



Use Case Scenario Summary

Use Case Scenario Name:	State Medicaid
Use Case to Which Scenario Belongs:	Quality Measure Information
Sponsor:	Michigan Department of Health and Human Services
Date:	August 11, 2017

Executive Summary

This brief section highlights the purpose for the use case and its value. The executive summary gives a description of the use case's importance while highlighting expected positive impact.

Clinical quality measures (CQMs) are measures of healthcare quality generated in a clinical setting by using information such as lab results, vital signs, symptoms, x-rays, etc. CQMs, when properly utilized, can help transform healthcare delivery to improve care for patients and help transform healthcare payment to be quality-based instead of volume-based.

Electronic clinical quality measures, called eCQMs, are clinical quality measures that are *electronically* captured or calculated locally in a clinical setting. For example, in a clinic's electronic health record (EHR) system, and then potentially transported electronically and securely to a centralized repository for analysis and comparison with other clinics.

Reporting certain CQMs is a requirement for Meaningful Use for both Medicaid and Medicare EHR incentive programs.

Purpose of Use Case: This use case scenario enables healthcare providers to send and validate clinical quality measures electronically for Medicaid Meaningful Use attestation. It also enables State Medicaid to receive electronic clinical quality measures sent by Medicaid providers. Finally, this use case enables senders, receivers, and other concerned parties (such as Medicaid) to access and view eCQMs across their provider spectrum.

Report Once: This use case scenario ties to other scenarios in the Quality Measure Information use case to allow providers to report measures *once*. Then the health information network will validate, convert, and route those measures to multiple quality measure reporting programs, satisfying the many different requirements providers must meet. This "Report Once" capability greatly simplifies providers' and payers' workflow and removes burdens from the process of reporting quality of care.

To learn more about the other scenarios in the Quality Measure Information use case, and how you can begin participating in those scenarios to enable a Report Once ability, please visit <https://mihin.org/quality-measure-information/>.

Overview

This overview goes into more details about the use case.

In the context of Meaningful Use, the Center for Medicaid and Medicare Services defines CQMs:

Clinical quality measures, or CQMs, are tools that help us measure and track the quality of healthcare services provided by eligible professionals, eligible hospitals and critical access hospitals (CAHs) within our healthcare system. These measures use data associated with providers' ability to deliver high-quality care or relate to long term goals for quality healthcare. CQMs measure many aspects of patient care including:

- health outcomes
- clinical processes
- patient safety
- efficient use of health care resources
- care coordination
- patient engagements
- population and public health
- adherence to clinical guidelines¹

The widespread use of eCQMs is transformational for healthcare, not simply because of Meaningful Use but because of the better outcomes that will result from the “continuous process improvement” (CPI) feedback loop that CQMs can drive in clinics. This is sometimes referred to as “clinical quality improvement” (CQI).

CQMs are also needed at the national level for reporting and strategy, including *determining where to apply resources*.

The U.S. Department of Health and Human Services (HHS) and the National Quality Forum (NQF) have defined eCQMs as:

To further enable electronic measurement of EHR data, the NQF, under contract with the U.S. Department of Health and Human Services (HHS), supported the

¹ “Clinical Quality Measures Basic,” *Centers for Medicare & Medicaid Services*, accessed January 6, 2017, <https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms/clinicalqualitymeasures.html>

development of a Health Level Seven (HL7) standard known as the Health Quality Measures Format (HQMF) for representing a health quality measure as an electronic Extensible Markup Language (XML) document. A health quality measure encoded in HQMF is referred to as an “eMeasure” or “eCQM” (*electronic clinical quality measure*). Through standardization of a measure’s structure, metadata, definitions, and logic, the HQMF provides for quality measure consistency and unambiguous interpretation. HQMF is a component of a larger quality end-to-end framework in which providers will ideally be able to push a button and import these eMeasures into their EHRs. The eMeasures can be turned into queries that automatically query the EHR’s data repositories and generate reports for quality reporting. From there, individual and/or aggregate patient quality data can be transmitted to the appropriate agency.²

There are four key attributes of electronic Clinical Quality Measures (eCQMs) that set them apart and highlight their critical importance to improving outcomes in healthcare:

1. eCQMs are generated by measuring actual clinical data, not from payer/claims data. The clinically-derived measures come directly from clinical lab results, vital signs, etc. The type of quality measures that can be derived from clinical data cannot be generated from claims data.
2. eCQMs enable healthcare providers to have and use their own tools for real-time (or near real-time) tracking of changes to their practice. eCQMs act as a monitoring and feedback system to help providers to identify the need for and to effect changes that improve outcomes. For example, by monitoring their own clinical quality measures throughout the day, providers can identify care gaps within a care team the same day and close care gaps, potentially even while a patient is still present in the clinic.
3. Payers, not just providers, will benefit tremendously also, as eCQMs represent a faster, less expensive way to generate quality measures. A study by Kaiser Permanente revealed that clinical quality measures can save up to 50% over chart abstraction. So that the healthcare industry can move to truly value-based purchasing and value-based care, eCQMs can give better clinical outcome information at lower cost and are more effective at driving change because they are real-time and locally “owned” by the providers.
4. As we move to consumer-directed and patient-centered care, patient-reported outcomes work well with eCQMs but it is unclear whether claims-based measures can support this.

² Centers for Medicare & Medicaid Services, *Guide for Reading Eligible Professionals (EP) and Eligible Hospitals (EH) eMeasures*, v3, (April 2013), accessed on January 6, 2017, https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/GuidetoReading_EPandEH_eCQMs_April2013.pdf

Persona Story

To explain this use case, this section follows a persona example from start to finish.

Janet Torres is the practice manager for a mid-sized private medical office in Western Michigan. Janet loves her job because she plays a critical role in making the practice run smoothly, and she feels fulfilled when she can ensure everything is in order for her doctors.

One area causing Janet considerable frustration is following the quality measure reporting requirements. Their office is hoping that by following best practices, they will be eligible for incentives offered by different insurance companies. The problem is there are so many different quality standards to follow and overlapping reports for the various programs that rate quality of care. Janet finds the entire process complicated, confusing, and burdensome. Adding to her annoyance, sometimes she doesn't hear back on a report until months after the original submission, impacting their chances for making a timely change.



When Janet heard about the scenarios included in the Quality Measure Information use case, she quickly enrolled to participate. Thanks to this scenario, Janet can more easily report on quality measures related to Medicaid Meaningful Use attestation.

Janet also appreciates that the new automation allows her to easily send quality measures to health insurance organizations. Feedback from the measures is now more quickly available through dashboards which allow Janet to see which areas of care need improvement for patients. She is informed on how to increase adherence to national standards in ways that would benefit their entire patient population.

Janet can easily report a quality measure just once each time it is required, and send that quality measure to any reporting program requiring that measure. The duplicative reporting that was once a burden on her practice is eliminated because copies will automatically route to all appropriate quality programs and insurance companies. Janet could not be more pleased.

Diagram

This diagram shows the information flow for this use case.

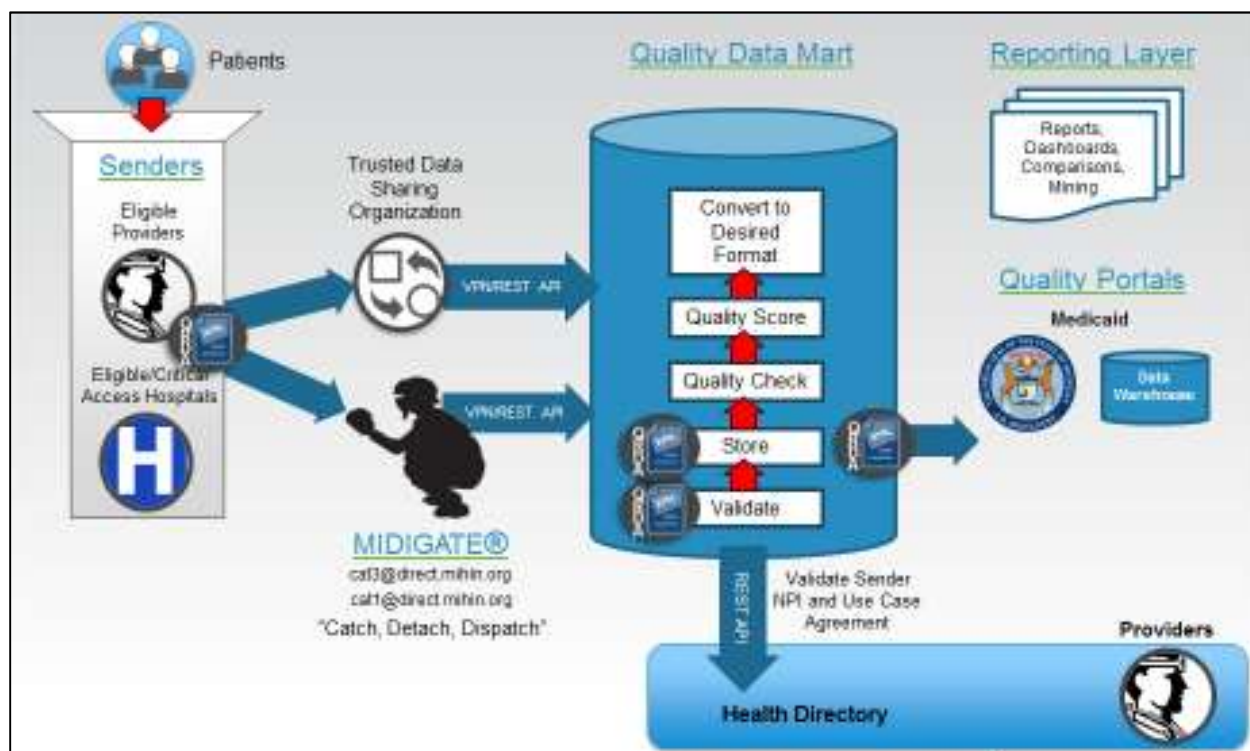


Figure 1. CQMRR Data Flow

Regulation

This section describes whether this use case is being developed in response to a federal regulation, state legislation or state level administrative rule or directive.

Legislation/Administrative Rule/Directive:

- ☒ Yes
- ☐ No
- ☐ Unknown

- ☒ Public Law 111-152 (Affordable Care Act)
- ☒ Public Law 111-5; Section 4104 (Meaningful Use)

Meaningful Use:

- ☒ Yes
- ☐ No
- ☐ Unknown

Cost and Revenue

This section provides an estimate of the investment of time and money needed or currently secured for this use case.

Costs: There are two types of costs for this use case. The *first cost* is to develop and implement the use case and to foster adoption.

Costs for supporting quality measure submission are evolving as additional requirements are communicated for new phases of Meaningful Use attestation. Medicaid providers can receive incentives for Meaningful Use by participating in this use case to help pay for their investment of time and money to generate and send in CQMs.

For providers using certified electronic health record technology (CEHRT), options should be available to calculate and send Category 3 Quality Reporting Data Architecture (QRDA) files using existing menus in the software for free. For providers wanting to enhance their EHR systems to automatically calculate QRDA files and send them to the health information network, EHR vendors generally charge \$5,000-\$10,000 per interface (typically at the practice level).

Costs vary for providers to upgrade to newer EHRs that have the ability to create more quality measures, depending on the type and license structure for the EHR system. Costs also vary to work with EHR vendors to fix file output when sent files do not meet validation requirements.

For MiHIN's development of this use case, initially grant funding from the Office of the National Coordinator on Health Information Technology (ONC) was used to develop the basic infrastructure. Additional funding from CMS and the State of Michigan is contributing to the expansion of the infrastructure for CQM reporting and is also paying for the implementation and rollout of this use case for State Medicaid. MiHIN funded several early adopters to send CQMs through directed integration projects using CMS/MDHHS funding budgeted for that purpose. Limited additional funding through MiHIN is available at least through 2017.

The *second cost* is the cost of not transforming to quality-based delivery and payment in healthcare. It is widely recognized that the present volume-based systems of delivery and payment are not sustainable and must change. Because CQMs are designed around activities that are associated with improved outcomes and reduced costs, their use over

time should equate to demonstrable savings to both payers and care providers – savings of time, money, and reduced utilization.



Figure 2. Hours Per Week Spent on Quality Reporting³

According to a 2016 article in *Health Affairs*, \$15.4 billion is spent annually on quality reporting. 81% of responding healthcare providers reported more effort dealing with external quality measures than three years ago. The article concludes that, “Greater effort is needed to **standardize** measures and make them **easier** to report.”⁴

Finally, there is a lost opportunity cost for any providers not reporting eQMs for Meaningful Use attestation, in the form of Medicaid penalties for not properly reporting quality measures.

Revenue: Because this use case scenario is mandated by legislation and Meaningful Use Stage 2, there is no charge to Medicaid providers to utilize this use case scenario to send in quality measures for Meaningful Use attestation credit.

A modest fee structure may be implemented for participants wishing to send in quality measures for reasons other than Meaningful Use attestation credit, for organizations in other states choosing to utilize this use case scenario and service, or for participants wishing to access quality measures for their own quality improvement efforts. This fee structure will be factored such that it pays for the costs of operating the use case scenario.

³ Lawrence P Casalino et al. “US Physician Practices Spend More Than \$15.4 Billion Annually to Report Quality Measure,” *Health Affairs* 35 (no.3 2016):401-406

⁴ Ibid.

Implementation Challenges

This section describes the challenges that may be faced to implement this use case scenario.

The greatest implementation challenge for this use case is to communicate the availability of its capability to providers and to compel them to participate and begin sending CQMs. This is due, at least in part, to the fact that many EHR vendors have not yet created the infrastructure to produce certified QRDA CAT 1 and QRDA CAT 3 files.

Working with EHR vendors to automate the creation and export of QRDA files is another challenge that will vary in level of difficulty from vendor to vendor.

An additional challenge is converting individual QRDA CAT 1 files into aggregate QRDA CAT 3 files, which is technically very difficult due to the extreme complexities of the measures, files, and different measure years. A significant portion of the effort for this use case has been applied to advancing the CAT 1 to CAT 3 conversion infrastructure.

Other challenges include delays caused by the industry not having good test data in large quantities. This has been addressed by creating a Patient Generator that produces unlimited quantities of realistic but synthetic (i.e. non-PHI) QRDA files for any zip code in the U.S. MiHIN has generated hundreds of thousands of test records, primarily QRDA CAT 1 files with “fake” patient names, for CMS, for several HIEs, and for a HIMSS Patient-matching Connectathon. Other test decks containing synthetic patient information are being prepared for other states along with a general ability for organizations to request test data sets.

MiHIN can now generate a wide variety of test decks for any organization, region, or state, and the test decks can have custom-configured demographics and percentages of episodes of healthcare. For more information on the Patient Generator visit

<https://ehrintelligence.com/news/health-information-exchange-focus-of-patient-matching-event> and <http://mihin.org/wp-content/uploads/2015/08/HIMSS-Connectathon-v2-08-24-15.pptx>.

Vendor Community Preparedness

This section addresses the vendor community preparedness to readily participate in the implementation of this use case.

Electronic health record applications have highly varied degrees of functionality and capabilities. The EHR version and the year edition to which the EHR software is certified by CMS/ONC will directly impact the EHR’s ability to produce QRDA CAT 1 and/or CAT 3 files.

MiHIN is prepared to receive QRDA CAT 1 files and calculate QRDA CAT 3 files from the QRDA CAT 1 files so that the EHR vendors do not have to perform that complex work.

Support Information

This section provides known information on this support for this use case.

Support can come from multiple levels (Governor, Federal or State Legislature, Michigan HIT Commission, Michigan State Departments, CMS/ONC/CDC, MiHIN Board, Participating Organizations, payer community, interest groups [e.g. MSMS, MHA], or citizen support).

Political Support:

- ☐ Governor
- ☐ Michigan Legislature
- ☒ Health Information Technology Commission
- ☒ Michigan Department of Health and Human Services or other State of Michigan department
- ☒ CMS/ONC
- ☐ CDC
- ☒ MiHIN Board

Numerous organizations involved in national efforts to transform healthcare to be based on quality have reviewed and supported this effort approach to this Use Case including but not limited to:

- National Quality Forum
- National Committee for Quality Assurance
- Michigan Peer Review Organization (the Quality Improvement Organization (QIO) for Michigan
- Michigan State Medical Society
- Blue Cross Blue Shield of Michigan
- The MITRE Corporation's Medicaid Information Technology Architecture (MITA) team

Concerns/Oppositions:

None noted

Sponsor(s) of Use Case

This section lists the sponsor(s) of the use case.

- Michigan Department of Health and Human Services

Metrics of Use Case

This section defines the target metrics identified to track the success of the use case.

- The number of eligible professionals, eligible hospitals and critical access hospitals that enroll and participate in the electronic transmission of CQMs through MiHIN.
- The frequency and quantity of CQM data submissions by providers and hospitals.
- The utilization of the service to view CQMs by providers and payer organizations.
- Trend analysis of clinical quality improvements, resulting from usage of CQMs that lead to clear improvement trends as viewed across populations over time.
- The reduction of duplicate or similar measures being captured by Medicaid health plans or similar entities from alternative non-standard processes.

Other metrics will be identified.