



Quality Measure Harmonization, Respecification, and Adoption

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This document provides information about measure①, harmonization①, alignment①, respecification①, and adoption, and defines key terms. Measure harmonization is important because it reduces duplication and overlap across quality measures①. 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 National Quality Forum (NQF) requires consideration of measure harmonization as part of its endorsement processes. This information supplements content found in the *Blueprint*, Chapter 5.11, Harmonization.

1 MEASURE HARMONIZATION AND ALIGNMENT

The definition of measure harmonization is standardizing specifications① for related measures when they

- have the same measure focus (i.e., numerator① criteria)
- have the same target population① (i.e., denominator① criteria)
- 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). Harmonized [measure](#) ^① [specifications](#) ^① are standardized so that they are uniform or compatible, unless differences are justified as dictated by the evidence.

The dimensions of [harmonization](#) ^① can include [numerator](#) ^①, [denominator](#) ^①, [exclusions](#) ^①, calculation, and [data source](#) ^① and collection instructions. The extent of harmonization, per [Changes to NQF's Harmonization and Competing Measures Process: Information for Measure Developers](#) ^②, depends on the relationship of the measures, evidence for the specific measure focus, and differences in data sources.

The measure developer must ensure the [risk adjustment](#) ^① methodology is harmonized with the risk adjustment methodology of [related measures](#) ^① or justify any differences. Measure developers should use the Blueprint 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, the [Measure Applications Partnership \(MAP\)](#) ^①, or NQF for endorsement. See the supplemental material, [Risk Adjustment in Quality Measurement](#) ^②, for more information on risk adjustment.

[Measure alignment](#) ^① is defined in [Changes to NQF's Harmonization and Competing Measures Process: Information for Measure Developers](#) ^② as “Encouraging the use of similar standardized performance measures across and within public and private sector efforts” (p. 6). 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 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](#) ^②). When selecting harmonized measures across programs, it becomes possible to compare the provision of care in different settings. For example, if the influenza immunization rate measure is calculated the same way 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 a 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 based on measures calculated in similar ways. In these and other ways, harmonization promotes

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

Measure developers should consider both harmonization and alignment throughout the Measure Lifecycle and whether to [respecify](#) ^① an existing measure, adopt an existing measure, or develop a new measure.

Developers of registries 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.

Harmonization should be considered when

- Developing measure concepts by

- o Conducting a thorough environmental scan 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 measure testing 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.

[Table 1](#) 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
<u>Numerator</u> : Same measure focus <u>Denominator</u> : Same target population	<u>Competing measures</u>	<ul style="list-style-type: none"> • Use existing (<u>adopted</u>) <u>measure</u> or justify development of an additional measure • A different data source will require new harmonized specifications (e.g., <u>respecified</u>)
Numerator: Same measure focus Denominator: Different target population	<u>Related measures</u>	<ul style="list-style-type: none"> • Harmonize on measure focus (i.e., <u>respecified</u>) • Justify differences • Respecify existing measure by expanding the target population
Numerator: Different measure focus Denominator: Same target population	Related measures	<ul style="list-style-type: none"> • Harmonize on target population • Justify differences
Numerator: Different measure focus Denominator: Different target population	New measures	<ul style="list-style-type: none"> • Develop a de novo <u>measure</u>

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 [CMS Measures Inventory Tool \(CMIT\)](#) (in development or planned for development). If the information gathering process and input from the TEP determine that no existing or related measures can be respecified or adopted, then it may be appropriate to develop a new measure. The *Blueprint*, Chapter 4.1, Information Gathering, provides details on this process.

2 HARMONIZATION DURING MEASURE MAINTENANCE

Harmonization and alignment work are parts of both measure development and measure maintenance. This discussion is about procedures for harmonization and alignment after the measure is in use and is in maintenance mode. Subsections 2.1-2.4 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 measures already in existence and measures in development that are similar or related. Although this step may have been done during initial measure development, the related measures may no longer be harmonized because specifications were changed.

Table 2 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 <u>target population</u>	<u>Competing measures</u>	<ul style="list-style-type: none"> Use existing measure (i.e., adopted) or justify development of additional measure A different data source will require new harmonized specifications (e.g., <u>respecified</u>)
Numerator: Same measure focus Denominator: Different target population	Related measures	<ul style="list-style-type: none"> Harmonize on measure focus (i.e., respecified) Justify differences Respecify existing measure by expanding the target population
Numerator: Different measure focus Denominator: Same target population	Related measures	<ul style="list-style-type: none"> Harmonize on target population Justify differences
Numerator: Different measure focus Denominator: Different target population	No harmonization issue	<ul style="list-style-type: none"> No action or develop <u>de novo measure</u> – 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, testing of the scientific acceptability, including re-analysis of reliability, validity, and exclusion appropriateness, is usually necessary.

2.4 NQF EVALUATES FOR HARMONIZATION DURING MEASURE MAINTENANCE

NQF evaluates the measure for harmonization potential during the maintenance review of the measure. The measure developer may be unaware of newly developed similar or related measures until after

submission to NQF for review. If similar or related measures are identified by NQF and harmonization has not taken place, or reasons for not doing so are adequately justified, the NQF Standing Committee reviewing the [measures](#) can request that measure developers create a [harmonization](#) plan addressing the possibility and challenges of harmonizing certain aspects of their respective measures. NQF 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](#). Alternatively, it may require changing the [numerator](#) or [denominator](#), or adding new [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 acute care hospitals or inpatient rehabilitation facilities (IRFs).

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, new specifications would have to be developed and properly evaluated for [reliability](#), [validity](#), and [feasibility](#) before a determination regarding use in a different setting can be made. Empirical analysis may be required 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 that are being respecified for use in a different setting or a different unit of analysis may not need to undergo the same level of comprehensive testing or evaluation compared to a newly developed measure. However, when respecifying a measure for use in a new setting, a new population, or with a new data source, the newly respecified measure must be evaluated and tested. 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 original 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 original measure in a new setting (e.g., an original measure addressing a highly prevalent condition may not show the same prevalence in a new setting or evidence that large [disparities](#) or suboptimal care found using the original measure do not exist in the new setting/population)?
- Are there changes in the applicability of the original measure (i.e., the original measure composite contains preventive care components that are not appropriate in a new setting such as hospice care)?
- Is it [feasible](#) to collect the data elements when changing the data source to an [electronic health record \(EHR\)](#)?

- 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 measure, as specified, capturing the intended numerator or denominator when applied to a different setting?
- If NQF-endorsed, are the changes to the existing measure significant enough to require resubmission to NQF for endorsement? The measure developer should discuss endorsement status with NQF. After making any changes to the numerator and denominator statement to fit the specific use, new detailed specifications will be required.
- Will the measure steward 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.

Considerations for attribution approaches ([NQF, 2016](#))

- Is the attribution model for the new measure evidence-based?
- To what degree can the new accountable unit influence the outcomes?
- Are there multiple units to which the attribution model will be applied?
- 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?
- Have multiple methodologies been considered for reliability?

3.1 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., electronic health record [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 original measure specifications when applied to a new setting/population (e.g., dramatic increase in the occurrence of exclusionary conditions)
- importance of the original measure in a new setting (e.g., an original measure addressing a highly prevalent condition may not show the same prevalence in a new setting, or evidence that large disparities or suboptimal care found using the original measure may not exist in the new setting/population)
- location of data or the likelihood that data are missing (e.g., an original measure that uses an administrative data source for medications in the criteria specification, when applied to Medicare patients in an inpatient setting, may need to be modified to use medical 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

4 ADOPTED MEASURES

Adopted measures ^① must have the same numerator ^①, denominator ^①, and data source ^① as the original measure. In the case of adopted measures, the measure developer should provide only the information that is specific to the measure's ^① implementation (e.g., data submission instructions, as they may be different from the original). In most cases, for an NQF-endorsed parent measure with no changes to the specifications ^①, NQF considers the adopted measure NQF-endorsed. An example of an adopted measure would be an ambulatory program adopting the core hypertension measure, NQF 0018, Controlling High Blood Pressure.

5 KEY POINTS

Harmonization ^① and alignment ^① are important aspects of measure development and maintenance ^① and a significant part of CMS's efforts to reduce quality measure-related burden. Harmonization work begins during conceptualization, specifically through the environmental scan ^①, 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 current measure with existing measures. If the measure developer decides not to harmonize with similar measures, they must provide justification for that decision. If harmonization results in changes to the measure specifications, measure developers may need to re-analyze reliability ^①, validity ^①, and exclusion ^① appropriateness. The same condition also applies to respecified measures ^①.

Measures are continually evaluated for harmonization during measure maintenance as new measures are developed and implemented. This process promotes parsimony and reduced implementation and reporting burden.

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