

# Quality Measure Harmonization, Respecification, and Adoption

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This document provides information about measure <u>harmonization</u>, <u>alignment</u>, <u>respecification</u>, and adoption, and defines key terms. Measure harmonization is important because it reduces duplication and overlap across <u>quality measures</u>. Measure duplication is undesirable because it may result in unnecessary data collection burden and make the processes of measure selection and interpretation less straightforward. The CMS consensus-based entity (CBE) requires consideration of measure harmonization as part of its endorsement processes. This information supplements content found in the Blueprint content on the *CMS MMS Hub*, *Harmonization*.

## 1 Measure Harmonization and Alignment

The definition of measure harmonization is standardizing <u>specifications</u> for <u>related measures</u> when they

- have the same measure focus (i.e., <a href="mailto:numerator">numerator</a> criteria)
- have the same target population (i.e., denominator ) criteria)
- have elements that apply to many measures (e.g., age designation for children)

Measure developers should harmonize measures unless there is a compelling reason for not doing so that would justify keeping two or more similar appearing measures separate (e.g., significant risk variation by age, comorbidity, race). The measure developer should harmonize and standardize measure specifications so they are uniform or compatible unless the measure developer can justify differences as dictated by the evidence.

The dimensions of harmonization can include numerator, denominator, <u>numerator</u> and <u>denominator exclusions</u>, <u>denominator exceptions</u>, calculation, and <u>data source</u> and collection instructions. The extent of harmonization depends on the relationship of the measures, evidence for the specific measure focus, and differences in data sources.

The measure developer must ensure harmonization of the <u>risk adjustment</u> methodology of the harmonized measure with the risk adjustment methodology of the related measure or justify any differences. Measure developers should use the Blueprint content on the *CMS MMS Hub* as a guide to understand some of the concepts to explore during the development and assessment of the risk adjustment model. Because of the complexity of risk adjustment models, the measure developer should provide sufficient information to facilitate the understanding of the measure when vetted through CMS and its measure development partners, e.g., other federal agencies, or CMS CBE for endorsement. For more information on risk adjustment, see the <u>Risk Adjustment in Quality Measurement</u> supplemental material.

The Blueprint content defines measure alignment as encouraging the use of similar standardized quality measures among government and private sector efforts. Harmonization is related to measure alignment because multiple programs and care settings may use harmonized measures of similar concepts. CMS seeks to align measures across programs, with other federal programs, and with private sector initiatives as much as is reasonable.

Alignment of quality initiatives across programs and with other federal partners and insurers helps to ensure clear information for patients and other consumers. A core set of measures increases signal for public and private recognition and payment programs (Conway, Mostashari, & Clancy, 2013 ). When selecting harmonized measures across programs, it becomes possible to compare the provision of care in different settings. For example, if the calculation method of the influenza immunization rate measure is the same in hospitals, nursing homes, and other settings, it is possible to compare the achievement for population health across the multiple settings. If there is harmonization of functional status measurement and alignment of measure use across programs, it would be possible to compare gains across the continuum of care. Consumers and payers are enabled to choose measures based on similar calculations. In these and other ways, harmonization promotes

- comparisons of population health outcomes
- coordination across settings in the continuum of care
- clearer choices for consumers and payers

The <u>Core Quality Measures Collaborative</u> (CQMC) is a public-private partnership between America's Health Insurance Plans and CMS. The membership is comprised of more than 70 organizations, including health insurance providers, primary care and specialty societies, consumer and employer groups, and other quality collaboratives. The aims of the CQMC are to

- Identify high-value, high-impact, evidenced-based measures promoting better patient outcomes and providing useful information for improvement, decision-making, and payment.
- Align measures across public and private payers to achieve congruence in the measures used for quality improvement, transparency, and payment purposes.
- Reduce the burden of quality measurement by eliminating low-value metrics, redundancies, and inconsistencies in measure specifications and quality measure reporting requirements across payors.

The CQMC has core sets of quality measures in 10 categories:

- Accountable Care Organizations / Patient-Centered Medical Homes / Primary Care
- Behavioral Health
- Cardiology
- Gastroenterology
- HIV & Hepatitis C
- Medical Oncology
- Neurology
- Obstetrics & Gynecology
- Orthopedics
- Pediatrics

Measure developers should consider both harmonization and alignment throughout the Measure Lifecycle and whether to respecify an existing measure, adopt an existing measure, or develop a new measure.

Registry developers and measure developers of registry measures should share and/or harmonize similar measures unless there is a compelling reason not to do so. Harmonization among registries provides clinicians with a larger cohort for comparison for performance scoring and benchmarking.

Measure developers should consider harmonization when

- developing measure concepts by
  - o conducting a thorough <u>environmental scan</u> to determine whether there are appropriate existing measures on the topic
  - o consulting with a Technical Expert Panel (TEP) and obtaining public input on the topic and the measures
- developing measure specifications by examining technical specifications for opportunities to harmonize
- conducting <u>measure testing</u> by assessing whether the harmonized specifications will work in the new setting or with the expanded population or data source
- implementing measures by proposing the harmonized measure for use in new programs
- conducting ongoing measure monitoring and evaluation by continuing environmental surveillance for other similar measures

<u>Table 1</u> summarizes ways to identify whether measures are related, competing, or new, and indicates the appropriate action based on the type of harmonization issue.

Table 1. Harmonization Decisions during Measure Development

Measure	Harmonization Issue	Action
Numerator: Same measure focus Denominator: Same target population	Competing measures	<ul> <li>Use existing (adopted) measure or justify development of an additional measure</li> <li>A different data source will require new harmonized specifications (e.g., respecified)</li> </ul>
Numerator: Same measure focus Denominator: Different target population	Related measures	<ul> <li>Harmonize on measure focus (i.e., respecified)</li> <li>Justify differences</li> <li>Respecify existing measure by expanding the target population</li> </ul>
Numerator: Different measure focus Denominator: Same target population	Related measures	<ul><li>Harmonize on target population</li><li>Justify differences</li></ul>
Numerator: Different measure focus Denominator: Different target population	New measures	Develop a de novo measure

The measure developer decides whether to develop a new measure by first conducting an environmental scan for existing similar or related measures or searching the <u>CMS Measures Inventory Tool (CMIT)</u> (for measures in development or planned for development), the <u>CMS CBE's Submission Tool and Repository (STAR) Measure Database</u> and Qualified Clinical Data Registry (QCDR) lists of measures. To review QCDR measures, go to the <u>Explore Measures & Activities</u> website and find the QCDR Measure Specifications. If the information gathering process and input from the TEP determine no similar or related measures can be respecified or adopted, then it may be appropriate to develop a new measure. The Blueprint content on the <u>CMS MMS Hub</u>, <u>Information Gathering</u>, provides details on this process.

# 2 HARMONIZATION DURING MEASURE MAINTENANCE

<u>Harmonization</u> and alignment work are parts of both measure development and <u>measure</u> <u>maintenance</u>. This discussion is about procedures for harmonization and alignment after the measure is in use and is in maintenance mode. Subsections <u>2.1-2.4</u> describe four steps to apply during measure maintenance to help ensure the measure's continued harmonization after implementation.

#### 2.1 Decide Whether Harmonization is Indicated

The developer should conduct an environmental scan for similar, existing measures and similar or related measures in development. Although the measure developer likely completed this step during initial measure development, the related measures may no longer be in harmony because of changes to specifications and new measures created.

<u>Table 2</u> describes harmonization issues and actions based on the numerator and denominator specifications.

Table 2. Harmonization Decisions during Measure Maintenance

Measure	Harmonization Issue	Action
Numerator: Same measure focus Denominator: Same target population	Competing measures	<ul> <li>Use existing measure (i.e., adopted) or justify development of a de novo measure</li> <li>A different data source will require new harmonized specifications (e.g., respecified)</li> </ul>
Numerator: Same measure focus Denominator: Different target population	Related measures	<ul> <li>Harmonize on measure focus (i.e., respecified)</li> <li>Justify differences</li> <li>Respecify existing measure by expanding the target population</li> </ul>
Numerator: Different measure focus Denominator: Same target population	Related measures	<ul><li>Harmonize on target population</li><li>Justify differences</li></ul>
Numerator: Different measure focus Denominator: Different target population	No harmonization issue	No action or develop de novo measure – harmonization not appropriate

#### 2.2 IMPLEMENT HARMONIZATION DECISIONS

After evaluating for harmonization, the possible outcomes are

- retain the measure with minor updates and provide justification if there are related measures
- revise the measure specifications to harmonize
- retire the measure and replace it with a different measure

## 2.3 Test Scientific Acceptability of Measure Properties

If harmonization results in changes to the measure specifications, the measure developer must test the scientific acceptability (1), including re-analysis of reliability (1), validity (1), and denominator and numerator exclusion appropriateness.

#### 2.4 The CMS CBE Evaluates for Harmonization during Measure Maintenance

The CMS CBE evaluates the measure for harmonization potential during the measure's endorsement maintenance review. The measure developer may be unaware of newly developed similar or related measures until after submission to the CMS CBE for review. If the CMS CBE identifies similar or related measures and harmonization has not taken place, or measure developers have adequately justified the reasons for not doing so, the CMS CBE Committee reviewing the measures can request measure developers to create a harmonization plan addressing the possibility and challenges of harmonizing certain aspects of their respective measures. The CMS CBE will consider the response and decide whether to recommend the measure for continued endorsement.

## 3 RESPECIFIED MEASURES

A respecified measure is an existing measure that a measure developer changes to fit the current purpose or use, which may mean changing the measure to meet the needs of a different care setting, data source, or population. It may require modifying the numerator, denominator, or adding new building block components to the specifications to fit the new use. An example of this type of respecification would be altering the pressure ulcer quality measure used in nursing homes for use in

other post-acute settings such as long-term care hospitals (LTCH) or inpatient rehabilitation facilities (IRFs). This would entail respecifying the nursing home measure to use the assessment tools required in LTCHs and IRFs that vary from the nursing home assessment tools. In this example, the data sources are conceptually similar. When data sources are disparate, such as respecifying from a registry measure to an <u>electronic clinical quality measure (eCQM)(1)</u>, there are usually, often greater, challenges in respecification, than if specifying a de novo measure.

The first step in evaluating, via information gathering, whether to respecify a measure is to assess the applicability of the measure focus to the population or setting of interest or data source:

- Is the focus of the existing measure applicable to the quality goal of the new measure population, setting, or data source?
- Does it meet the importance criterion for the new population or setting?

For example, if the population changes or if the type of data is different, the measure developer creates new specifications and properly evaluates for reliability, validity, and feasibility before determining use in a different setting. There may be a need for empirical analysis to evaluate the appropriateness of the measure for a new purpose. In respecifying a measure to a different setting, the measure developer needs to consider accountability, attribution, and the data source(s) of the new setting. Measures being respecified for use in a different, but similar setting or a different unit of analysis may not need to undergo the same level of comprehensive testing or evaluation compared to a de novo measure. However, when respecifying a measure for use in a new setting, a new population, or with a new data source, the measure developer must evaluate and test the newly respecified measure.

To assist measure developers in their respecification efforts and before deciding to respecify a measure, the measure developer should consider these questions:

- Are there changes in the relative frequency of critical conditions used in the existing measure specifications when applied to a new setting/population (e.g., when the exclusionary conditions have increased dramatically)?
- Is there a change in the importance of the existing measure in a new setting? For example, an existing measure addressing a highly prevalent condition may not show the same prevalence in a new setting or evidence of large <u>disparities</u> or suboptimal care in the new setting/population.
- Are there changes in the applicability of the existing measure, i.e., the existing measure composite contains preventive care components not appropriate in a new setting such as hospice care?
- Are the <u>data elements</u> required by the existing measure concept available in data source(s) for the respecified measure? This is especially true when respecifying to a digital measure.
- Is it feasible to collect the data elements when changing the data source to an <u>electronic</u> health record (EHR) ① or other digital format?
- Can the measure developer represent the data elements required in the existing measure in the same terminologies as in the respecified measure?
- Are the data elements valid, e.g., certain codes in the claims from commercial health plans may not be valid or payable under Medicare?
- Is the respecified measure capturing the intended numerator or denominator when applied to a different setting?

- Are there industry standards (e.g., <u>Health Level Seven International</u>® [HL7®], <u>Interoperability Standards Advisory</u> [ISA], and <u>United States Core Data for Interoperability</u> [USCDI]) the measure must leverage in the respecified version of the measure not included in the existing measure?
- If respecifying a registry measure, are there any non-standard data retrieval, calculation algorithms, or software modules used in a registry or other collection system for the existing measure that require development for the respecified measure?
- Are there clinical workflow, technical, or data flow considerations specific to the respecified measure requiring consideration? There will almost certainly be some workflow/data flow impacts when going from a centralized process, e.g., a registry collects data and calculates outcomes, to more of a decentralized EHR implementation-specific data capture and calculation process such as for eCQMs.
- Are there any specialty or setting-specific factors affecting specification and reporting such as for hospital-based specialties, e.g., radiology and pathology, which may use hospital as opposed to outpatient EHR systems and ancillary systems such as laboratory and imaging information systems rather than outpatient EHRs? In such situations, especially where registries are involved, how can the measure logic capture or map the data required in these ancillary systems to the EHR for calculation and reporting?
- What varying or additional procedural, logistical, or timeline requirements exist for the
  respecified version of the measure? For example, <u>Qualified Registry</u> and QCDR selfnomination submission and timing requirements vary from the pre-rulemaking submission
  requirements.
- Are there additional formal measure maintenance requirements for the respecified measure, for example, eCQMs require annual updates?
- Are there additional attribution level or program-specific requirements for the respecified measure?
- Considerations for attribution approaches (adapted from National Quality Forum, 2016<sup>™</sup>) include
  - o Is the attribution model for the respecified measure evidence-based?
  - o To what degree can the new accountable unit influence the outcomes?
  - Are there multiple units for applying the attribution model, for example both the individual clinician and group practice?
  - O What are the potential consequences?
  - What are the qualifying events for attribution, and do those qualifying events accurately assign care to the right accountable unit?
  - What are the details of the algorithm used to assign responsibility?
  - Has the measure developer considered multiple methodologies for reliability?
- If CMS CBE-endorsed, are the changes to the existing measure substantive enough to require resubmission to the CMS CBE for endorsement? The measure developer should discuss endorsement status with the CMS CBE. Measures respecified to eCQMs require resubmission as a new measure. After making any changes to the numerator and denominator statement to fit the specific use, the measure developer needs to create new detailed specifications.
- Will the <u>measure steward</u> be agreeable to the changes in the measure specifications to meet the needs of the current project? If a measure is copyright protected, consider issues (e.g., stewardship, proper referencing of the parent measure, or costs associated with the

copyright) relating to the measure's copyright. In any case, the measure developer should contact the measure steward for permission or clarification.

#### 3.1 Respecifying Measures to eCQMs

Expanding on some of the considerations discussed in Section 3, Respecified Measures, here are some examples of overarching issues for respecifying measures to eCQMs. This list is not exhaustive. Rather, these examples are major themes for measure developers and measure stewards to consider when respecifying measures to eCQMs.

Different measures vary in the source and type of data. When the EHR and other <u>health information</u> <u>technology (IT)</u> are the source(s) of data, measure developers should consider several factors when respecifying to eCQMs:

- Data elements from a data source do not always translate 1:1 to an EHR or health IT (herein EHR). Measure developers should not assume all required data elements for the measure's specifications are in structured fields and stored in an EHR. Therefore, repeating the measure conceptualization process, especially information gathering and empirical analysis, is very important as it will identify early in the measure development process whether the required data elements are available in the EHR.
- Different EHRs from different vendors do not collect and store data elements in the same way. To address disparate EHRs, the health IT community (e.g., standards developers, federal agencies, CMS internal interested parties, and their respective contractors) develops or names standard data elements. There is a concerted effort among these interested parties to develop and implement eCQM standards based on policy requirements with an explicit goal to minimize implementation and reporting burden. Therefore, knowledge of health IT standards is critical in the development of eCQMs as well as other digital measures.
- Measure developers use health IT standards in the authoring of eCQMs. The measure developer must stay well-informed of updates to standards as they evolve, of the health IT community's work, and be aware of the standards processes in the event the measure developer needs to request a change or update to a standard, such as a new data element. This process takes time as standards development and maintenance use a consensus-development process with involvement from multiple interested parties to determine whether the standards developer can and should make the change, e.g., the data element can become a new standard. Some resources for health IT tools and standards include
  - o CMS Tools and Resources on the CMS MMS Hub
  - o External Tools & Resources on the CMS MMS Hub
  - o Electronic Clinical Quality Improvement (eCQI) Resource Center □
  - O HL7 FHIR<sup>™</sup>
  - o ISA□
  - o National Library of Medicine Value Set Authority Center (VSAC) ☐

## 3.1.1 Standardized Measure Development

When respecifying a measure to an eCQM, measure developers should consult the CMS MMS Hub

Measure Specification and the Electronic Clinical Quality Measure (eCQM) Specification, Testing,

Standards, Tools, and Community supplemental material to ensure the respecification follows a similar development process with the same scientific rigor to that of other quality measures in CMS

quality programs. As depicted in <u>Figure 1</u>. Measure Lifecycle Components, the items in **bold** represent aspects of the Measure Lifecycle deserving increased attention by measure developers when respecifying registry measures to eCQMs, as eCQM development requires additional or varied processes throughout the Measure Lifecycle.

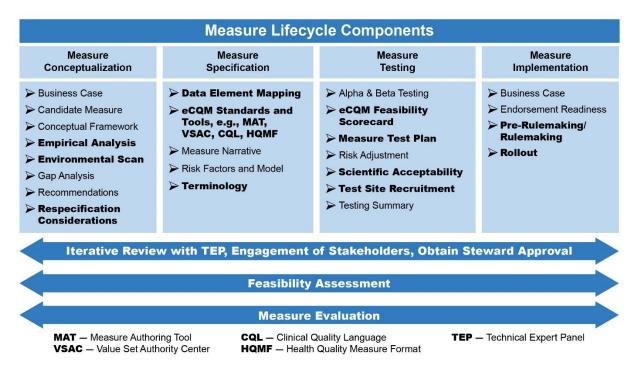


Figure 1. Measure Lifecycle Components

The Measure Lifecycle is a complex process detailed in the Blueprint content on the <u>CMS MMS Hub</u>. In the <u>measure conceptualization</u> stage, the measure developer should evaluate measures for respecification to an eCQM for any gaps in the registry measure's development process. Measure developers should address these gaps before moving to respecification. Empirical analysis facilitates the consideration of respecifying to an eCQM by referencing actual experience or existing data.

During the <u>measure specification</u> stage, data element mapping occurs, which ensures the required data elements for the eCQM are available and collected. The measure developer determines which terminology standards to use for each data element, such as SNOMED CT, Logical Observation Identifiers Names and Codes (LOINC), and Current Procedural Terminology (CPT) following guidance from the ISA and USCDI. There are several tools and resources for developing the eCQM specifications. The tools are primarily the Measure Authoring Tool (MAT) and the VSAC. One output of the MAT is the <u>Health Quality Measure Format (HQMF)</u> document, which provides information about the eCQM in a human readable format, e.g., numerator, denominator, measure description, and rationale for the measure. Find the eCQM data elements currently in use in CMS programs in the <u>eCQM Data Element</u> Repository.

Specific to differences in eCQM testing, the measure developer must be aware of the requirements to use the <u>Bonnie</u> tool to develop and test synthetic patient data against the eCQM's <u>Clinical Quality Language</u> (CQL)-based logic. Additionally, eCQMs require testing across at least two EHR vendor products and enough test site data for statistically significant assessments of scientific acceptability.

In the <u>measure implementation</u> stage, the measure steward proposes the measure for adoption into a quality program. For CMS programs, this may involve the <u>pre-rulemaking</u> and rulemaking processes. The measure developer may also propose the eCQM for endorsement, which refers to submitting the eCQM to the CMS CBE. The tasks for this activity consist of preparing for endorsement - developing the package for submission, attending meetings, and providing post meeting comments. Although endorsement is not a requirement for CMS quality measures, there is a strong preference for endorsed quality measures. For more information, see the *Consensus-Based Entity (CBE) Endorsement and Maintenance* (under revision) supplemental material.

#### 3.1.2 Decision to Respecify to an eCQM

To assist in determining if a quality measure can be respecified, the measure developer may use the decision tree illustrated in <u>Figure 2</u>. In keeping with general measure development processes, the measure developer needs to ensure there are no competing or similar eCQMs and the TEP has weighed in on the decision to respecify.

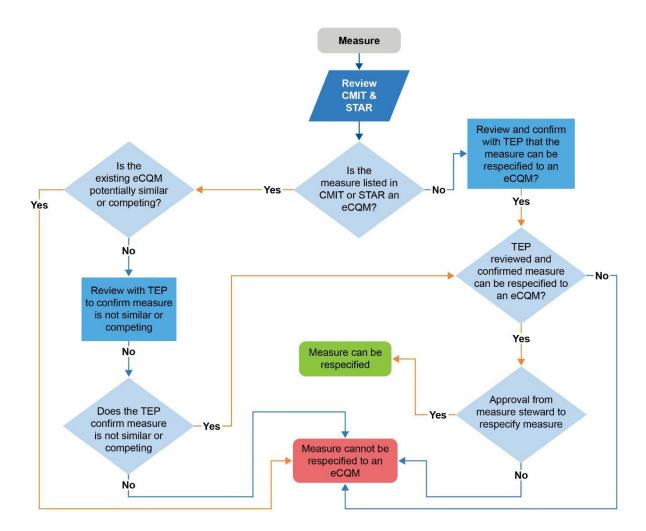


Figure 2. Decision Tree to Assist in Determining Whether to Respecify a Measure

## 3.1.3 Respecifying Registry Measures to eCQMs

Use of registries is becoming more common, including for reporting quality measures to CMS. Respecifying registry measures for use in quality programs can provide a convenient and useful source to expand the availability of measures, especially digital measures, primarily eCQMs.

Qualified Registries and QCDRs support clinician quality reporting. Both registry types can report Merit-based Incentive Payment System (MIPS) measures as an alternative to direct reporting for clinicians. Additionally, eligible clinicians can only report certain MIPS measures and specific QCDR measures through registries. It is these actively collected measures unique to registries the measure developers may find useful as a source of measures for respecification to eCQMs or other digital measures.

Respecification of registry measures can present varying levels of complexity depending on several scenarios:

- Existing MIPS measures. Eligible clinicians can report to CMS via registries (Qualified Registries or QCDRs) as an alternative to direct submission by clinicians. Eligible clinicians can report these measures via registries, but the measures are not unique to registries. As MIPS program measures, they have gone through the rule-making process and a high level of review and approval. Respecification to eCQMs presents primarily technical issues of data abstraction and calculation rather than basic development or application to a different population or setting. If respecification of MIPS measures was for a different setting such as the hospital, other issues would arise, as discussed in Section 3, Respecified Measures.
- MIPS Registry only measures. As MIPS measures, these measures have also gone through
  the rule-making process indicating a high level of review and approval. However, the
  measure's limitation to registry submission may imply the data may present particular
  challenges in terms of collection feasibility from individual EHRs. Full testing of the measure
  is an important aspect of respecification.
- Qualified Registry and QCDR measures not approved as MIPS measures. These measures
  have generally gone through a limited review, i.e., required for approval for submission to
  the registry by specific Qualified Registries and QCDRs. Although the measures are in use,
  they may have a limited, documented development process. Thus, they may require
  substantial basic development work as part of the respecification process.

#### 3.2 TESTING RESPECIFIED MEASURES

When respecifying a measure for use in a new domain (e.g., new setting or population) or using a different data source (e.g., EHR data), the measure developer should construct the measure testing to detect important changes in the functionality or properties of the measure. As applicable, review changes in

- relative frequency of critical conditions used in the existing measure specifications when applied to a new setting/population, e.g., dramatic increase in the occurrence of exclusionary conditions
- importance of the existing measure in a new setting, e.g., an existing measure addressing a highly prevalent condition may not show the same prevalence in a new setting, or evidence large disparities or suboptimal care found using the existing measure's setting/population may not exist in the new setting/population
- location of data or the likelihood data are missing, e.g., an existing outpatient measure using an claims data source for medications in the criteria specification, when applied to Medicare

patients in an inpatient setting, the measure developer may need modify to use patient record abstraction because Medicare Part A claims do not contain medication information due to bundling

- frequency of codes observed in stratified groups when applying the measure to a new setting or subpopulation
- risk adjustment model or changes that make the previous risk adjustment model inappropriate in the new setting/population

Specific to respecified eCQMs, initial feasibility analysis findings are typically more qualitative and the measure developer must confirm them by more detailed quantitative analysis and testing. Initial feasibility analysis may uncover significant industry readiness, workflow, burden, or standards constraints requiring mitigation and/or rethinking the viability of moving forward with respecification. The measure developer can complete initial feasibility assessments using the Feasibility Scorecard (link pending). Use the Feasibility Scorecard to assess

- the availability of the data element in the EHR in a structured format
- the accuracy of the data element
- if the measure developer coded the data element using recommended standards
- the impact of capturing the data element in the workflow

The components of the Scorecard assess current state data element feasibility but will not inherently provide an assessment of future data element feasibility. For example, workflow or technology changes could make data elements feasible to support respecifying registry measures to eCQMs. Therefore, the measure developer should ensure that, in cases where a respecified data element is currently not feasible, they include qualitative information about the near-term potential and level of effort to improve feasibility.

Confirming the EHRs collect and store required data elements reduces the risk of rework and course correction during measure respecification, which may delay the completion of the eCQM. The decision tree in Figure 3 may be helpful in determining which data elements are critical to the eCQM. Identifying the most appropriate data elements is critical to ensure the measure's intent does not change. If the measure developer cannot substitute critical data elements or substitution will change the intent of the measure, then developing a de novo eCQM may be the only option.

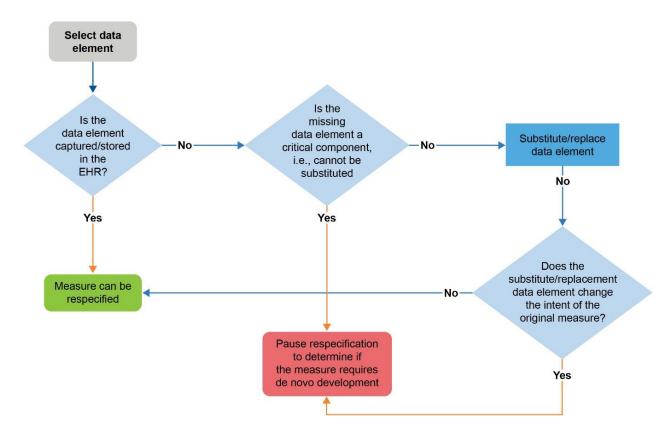


Figure 3. Decision Tree to Assist in Determining Data Element Criticality

Building upon the initial feasibility assessment, measure developers can use <u>Bonnie</u> to export HQMF-constructed simulated patient data in <u>Quality Reporting Document Architecture</u> Category I (QRDA I) or Excel format. The measure developer may use these data to evaluate each test site's ability to consume simulated, clinically relevant patient data and implement the measure correctly within their individual EHR platform and environment. This process assesses whether the technical specification logic performs as intended. While simulated data allow for 100% specification logic coverage, resource constraints typically limit the number of clinically relevant, real-world scenarios the measure developer can test. However, Bonnie cannot test individual facility/practice workflow impact. Additionally, the measure developer should be aware that smaller facilities and health systems may not be able to consume simulated data in QRDA I format and may need to use the Excel export. If the eCQM requires integration of data from (an)other source(s) into the EHR for implementation and reporting, testing must show how the data will flow from the other source(s) into the EHR.

As with other quality measures, all respecified measures must establish scientific acceptability through reliability and validity testing. For more information, see the Blueprint content on the CMS MMS Hub, Scientific Acceptability.

## **4** ADOPTED MEASURES

Adopted measures must have the same numerator, denominator, and data source as the existing measure. In the case of adopted measures, the measure developer should provide only the information specific to the measure's implementation, e.g., data submission instructions, as they may be different from the original. In most cases, for an CMS CBE-endorsed parent measure with no changes to the specifications, the CMS CBE considers the adopted measure CMS CBE-endorsed. An example of an adopted measure would be an ambulatory program adopting the core hypertension measure, Controlling High Blood Pressure (CMIT Measure ID 167) (CMS CBE 0018).

## 5 KEY POINTS

Harmonization and alignment are important aspects of measure development and maintenance and a significant part of CMS's efforts to reduce quality measure-related burden. Harmonization work begins during conceptualization, specifically through the environmental scan, when measure developers search for similar measures already in existence or under development. When similar measures exist, the measure developer is responsible for identifying opportunities to harmonize the similar measure with existing measures. If the measure developer decides not to harmonize with similar measures, they must provide justification for their decision. If harmonization results in changes to the measure specifications, measure developers may need to re-analyze reliability, validity, and denominator and numerator exclusion appropriateness. The same principle also applies to respecified measures.

The measure developer must consider the characteristics specific to an existing measure when respecifying a measure. Respecifying a registry measure has special considerations and respecifying to an eCQM also has special considerations.

Measure developers continue to evaluate measures for harmonization and alignment during measure maintenance as development and implementation of new measures continues. Respecification may be necessary. This process promotes parsimony and reduced implementation and reporting burden.

## **REFERENCES**

- Centers for Medicare & Medicaid Services. (n.d.-a). *CMS measures inventory tool.* Retrieved June 29, 2023, from https://cmit.cms.gov/cmit/#/MeasureInventory
- Centers for Medicare & Medicaid Services. (n.d.-b). Controlling high blood pressure. CMS Measures Inventory Tool. Retrieved June 29, 2023, from https://cmit.cms.gov/cmit/#/FamilyView?familyId=167
- Centers for Medicare & Medicaid Services. (n.d.-c). *Measure authoring tool*. Retrieved June 29, 2023, from https://www.emeasuretool.cms.gov/
- Centers for Medicare & Medicaid Services. (n.d.-d). *Quality: Traditional MIPS requirements.* Retrieved June 29, 2023, from <a href="https://qpp.cms.gov/mips/quality-measures">https://qpp.cms.gov/mips/quality-measures</a>
- Centers for Medicare & Medicaid Services, & Office of the National Coordinator for Health Information Technology. (n.d.). *Bonnie: A tool for testing electronic clinical quality measures*. Retrieved June 29, 2023, from <a href="https://bonnie.healthit.gov/">https://bonnie.healthit.gov/</a>
- Conway, P. H., Mostashari, F., & Clancy, C. (2013). The future of quality measurement for improvement and accountability. *JAMA*, 309(21), 2215-2216. https://doi.org/10.1001/jama.2013.4929
- Electronic Clinical Quality Improvement Resource Center. (n.d.-a). *eCQI Resource Center*. Retrieved July 10, 2023, from <a href="https://ecqi.healthit.gov/">https://ecqi.healthit.gov/</a>
- Electronic Clinical Quality Improvement Resource Center. (n.d.-b). *Electronic clinical quality measure* (eCQM) data element repository (DERep). Measure collaboration (MC) workspace. Retrieved July 10, 2023, from https://ecqi.healthit.gov/mc-workspace-2/data-element-repository
- Health Level Seven International. (n.d.-a). *Home*. Retrieved June 29, 2023, from <a href="http://www.hl7.org/index.cfm">http://www.hl7.org/index.cfm</a>
- Health Level Seven International. (n.d.-b). *Welcome to FHIR*. Retrieved June 29, 2023, from <a href="https://www.hl7.org/fhir/">https://www.hl7.org/fhir/</a>
- Office of the National Coordinator for Health Information Technology. (n.d.-a). *Interoperability* standards advisory. Retrieved June 29, 2023, from https://www.healthit.gov/isa/
- Office of the National Coordinator for Health Information Technology. (n.d.-b). *United States core data for interoperability*. Retrieved June 29, 2023, from <a href="https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi">https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi</a>
- National Quality Forum. (2016). *Attribution: Principles and approaches. Final report.*http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=84236
- Partnership for Quality Measurement. ( ). *Core quality measure collaborative*. Retrieved July 20, 2023, from <a href="https://p4qm.org/CQMC/">https://p4qm.org/CQMC/</a>
- Partnership for Quality Measurement. (n.d.). *Evaluation and Maintenance*. Retrieved July 19, 2023, from https://p4qm.org/EM

Partnership for Quality Measurement. (n.d.). *Submission tool and repository measure database*. Retrieved July 19, 2023, from <a href="https://p4qm.org/measures">https://p4qm.org/measures</a>

U.S. National Library of Medicine. (n.d.). *Value set authority center*. Retrieved June 29, 2023, from <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>