N = 46020		
EDTC-1	Administrative Communication	90% (n=515)	95% (n=549)	95% (n=551)	97% (n=564)	95%	97%	14	100%	93%	1147	100%
EDTC-2	Patient Information	98% (n=558)	98% (n=566)	98% (n=568)	99% (n=577)	99%	99%	14	100%	94%	1149	100%
EDTC-3	Vital Signs	98% (n=559)	98% (n=561)	98% (n=566)	99% (n=575)	98%	99%	14	100%	94%	1149	100%
EDTC-4	Medication Information	99% (n=566)	99% (n=567)	98% (n=567)	99% (n=574)	99%	99%	14	100%	92%	1149	100%
EDTC-5	Practitioner Information	92% (n=528)	94% (n=542)	91% (n=524)	93% (n=540)	93%	93%	14	100%	92%	1149	100%
EDTC-6	Nurse Information	93% (n=530)	94% (n=541)	94% (n=540)	98% (n=568)	95%	98%	14	100%	87%	1149	100%
EDTC-7	Procedures and Tests	98% (n=562)	97% (n=555)	97% (n=562)	97% (n=562)	97%	97%	14	100%	95%	1148	100%
All EDTC	Composite*	77% (n=441)	82% (n=470)	84% (n=482)	89% (n=514)	83%	89%	14	100%	74%	1132	100%

N = denominator
n = numerator
N/A = the provider did not submit any data
D/E = 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)

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.

EDTC MBQIP MEASURES

Emergency Department Transfer Communication (EDTC)

MBQIP Measures

Required

EDTC-1: Administrative Communication (Two data elements)

EDTC-2: Patient Information (Six data elements)

EDTC-3: Vital Signs (Six data elements)

EDTC-4: Medication Information (Three data elements)

EDTC-5: Physician or Practitioner Generated Information (Two data elements)

EDTC-6: Nurse Generated Information (Six data elements)

EDTC-7: Procedures and Tests (Two data elements)

All-EDTC: Composite of all 27 data elements

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The 4 EDTC Quality Domains

- Patient Safety
- Outpatient Care
- Patient Engagement
- Care Transitions

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Patient Safety

- Patient safety measures are used to gauge how well a hospital provides care to its patients.
- MBQIP measures are based on scientific evidence and can reflect guidelines, standards of care, practice parameters, and patient perceptions.
  - Medical information from patient records and/or HCAHPS survey responses are converted into rates or percentages that allow facilities to assess their performance.

(Stratis Health, n.d.)

Outpatient Care

- The CMS outpatient measures evaluate the regularity with which a health care provider administers the outpatient treatment known to provide the best results for most patients with a particular condition.

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(Stratis Health, n.d.)

Outpatient Measures

The following measures have been identified as relevant to most CAHs and are included in the MBQIP.

MBQIP Measures

Required

OP-1: Median Time to Fibrinolysis

OP-2: Fibrinolytic Therapy Received within 30 minutes

OP-3: Median Time to Transfer to another Facility for Acute Coronary Intervention

OP-4: Aspirin at Arrival

OP-5: Median Time to ECG

OP-18: Median Time from ED Arrival to ED Departure for Discharged ED Patients

OP-20: Door to Diagnostic Evaluation by a Qualified Medical Professional

OP-21: Median Time to Pain Management for Long Bone Fracture

OP-22: Patient Left Without Being Seen

Additional

OP-23: ED – Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Receive Head CT or MRI Scan Interpretation Within 45 Minutes of ED Arrival

OP-25: Safe Surgery Checklist Use

Patient Engagement

- Studies have demonstrated measurable benefits to providing patient-centered care with a positive impact on patient satisfaction, length of stay, and cost per case.
- By improving communication with patients, whether via providers at the bedside or institutionally through committees focused on systemic changes in patient care, patient outcomes can, and will, improve.
- Broad improvement efforts focusing on patient-centered care, organizational culture, communication strategies, and staff engagement and satisfaction are critical for comprehensive improvement.

(Stratis Health, n.d.)

Care Transitions

- Care transitions refer to the movement of patients from one health care provider or setting to another.
- For patients living with serious and complex illnesses, transitions in setting of care are prone to errors. For example, one in five patients discharged from the hospital to home experience an adverse event within three weeks of discharge.
- The current rate for hospital readmissions among Medicare beneficiaries within 30 days of discharge is nearly 20%, contributing to lower patient satisfaction and rising health care costs.

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(Gerhardt, et al., 2013)

Four Key Principles in Quality Improvement

- Quality improvement work as systems and processes
- Focus on patients
- Focus on being part of the team
- Focus on use of the data

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(HRSA, 2011.)

QI Work as Systems and Processes

"To make improvements, an organization needs to understand its own delivery system and key processes."

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QI Work as Systems and Processes

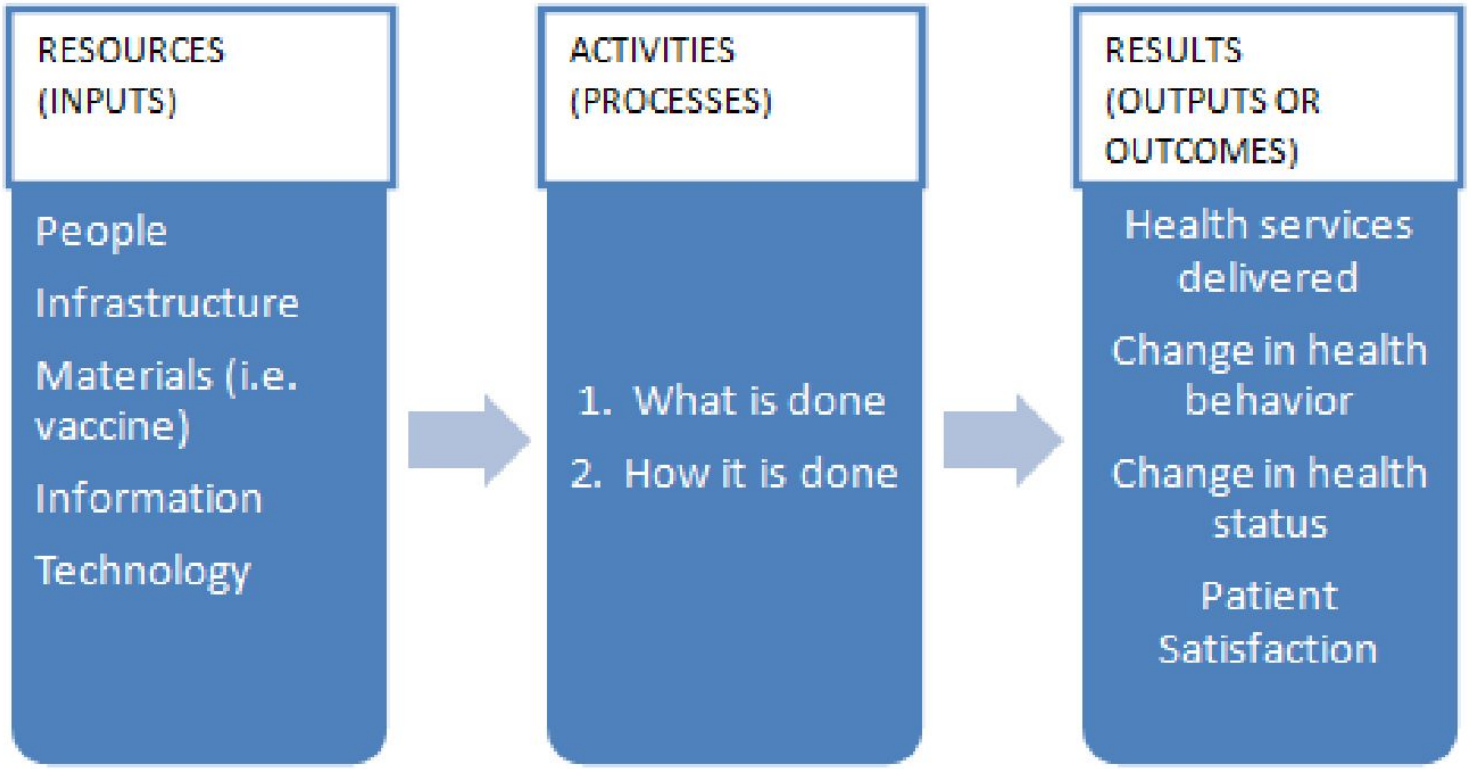

Figure 1.1 shows how a health care delivery system consists of resources, activities, and results; these key components are also called *inputs*, *processes*, and *outputs/outcomes*.

Focus on Patients

- An important measure of quality is the extent to which patients' needs and expectations are met. Services that are designed to meet the needs and expectations of patients and their community include:
  - Systems that affect patient access
  - Care provision that is evidence-based
  - Patient safety
  - Support for patient engagement
  - Coordination of care with other parts of the larger health care system
  - Cultural competence, including assessing health literacy of patients, patient- centered communication, and linguistically-appropriate care

Focus on Being Part of the Team

- At its core, QI is a team process. Under the right circumstances, a team harnesses the knowledge, skills, experience, and perspectives of different individuals within the team to make lasting improvements. A team approach is most effective when:
  - The process or system is complex
  - No one person in an organization knows all the dimensions of an issue
  - The process involves more than one discipline or work area
  - Solutions require creativity
  - Staff commitment and buy-in are needed

Focus on use of the data

- Data are the cornerstone of QI. They are used to describe how well current systems are working; what happens when changes are applied, and to document successful performance. Using data:
  - Separates what is *thought* to be happening from what is *really* happening
  - Establishes a baseline *(Starting with a low score is acceptable)*
  - Reduces placement of ineffective solutions
  - Allows monitoring of procedural changes to ensure that improvements are sustained
  - Indicates whether changes lead to improvements
  - Allows comparisons of performance across sites

The Importance of Quality Improvement

IMPROVED PATIENT OUTCOMES

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Federal Office of Rural Health Policy (FORHP)
Medicare Beneficiary Quality Improvement Project (MBQIP)

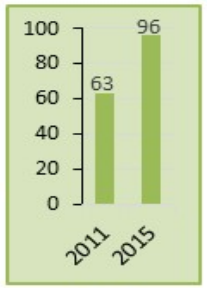
MBQIP was created:

In 2010 as a key quality improvement activity within the Medicare Rural Hospital Flexibility grant program. The project officially kicked off in September 2011.

There are:

1334 CAHs in the U.S.

57 Million People living in rural communities across the U.S.



CAH % Participation

The GOAL of MBQIP:

To improve the quality of care provided in small, rural Critical Access Hospitals (CAHs). Even though many CAHs have low patient volume, *every patient matters*!

MBQIP Quality Domains:

- Patient Safety
- Patient Engagement (HCAHPS)
- Care Transitions (Emergency Department Transfer Communication)
- Outpatient

Quality Measurement + Quality Improvement = Improved patient outcomes

Quality Measurement

- **96%** of CAHs participate in **MBQIP**
- **56%** actively submit **OUTPATIENT** data
- **76%** administer the **HCAHPS** survey
- **65%** actively submit **EDTC** data

Collaboration towards Quality Improvement

- States are collaborating with a variety of partners like Hospital Engagement Networks (HEN), Hospital Associations, Rural Health Networks and Quality Improvement Organizations (QIO)
- Federal and national partners, such as CMS and the National Quality Forum help pinpoint areas of need and share resources related to MBQIP and quality improvement
- The Federal Office of Rural Health Policy (FORHP) works closely with Technical Assistance Support Center (TASC), Rural Quality Improvement Technical Assistance (RQITA) and state Flex coordinators to develop and share MBQIP resources

MBQIP@hrsa.gov
www.ruralcenter.org/tasc/mbqip

U.S. Department of Health & Human Services
HRSA
Federal Office of Rural Health Policy

UTILIZE YOUR RESOURCES!

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StratisHealth Rural Quality Improvement Technical Assistance

Quality Improvement Implementation Guide and Toolkit for Critical Access Hospitals

May 2016

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Quality Improvement

U. S. Department of Health and Human Services

Health Resources and Services Administration

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Resources

- MBQIP Toolkit for CAHs:

https://www.ruralcenter.org/tasc/resources/quality-improvement-implementation-guide-and-toolkit-critical-access-hospitals

- HCAHPS Vendor Directory:

https://www.ruralcenter.org/ship/investment-resources/276

- Agency for Healthcare Research and Quality

https://www.ahrq.gov/professionals/systems/hospital/qitoolkit/index.html

- US Department of Health and Human Services Quality Improvement Toolkit

https://www.hrsa.gov/quality/toolbox/508pdfs/qualityimprovement.pdf

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