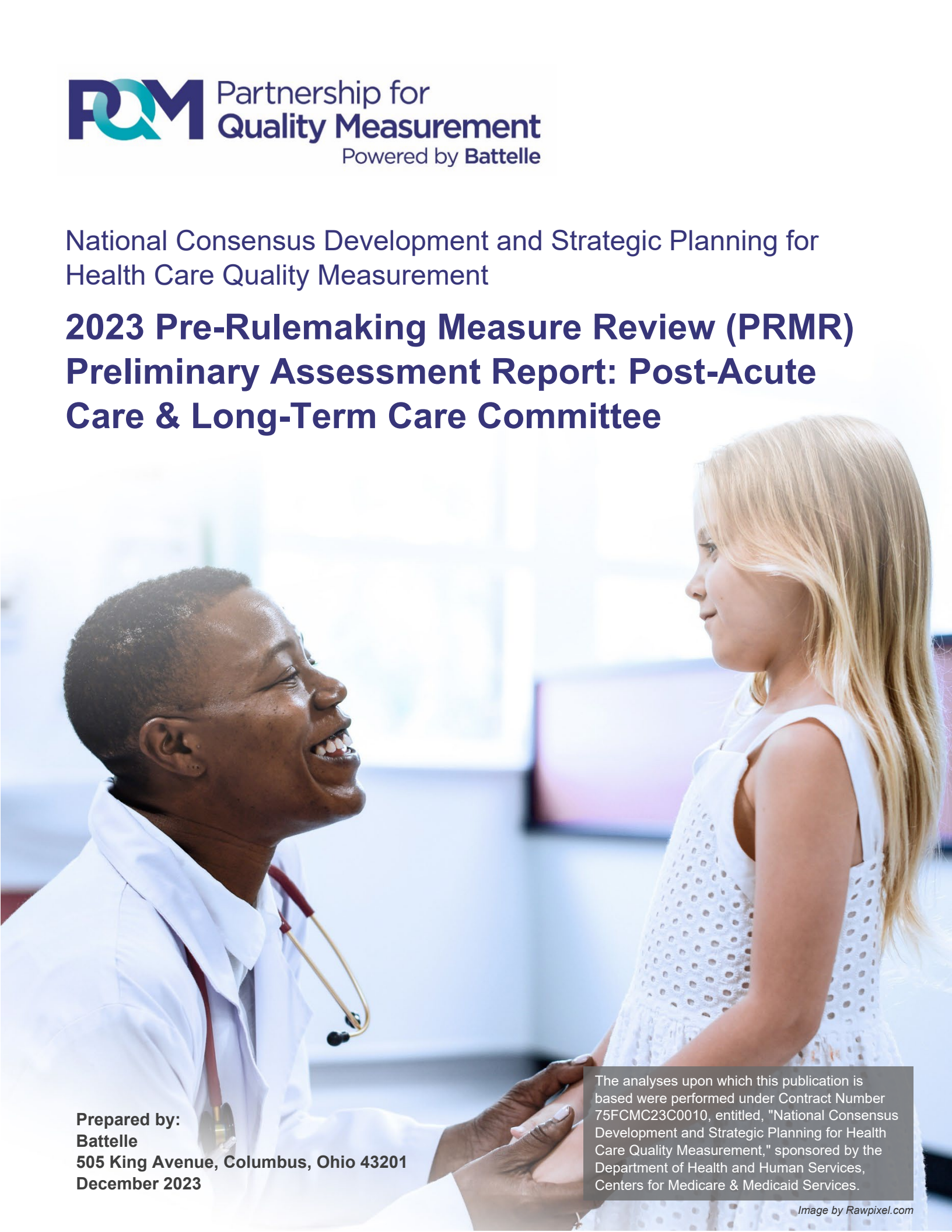


National Consensus Development and Strategic Planning for  
Health Care Quality Measurement

## **2023 Pre-Rulemaking Measure Review (PRMR) Preliminary Assessment Report: Post-Acute Care & Long-Term Care Committee**



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## Executive Summary

The Pre-Rulemaking Measure Review (PRMR) process, undertaken yearly, informs the selection of health care quality and efficiency measures for use in Centers for Medicare & Medicaid Services (CMS) Medicare quality programs. Each cycle begins with the publication of the Measures Under Consideration (MUC) list. The MUC list is reviewed by interested parties, selected to serve on PRMR committees. The PRMR process engages a diverse group of interested parties in making consensus-based recommendations regarding the inclusion of considered measures.

This PRMR Preliminary Assessment Report for the Post-Acute Care/Long-Term Care (PAC/LTC) Committee provides PRMR Advisory and Recommendation Group members with a detailed baseline evaluation of the measures under consideration for PAC/LTC-relevant CMS programs this PRMR cycle. The findings of this report will enable committee members to further examine and discuss measure suitability for the selected CMS program(s) during the PRMR Recommendation Group Meetings in January 2024.

Measure assessment included evaluation of submission materials such as CMS MUC Entry/Review Information Tool (MERIT) submission forms, reliability and validity testing results, and summaries of evidence for measure relevance to specific program populations. A team of Battelle measure evaluators reviewed submission materials for the five measures and sub-measures under consideration for the Hospice Quality Reporting Program and applied standardized criteria across the domain of meaningfulness including elements such as importance, conformance, feasibility, validity, reliability, and usability. The measure evaluations and descriptions of available evidence in this report will inform PRMR committee consideration of measure meaningfulness as well as additional criteria of appropriateness of scale and time to value realization during later stages of the PRMR cycle.

*Figure 1. PAC/LTC Committee Measures Under Consideration*



# Chapter 1. Introduction

## 1.1 PRMR Overview

The goal of the PRMR process is to inform the selection of health care quality and efficiency measures for use in CMS Medicare quality programs. Input from interested parties informs these recommendations throughout the measure life cycle. The cornerstone of a transparent and inclusive consensus-based process is effective engagement of interested parties. This ensures that meaningful feedback is provided to CMS on all measures proposed for inclusion in CMS payment programs. The PRMR process convenes and engages interested parties throughout the cycle. The interested parties include those who are impacted or affected by the use of quality and efficiency measures. Interested parties come from a variety of places (Figure 2) and represent a diverse group of people.

Figure 2. PRMR Interested Parties



The Health & Human Services (HHS), per statute<sup>1</sup>, publishes annually (by December 1) a [list of measures under consideration \(MUC\)](#) for future federal rulemaking. The PRMR process makes consensus recommendations regarding the inclusion of measures being considered for CMS quality reporting and value-based programs. PRMR’s review focuses on a measure’s appropriateness for a specific program. It assesses if, within the proposed program, the measure is meaningful, tailored to the program’s unique needs, balanced, and scaled to meet program-specific goals, and demonstrates a clear vision of near- and long-term program impacts.

Previously conducted via the Measure Applications Partnership (MAP) process, the annual review of measures under consideration is now called Pre-Rulemaking Measure Review (PRMR, pronounced Primer).

<sup>1</sup> Section 3014 of the Patient Protection and Affordable Care Act of 2010 (ACA) (P.L. 111-148) created section 1890A of the Social Security Act (the Act), which required HHS to establish a federal pre-rulemaking process for the selection of quality and efficiency measures for use by HHS.

## 1.2 Relevant CMS Program

The PAC-LTC Committee will review MUC list measures proposed for the Hospice Quality Reporting Program (HQRP). The HQRP collects data from the Hospice Item Set (HIS) data collection tool, the Hospice Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey, and Medicare hospice claims to report on the quality of care from hospice providers. Medicare-certified hospice providers must submit complete data in a timely manner to receive credit for reporting. More information on this CMS program can be found in [Appendix A](#), which includes an excerpt from the 2023 Measures Under Consideration List Program-Specific Measure Needs and Priorities. While the HQRP is the only program with measures under consideration this PRMR cycle, future cycles may also include PAC/LTC relevant programs outlined in the [PQM Guidebook of Policies and Procedures for Pre-Rulemaking Measure Review and Measure Set Review](#).

## 1.3 Measures Under Consideration

For the 2023 PRMR review cycle, five measures are under consideration for inclusion in HQRP. Table 1.3.1 lists the measures under consideration for review by the PAC/LTC Committee and their associated CMS Cascade of Meaningful Measures priority area.<sup>2</sup> “Cascade Priority” area is included to show the alignment of each measure with a meaningful measure area and to provide more context for what the measure’s addition could bring to the selected CMS program. These measures are [available for public comment](#) at the PQM website December 1-22, 2023.

**Table 1.3.1. MUC List by Cascade Priority**

MUC ID	Measure Title	Cascade Priority
<a href="#">MUC2023-163</a>	Timely Reassessment of Pain Impact	Person-Centered Care
<a href="#">MUC2023-166</a>	Timely Reassessment of Non-Pain Symptom Impact	Person-Centered Care
<a href="#">MUC2023-183</a>	CAHPS Hospice Survey Care Preferences	Person-Centered Care
<a href="#">MUC2023-191</a>	CAHPS Hospice Survey Hospice Team Communication	Person-Centered Care
<a href="#">MUC2023-192</a>	CAHPS Hospice Survey Getting Hospice Care Training	Person-Centered Care

<sup>2</sup> CMS. Cascade of Meaningful Measures. Accessed 6 November 2023. <https://www.cms.gov/cascade-measures#:~:text=The%20Cascade%20of%20Meaningful%20Measures,may%20need%20to%20be%20developed.>

## Chapter 2. Preliminary Assessment Methodology

### 2.1 Goals and Objectives

The goal of this PRMR Preliminary Assessment Report for the PAC/LTC Committee is to provide committee members with a thorough and standardized baseline evaluation of the measures under consideration for PAC/LTC programs. This preliminary assessment supports committee members as they further examine and discuss measure suitability to the selected CMS program during the PRMR Recommendation Group Meetings.

To achieve this goal, Battelle staff conducted preliminary assessments of each measure with three objectives in mind:

- 1) To assess completeness of measure information provided in the CMS MUC Entry/Review Information Tool (CMS MERIT) submission and review available testing/performance data.
- 2) To evaluate measures against consistent criteria with an emphasis on importance, conformance, feasibility, reliability, validity, and usability (i.e., meaningfulness).
- 3) To provide a summary of findings based on the evaluation criteria that describes the likelihood that each measure meets “meaningfulness” requirements for use in a CMS program. Note: Measures that have received CBE endorsement are assumed to largely meet the meaningfulness criteria, although reviewers are asked to consider the specific needs of the selected program when evaluating this for PRMR.

### 2.2 Data Sources

To conduct this preliminary assessment, Battelle staff reviewed submission documentation provided in the CMS MERIT system. The types of information provided varied by measure but generally fell into the following categories: CMS MERIT Submission Form, Measure Information Forms (not required and only applicable to currently in use measures), peer-reviewed literature, clinical practice guidelines, validity and reliability testing methods and results, and electronic clinical quality measure (eCQM) feasibility testing information, if applicable.

### 2.3 Evaluation Criteria

A team of experienced measure evaluators reviewed the available information for each measure from the data sources listed above and compared it against evaluation criteria for meaningfulness. Figure 3 illustrates the evaluation process. Submission forms, clinical guidelines and supporting evidence, validity and reliability testing and any relevant eCQM materials were reviewed and evaluated based on the criteria outlined for meaningfulness in the [PRMR Guidebook of Policies and Procedures](#).

Table 2.3.1 provides a detailed review of the evaluation criteria used by staff in developing the preliminary assessment.

Figure 3. Evaluation Process

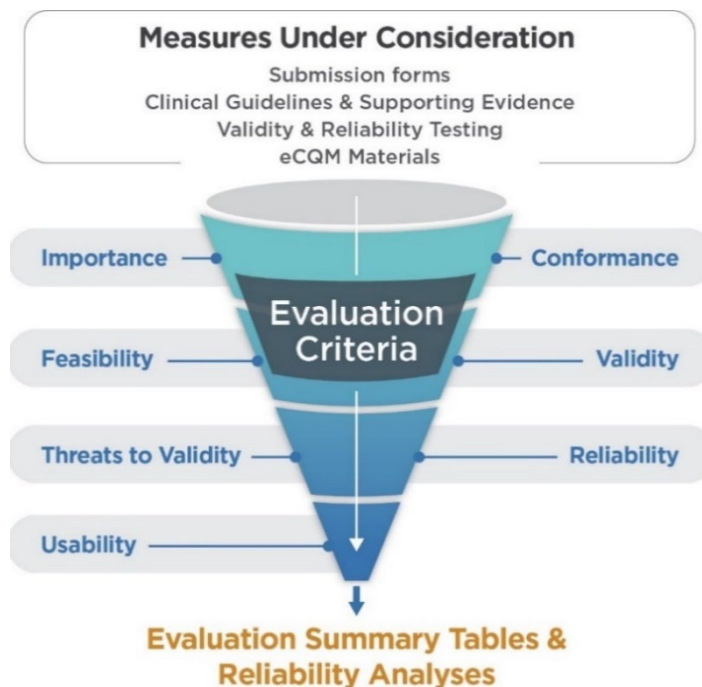


Table 2.3.1. Evaluation Criteria

Evaluation Criteria	Guiding Question
<b>Concept of Interest</b>	
Importance	<i>Does the measure align with interested party goals and priorities?</i>
Conformance	<i>Does the measure as specified align with the conceptual intent?</i>
Feasibility	<i>Does the measure specification and data collection minimize burden?</i>
<b>Context of Use</b>	
Importance	<i>Will performance improvement to the benchmark have a significant impact on population outcomes?</i>
Reliability	<i>Is measure performance scientifically sound?</i>
Validity	<i>May providers/facilities/care systems effectively improve on this measure?</i>
Threats to Validity	<i>If appropriate, is the measure risk adjusted to account for factors outside entity control?</i>
Usability	<i>Is there opportunity for improvement on this measure in the intended use setting?</i>



## 2.4 Data Analysis and Interpretation

Battelle staff reviewed and evaluated validity and reliability testing results provided in submission materials. Additionally, when reliability testing results were available, a team of analysts simulated median reliability to assess performance score deciles and reliability deciles and to generate mean reliability. The distribution of reliability across entities is important, and denominator size (generally patient population) has a great impact on reliability for a single entity. This information is not currently requested from the developer, but the data provided in the measure report and supplemental materials are used to simulate a dataset that closely mirrors any mean, standard deviation, and percentile information provided for the performance score or for reliability. Where possible, tables containing results of reliability analyses follow the measure evaluation tables for each measure. These values were generated through the following process and correspond to the order in which tables are shown:

- 1) Entities are sorted by performance score, and the average score by decile (estimated from the simulated data) is listed along with the number of entities and episodes included in each average. Average, standard deviation, and minimum and maximum scores are also included.
- 2) Entities are sorted by the number of episodes, and the average reliability by decile (estimated from the simulated data) is reported along with the number of entities and episodes included in each average and the average number of episodes per decile.
- 3) Entities are sorted by reliability, and the average reliability by decile (estimated from the simulated data) is reported. Average, standard deviation, and minimum and maximum reliability and inter-quartile range (IQR) are also included.

Battelle uses a reliability threshold of 0.6 for individual entities in these analyses, which aligns with reliability thresholds used across other CMS initiatives. In some instances, developers provided reliability-by-decile tables for inclusion in the report. These measures have footnotes to inform PRMR committee members if a table was derived via Battelle's simulated reliability analyses or was provided by the measure developer and derived from original testing data.

PRMR committee members should note that there is variation in the types of testing and data availability expected for measures at different stages of use and measure type. For example, when compared to in-use measures that are undergoing substantial changes, new measures do not have measure information forms and may have less robust testing and use data available. The history of each measure's endorsement pathway and inclusion in CMS programs is noted in the background section for each measure to guide PRMR committee members in their review. The appropriate testing methodology for validity and reliability may vary by measure type, and some measures may not be well-suited to utilizing risk adjustment models. Empiric validity testing was not required for submission but, where available, provides additional information on the strength of the measure's association desired outcomes. When evaluators note that testing scores, clinical guidelines, or other information is absent from submitted materials, PRMR committee members should focus more strongly on the available information and direct their reviews toward possible implementation of each measure for the selected program.

Table 2.4.1 provides a summary of data sources that were submitted through CMS MERIT and reviewed, and the kinds of evidence and analyses presented in each submission. The focus in

the table is on testing performed at the measured-entity level, and the type of testing performed is noted.

**Table 2.4.1. Data Sources for PAC/LTC Measures Under Consideration**

MUC ID	Measure Title	Data Reviewed	Data Not Available
<b>MUC2023-163</b>	Timely Reassessment of Pain Impact	<ul style="list-style-type: none"> <li>✓ CMS MERIT Submission Form</li> <li>✓ Measure Information Form</li> <li>✓ Face Validity</li> <li>✓ Peer-Reviewed Literature</li> <li>✓ Clinical Practice Guideline (ungraded)</li> </ul>	✗ Reliability
<b>MUC2023-166</b>	Timely Reassessment of Non-Pain Symptom Impact	<ul style="list-style-type: none"> <li>✓ CMS MERIT Submission Form</li> <li>✓ Measure Information Form</li> <li>✓ Face Validity</li> <li>✓ Peer-Reviewed Literature</li> <li>✓ Clinical Practice Guideline (ungraded)</li> </ul>	✗ Reliability
<b>MUC2023-183</b>	CAHPS Hospice Survey Care Preferences	<ul style="list-style-type: none"> <li>✓ CMS MERIT Submission Form</li> <li>✓ Measure Information Form</li> <li>✓ Empiric Validity: Pearson Correlations</li> <li>✓ Face Validity</li> <li>✓ Reliability: Signal-to-Noise</li> <li>✓ Peer-Reviewed Literature</li> </ul>	✗ Clinical Practice Guideline
<b>MUC2023-191</b>	CAHPS Hospice Survey Hospice Team Communication	<ul style="list-style-type: none"> <li>✓ CMS MERIT Submission Form</li> <li>✓ Measure Information Form</li> <li>✓ Empiric Validity: Pearson Correlations</li> <li>✓ Face Validity</li> <li>✓ Reliability: Signal-to-Noise</li> <li>✓ Peer-Reviewed Literature</li> </ul>	✗ Clinical Practice Guideline
<b>MUC2023-192</b>	CAHPS Hospice Survey Getting Hospice Care Training	<ul style="list-style-type: none"> <li>✓ CMS MERIT Submission Form</li> <li>✓ Measure Information Form</li> <li>✓ Empiric Validity: Pearson Correlations</li> <li>✓ Face Validity</li> <li>✓ Reliability: Signal-to-Noise</li> <li>✓ Peer-Reviewed Literature</li> </ul>	✗ Clinical Practice Guideline

## Chapter 3. Measures by CMS Program

### Hospice Quality Reporting Program

#### 3.1 MUC2023-163 Timely Reassessment of Pain Impact

**Description:** The Timely Reassessment of Pain Impact measure captures the percent of hospice patient assessments that have a pain reassessment within 2 days when pain impact was initially assessed as moderate or severe.

**Measure Type:** Process

**Level of Analysis:** Facility

**Data Source(s):** Hospice patient assessment data from the Hospice Outcomes & Patient Evaluation (HOPE)

**Development Status:** Field (Beta) Testing

**Endorsement Status:** Not Endorsed

#### **CMS-Provided Rationale for Measure Consideration:**

Providing person-centered pain management, including timely reassessment to ascertain the effectiveness of treatment, is a hallmark of high-quality hospice care.<sup>3</sup> The proposed measure of timely reassessment of pain impact is derived from the Hospice Outcomes & Patient Evaluation (HOPE), a new instrument to assess the quality of care provided to hospice patients throughout the hospice stay. The timeframe for symptom reassessment (within 2 days) was chosen based on input from hospice clinicians and a technical expert panel; hospice nurses reported this timeframe aligns with their usual practices. Through implementation in the Hospice Quality Reporting Program (HQRP), the proposed measure can facilitate patient engagement in care, support hospice care planning and quality improvement activities, and help to inform consumer choice of hospice providers.

<sup>3</sup> National Coalition for Hospice and Palliative Care. (2018). Clinical Practice Guidelines for Quality Palliative Care, 4th edition. Retrieved from: [https://www.nationalcoalitionhpc.org/wp-content/uploads/2018/10/NCHPC-NCPGuidelines\\_4thED\\_web\\_FINAL.pdf](https://www.nationalcoalitionhpc.org/wp-content/uploads/2018/10/NCHPC-NCPGuidelines_4thED_web_FINAL.pdf).

**Table 3.1.1. MUC2023-163 Brief Summary of Measure Information**

CMS MERIT Submission Information MUC2023-163	Description
<b>Measure name</b>	Timely Reassessment of Pain Impact
<b>MUC ID</b>	MUC2023-163
<b>Cascade priority</b>	Person-Centered Care
<b>Measure steward</b>	Centers for Medicare & Medicaid Services
<b>Measure developer</b>	Abt Associates
<b>Program submitted to</b>	Hospice Quality Reporting Program
<b>Committee assigned to</b>	Post-Acute Care/Long-Term Care Committee
<b>Is this a new measure in this year’s MUC list?</b>	Yes
<b>If not a new measure, then describe the history of this measure in prior MUC list inclusion</b>	N/A
<b>Is the measure currently used in a CMS program?</b>	New measure never reviewed by Measure Applications Partnership (MAP) Workgroup or used in a CMS program.
<b>If previously used, please describe the history of the measure in CMS program</b>	N/A
<b>Any other program the measure is in use</b>	No
<b>Is this measure being proposed to meet a statutory requirement?</b>	N/A
<b>CBE endorsement status</b>	Not Endorsed
<b>CBE endorsement number if applicable</b>	N/A
Measure Specification Details	
<b>Measure description</b>	<p>The Timely Reassessment of Pain Impact measure captures the percent of hospice patient assessments that have a pain reassessment within 2 days when pain impact was initially assessed as moderate or severe. Data for this measure are collected by hospice clinicians using the HOPE instrument. Symptom impact assessments are administered at fixed timepoints during a hospice election - at admission (ADM) and in conjunction with the first and second interdisciplinary group (IDG) meetings. When pain symptom impact is</p>

CMS MERIT Submission Information MUC2023-163	Description
	assessed as moderate or severe, a HOPE Symptom Reassessment (SRA) is to occur within 2 calendar days of the initial/triggering assessment. For the purposes of this measure, a quality episode is defined as the period from the date of the symptom impact assessment to two calendar days thereafter.
<b>Data source</b>	Hospice patient assessment data from the Hospice Outcomes & Patient Evaluation (HOPE)
<b>Level of analysis</b>	Facility
<b>Numerator</b>	Number of HOPE Admission or IDG assessments for which pain symptom impact was reassessed within 2 days of the initial/triggering assessment date (Date of Symptom Impact Assessment).
<b>Denominator</b>	Total number of HOPE Admission or IDG assessments where pain impact was assessed as moderate or severe.
<b>Numerator exclusions</b>	N/A
<b>Denominator exclusions</b>	HOPE assessments where: <ul style="list-style-type: none"> <li>• Patient was discharged from hospice before an SRA could be completed.</li> <li>• Hospice was unable to visit for the SRA (i.e., because patient refused any visits to complete the SRA, patient was in the hospital or emergency department, patient was traveling outside the hospice’s service area, or hospice was unable to contact patient/caregiver).</li> </ul>
<b>Denominator exceptions</b>	N/A
<b>Risk adjustment</b>	No
<b>Development stage</b>	Field (Beta) Testing
<b>Target population</b>	All hospice patients
<b>Measure type</b>	Process
<b>Is the measure composite or component of a composite?</b>	No
<b>Digital Measure Information</b>	
<b>Is this measure an eCQM?</b>	No
<b>If eCQM, what is the Measure Authoring Tool (MAT) number?</b>	N/A

CMS MERIT Submission Information MUC2023-163	Description
<p><b>If eQIM, does the measure have a Health Quality Measures Format (HQMF) specification in alignment with the latest HQMF and eQIM standards, and does the measure align with Clinical Quality Language (CQL) and Quality Data Model (QDM)?</b></p>	<p>N/A</p>

**Table 3.1.2. MUC2023-163 Timely Reassessment of Pain Impact Measure Evaluation**

MUC2023-163 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Importance:</b> Does the measure align with goals and priorities? <i>(Concept of Interest)</i></p>	<p>Evidence provided demonstrating the importance of pain management for hospice populations as a hallmark of quality of care<sup>4</sup>.</p>	<p>No review of evidence explicitly relating pain assessment with adequate pain control is provided.</p>	<p>Unable to evaluate alignment between the study population and the target quality program population.</p>
<p><b>Conformance:</b> Does the measure as specified align with the conceptual intent? <i>(Concept of Interest)</i></p>	<p>Exclusions appear appropriate: patients who were discharged from hospice, or patients could not be reached in the 2-day quality episode time frame (patient refused visit, patient in ED/hospital, patient traveling, hospice unable to contact). Inter-rater reliability (IRR) testing evaluated the HOPE assessment items in a sample of 237 hospice encounters; symptom assessment for pain impact: had “good” IRR with a kappa of 0.71.<sup>5</sup></p>	<p>--</p>	<p>Most persons and entities in the quality program population are included in the specification. Data element reliability and validity extrapolate to the quality program population.</p>

<sup>4</sup> Wilkie, D. J., & Ezenwa, M. O. (2012). Pain and symptom management in palliative care and at end of life. *Nursing Outlook*, 60(6), 357-364.

<sup>5</sup> Altman DG (1990). *Practical Statistics for Medical Research*. CRC Press.

MUC2023-163 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Feasibility:</b> Does the measure’s specification and data collection minimize burden? <i>(Concept of Interest)</i></p>	<p>All data elements are defined fields in electronic sources (all required data elements are part of the HOPE assessment), and the HOPE assessment is expected to be reported via the Internet Quality Improvement and Evaluation System (iQIES).</p>	<p>The technical expert panel (TEP) acknowledged that it is possible for RNs to overuse the exclusion criteria included in the HOPE instrument, but felt it was important not to penalize hospice providers for these situations.</p>	<p>The people, processes, and technology required for data collection and reporting extrapolate to the quality program population.</p> <p>Most entities in the quality program population have access to the people, processes, and technology needed for data collection and reporting, processes, and technology.</p>
<p><b>Importance:</b> Will performance improvement to the benchmark have a significant impact on population outcomes? <i>(Context of Use)</i></p>	<p>Beta testing estimates a possible 44.2% of patients have moderate to severe pain at initial assessment, and about half of those patients would not be reassessed within 2 days. Previous studies have reported inadequate assessment and management of pain at end of life.<sup>6</sup> Evidence from the CAHPS Hospice Survey suggests there is considerable room for improvement in pain management in hospice.<sup>7,8</sup> In a nationwide comprehensive study of the quality of care received by hospice patients with cancer, caregivers reported that roughly 1 out of 6 patients did not always receive help with pain when needed. Six out of 6</p>	<p>Distribution of performance scores by hospice is not provided. Possible gaps by social risk factors were not assessed.</p>	<p>Most of the performance improvements to the benchmark have a significant impact on quality program population outcomes.</p>

<sup>6</sup> Wilkie, D. J., & Ezenwa, M. O. (2012). Pain and symptom management in palliative care and at end of life. *Nursing Outlook*, 60(6), 357-364.  
<sup>7</sup> Parast L, Tolpadi AA, Teno JM, Elliott MN, Price RA. Hospice Care Experiences Among Cancer Patients and Their Caregivers. *J Gen Intern Med*. 2021 Apr;36(4):961-969.  
<sup>8</sup> Quigley DD, Parast L, Haas A, Elliott MN, Teno JM, Anhang Price R. Differences in Caregiver Reports of the Quality of Hospice Care Across Settings. *J Am Geriatr Soc*. 2020 Jun;68(6):1218-1225.

MUC2023-163 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	persons who responded to the question agreed the information from the measure is important to know and can help improve care for similar patients.		
<p><b>Reliability:</b> Is measure performance scientifically sound? (Context of Use)</p>	--	Reliability was not analyzed for this measure according to the report provided. The overall mean, percentiles, and overall standard deviation of the performance score are not provided. Without these details, the performance score and reliability cannot be simulated or assessed for this measure.	Unable to determine if entities have reliability above the threshold (0.60) <i>within</i> the quality program population.
<p><b>Validity:</b> Can providers/facilities/care systems reasonably influence and improve outcomes on this measure? (Context of Use)</p>	In the assessment of face validity of the measure, 11 out of 11 voting TEP members rated validity of the instrument as high for its ability to distinguish between high- and low-performing hospices. Guideline 2.2: The interdisciplinary team should regularly assess patients' symptoms and their impact on well-being, quality of life, and functional status; and after treatment is initiated, the team should perform a timely reassessment to ascertain effectiveness of treatment. <sup>9</sup>	The cited guideline is ungraded (few studies, poor quality, inconsistent evidence regarding effective interventions). Empirical test of measure validity not reported.	There is an association between the entity and the measure focus in a population that extrapolates to the quality program population. There is clear articulation of the way an entity may improve performance on the measure focus <i>within</i> the program population.

<sup>9</sup> Ahluwalia, S. C., Chen, C., Raaen, L., Motala, A., Walling, A. M., Chamberlin, M., O'Hanlon, C., Larkin, J., Lorenz, K., Akinniranye, O., & Hempel, S. (2018). A Systematic Review in Support of the National Consensus Project Clinical Practice Guidelines for Quality Palliative Care, Fourth Edition. *J Pain Symptom Manage*, 56(6), 831-870.



MUC2023-163 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Threats to Validity:</b> If appropriate, is the measure risk adjusted to account for factors outside entity control?</p> <p><i>(Context of Use)</i></p>	<p>This measure is not risk adjusted.</p>	<p>--</p>	<p>N/A</p>
<p><b>Usability:</b> Is there opportunity for improvement on this measure in the intended use setting?</p> <p><i>(Context of Use)</i></p>	<p>Feedback received from hospice RNs during beta testing was positive. They reported that the HOPE tool and 2-day reassessment standard align with their current practice, and that hospice patients received the program positively. Nine out of 9 measured entities agreed the measure is easy to understand and is useful for decision-making.</p>	<p>--</p>	<p>There is an explicit articulation of the resources and context that might facilitate improvement within the quality program population.</p>

**MUC2023-163 Simulated Reliability Tables**

Reliability was not analyzed for this measure according to the report provided. The overall mean, percentiles, and overall standard deviation of the performance score are not provided. Without these details, the performance score and reliability cannot be simulated or assessed for this measure.

### 3.2 MUC2023-166 Timely Reassessment of Non-Pain Symptom Impact

**Description:** The Timely Reassessment of Non-Pain Symptom Impact measure captures the percent of hospice patient assessments that have non-pain symptom(s) reassessment within 2 days when symptom impact was initially assessed as moderate or severe.

**Measure Type:** Process

**Level of Analysis:** Facility

**Data Source(s):** Standardized Patient Assessments

**Development Status:** Field (Beta) Testing

**Endorsement Status:** Not Endorsed

**CMS-Provided Rationale for Measure Consideration:**

Providing person-centered symptom management, including timely reassessment to ascertain the effectiveness of treatment, is a hallmark of high-quality hospice care. The proposed measure of timely reassessment of non-pain symptom impact is derived from the Hospice Outcomes & Patient Evaluation (HOPE), a new instrument to assess the quality of care provided to hospice patients throughout the hospice stay. The timeframe for symptom reassessment (within 2 days) was chosen based on input from hospice clinicians and a technical expert panel; hospice nurses reported this timeframe aligns with their usual practices. Through implementation in the Hospice Quality Reporting Program (HQRP), the proposed measure can facilitate patient engagement in care, support hospice care planning and quality improvement activities, and help to inform consumer choice of hospice providers.

**Table 3.2.1. MUC2023-166 Brief Summary of Measure Information**

CMS MERIT Submission Information MUC2023-166	Description
<b>Measure name</b>	Timely Reassessment of Non-Pain Symptom Impact
<b>MUC ID</b>	MUC2023-166
<b>Cascade priority</b>	Person-Centered Care
<b>Measure steward</b>	Centers for Medicare & Medicaid Services (CMS)
<b>Measure developer</b>	Abt Associates

CMS MERIT Submission Information MUC2023-166	Description
<b>Program submitted to</b>	Hospice Quality Reporting Program
<b>Committee assigned to</b>	Post-Acute Care/Long-Term Care Committee
<b>Is this a new measure in this year’s MUC List?</b>	Yes
<b>If not a new measure, then describe the history of this measure in prior MUC list inclusion</b>	N/A
<b>Is the measure currently used in a CMS program?</b>	No
<b>If previously used, please describe the history of the measure in CMS program</b>	New measure. Never reviewed by Measure Applications Partnership (MAP) Workgroup or used in a CMS program.
<b>Any other program the measure is in use</b>	No
<b>Is this measure being proposed to meet a statutory requirement?</b>	No
<b>CBE endorsement status</b>	Not Endorsed
<b>CBE endorsement number if applicable</b>	N/A
Measure specification details	
<b>Measure description</b>	<p>The Timely Reassessment of Non-Pain Symptom Impact measure captures the percent of hospice patient assessments that have non-pain symptom(s) reassessment within 2 days when symptom impact was initially assessed as moderate or severe.</p> <p>Data for this measure are collected by hospice clinicians using the HOPE instrument. Symptom impact assessments are administered at fixed timepoints during a hospice election – at admission (ADM) and in conjunction with the first and second interdisciplinary group (IDG) meetings. When non-pain symptom impact is assessed as moderate or severe, a HOPE Symptom Reassessment (SRA) is to occur within 2 calendar days of the initial/triggering assessment. For purposes of this measure, a quality episode is defined as the period from the date of the symptom impact assessment to two calendar days thereafter.</p>
<b>Data source</b>	Standardized Patient Assessments
<b>Level of analysis</b>	Facility

CMS MERIT Submission Information MUC2023-166	Description
<b>Numerator</b>	Number of HOPE Admission or IDG assessments for which non-pain symptom impact was reassessed within 2 days of the initial/triggering assessment date (Date of Symptom Impact Assessment).
<b>Denominator</b>	Total number of HOPE Admission or IDG assessments where any non-pain symptom impact was assessed as moderate or severe.
<b>Numerator exclusions</b>	N/A
<b>Denominator exclusions</b>	HOPE assessments where: <ul style="list-style-type: none"> <li>● Patient was discharged from hospice before an SRA could be completed.</li> <li>● Hospice was unable to visit for the SRA (i.e., because patient refused any visits to complete the SRA, patient was in the hospital or emergency department, patient was traveling outside the hospice’s service area, or hospice was unable to contact patient/caregiver).</li> </ul>
<b>Denominator exceptions</b>	N/A
<b>Risk adjustment</b>	No
<b>Development stage</b>	Field (Beta) Testing
<b>Target population</b>	All hospice patients
<b>Measure type</b>	Process
<b>Is the measure a composite or component of a composite?</b>	No
Digital Measure Information	
<b>Is this measure an eCQM?</b>	No
<b>If eCQM, what is the Measure Authoring Tool (MAT) number?</b>	N/A
<b>If eCQM, does the measure have a Health Quality Measures Format (HQMF) specification in alignment with the latest HQMF and eCQM standards, and does the measure align with Clinical Quality Language (CQL) and Quality Data Model (QDM)?</b>	N/A

**Table 3.2.2. MUC2023-166 Timely Reassessment of Non-Pain Symptom Impact Measure Evaluation**

MUC2023-166 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Importance:</b> Does the measure align with goals and priorities?  (<i>Concept of Interest</i>)</p>	<p>Evidence provided to demonstrate that providing person-centered symptom management. This includes timely reassessment to ascertain the effectiveness of treatment, is a hallmark of high-quality hospice care.<sup>10</sup></p>	<p>No review of evidence explicitly relating non-pain assessment with adequate pain control is provided.</p>	<p>Unable to evaluate alignment between the study population and the target quality program population.</p>
<p><b>Conformance:</b> Does the measure as specified align with the conceptual intent? (<i>Concept of Interest</i>)</p>	<p>Exclusions appear appropriate: patients who were discharged from hospice, or patients could not be reached in the 2-day quality episode time frame (patient refused visit, patient in ED/hospital, patient traveling, hospice unable to contact). Inter-rater reliability (IRR) testing evaluated the HOPE assessment items in samples ranging from 145-210 hospice encounters; kappas for non-pain symptom impact items ranged from “moderate” to “good”: shortness of breath: 0.66, anxiety: 0.60, nausea: 0.62, vomiting: 0.60, diarrhea: 0.60, constipation: 0.51, agitation: 0.45.<sup>11</sup></p>	<p>--</p>	<p>Most persons and entities in the quality program population are included in the specification. Data element reliability and validity extrapolate to the quality program population.</p>
<p><b>Feasibility:</b> Does the measure’s specification and data</p>	<p>All data elements are defined fields in electronic sources (all required data elements are part of the HOPE assessment), and the HOPE</p>	<p>The TEP acknowledged that it is possible for RNs to overuse the exclusion criteria included in the HOPE instrument, but felt it was</p>	<p>The processes, and technology required for data collection and reporting extrapolate to the quality program population.</p>

<sup>10</sup> Ahluwalia, S. C., Chen, C., Raaen, L., Motala, A., Walling, A. M., Chamberlin, M., O'Hanlon, C., Larkin, J., Lorenz, K., Akinniranye, O., & Hempel, S. (2018). A Systematic Review in Support of the National Consensus Project Clinical Practice Guidelines for Quality Palliative Care, Fourth Edition. *J Pain Symptom Manage*, 56(6), 831-870.

<sup>11</sup> Altman DG (1990). *Practical Statistics for Medical Research*. CRC Press.

MUC2023-166 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
collection minimize burden? <i>(Concept of Interest)</i>	assessment is expected to be reported via the Internet Quality Improvement and Evaluation System (iQIES).	important not to penalize hospice providers for these situations.	Most entities in the quality program population have access to the people, processes, and technology needed for data collection and reporting, processes, and technology.
<p><b>Importance:</b> Will performance improvement to the benchmark have a significant impact on population outcomes? <i>(Context of Use)</i></p>	<p>In a nationwide comprehensive study of the quality of care received by hospice patients with cancer, caregivers reported that roughly 1 out of 6 patients did not receive help for trouble breathing when needed, 2 out of 5 did receive help for anxiety when needed, and more than a quarter of patients did not receive help for constipation when needed. Beta testing estimates a possible 59.2% of patients have moderate to severe symptoms at initial assessment, and about half of those patients (47.2%) would not be reassessed within 2 days.</p> <p>Previous studies have reported inadequate assessment and management of pain at end of life.<sup>12</sup> Evidence from the CAHPS Hospice Survey suggests there is considerable room for improvement in pain</p>	<p>Distribution of performance scores by hospice is not provided.</p> <p>Possible gaps by social risk factors were not assessed.</p>	<p>Most of the performance improvements to the benchmark have a significant impact on quality program population outcomes.</p>

<sup>12</sup> Wilkie, D. J., & Ezenwa, M. O. (2012). Pain and symptom management in palliative care and at end of life. *Nursing Outlook*, 60(6), 357-364.

MUC2023-166 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	<p>management in hospice.<sup>13,14</sup> In a nationwide comprehensive study of the quality of care received by hospice patients with cancer, caregivers reported that roughly 1 out of 6 patients did not always receive help with pain when needed. Six out of 6 persons who responded to the question agreed the information from the measure is important to know and can help improve care for similar patients.</p>		
<p><b>Reliability:</b> Is measure performance scientifically sound? (Context of Use)</p>	<p>--</p>	<p>Reliability was not analyzed for this measure according to the report provided. The overall mean, percentiles, and overall standard deviation of the performance score are not provided. Without these details, the performance score and reliability cannot be simulated or assessed for this measure.</p>	<p>Unable to determine if entities have reliability above the threshold (0.60) <i>within</i> the quality program population.</p>
<p><b>Validity:</b> Can providers/facilities/care systems reasonably influence and improve outcomes on this measure? (Context of Use)</p>	<p>In the assessment of face validity of the measure, 11 out of 11 voting TEP members rated validity of the instrument as high for its ability to distinguish between high- and low-performing hospices.</p> <p>Based on appropriate clinical guidelines, the interdisciplinary team</p>	<p>The cited guideline is ungraded (few studies, poor quality, inconsistent evidence regarding effective interventions). Empirical test of measure validity not reported.</p>	<p>There is an association between the entity and the measure focus in a population that extrapolates to the quality program population.</p> <p>There is clear articulation of the way an entity may improve performance on the measure</p>

<sup>13</sup> Parast L, Tolpadi AA, Teno JM, Elliott MN, Price RA. Hospice Care Experiences Among Cancer Patients and Their Caregivers. J Gen Intern Med. 2021 Apr;36(4):961-969.

<sup>14</sup> Quigley DD, Parast L, Haas A, Elliott MN, Teno JM, Anhang Price R. Differences in Caregiver Reports of the Quality of Hospice Care Across Settings. J Am Geriatr Soc. 2020 Jun;68(6):1218-1225.

MUC2023-166 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	should regularly assess patients' symptoms and their impact on well-being, quality of life, and functional status; and after treatment is initiated, the team should perform a timely reassessment to ascertain effectiveness of treatment. <sup>15</sup>		focus <i>within</i> the program population.
<p><b>Threats to Validity:</b> Is the measure risk adjusted to account for factors outside control?  (Context of Use)</p>	This measure is not risk adjusted.	--	
<p><b>Usability:</b> Is there opportunity for improvement on this measure in the intended use setting?  (Context of Use)</p>	Feedback received from RNs during beta testing was positive. They reported that the HOPE tool and 2-day reassessment standard align with their current practice and that hospice patients received the program positively. Nine out of 9 measured entities agreed the measure is easy to understand and is useful for decision-making.	--	There is an explicit articulation of the resources and context that might facilitate improvement <i>within</i> the quality program population.

<sup>15</sup> Ahluwalia, S. C., Chen, C., Raaen, L., Motala, A., Walling, A. M., Chamberlin, M., O'Hanlon, C., Larkin, J., Lorenz, K., Akinniranye, O., & Hempel, S. (2018). A Systematic Review in Support of the National Consensus Project Clinical Practice Guidelines for Quality Palliative Care, Fourth Edition. *J Pain Symptom Manage*, 56(6), 831-870.



### MUC2023-166 Simulated Reliability Tables

Based on measure submission materials from the developer, it appears that reliability was not analyzed for this measure. The overall mean, percentiles, and overall standard deviation of the performance score are not provided. Without these details, the performance score and reliability cannot be simulated or assessed for this measure.

### 3.3 MUC2023-183 CAHPS Hospice Survey-Care Preferences

**Description:** Care Preferences is a multi-item measure derived from the CAHPS Hospice Survey, Version 9.0, a 39-item standardized questionnaire and data collection methodology. The survey is intended to measure the care experiences of hospice decedents and their primary caregivers. The Care Preferences measure is composed of responses that address the care team’s effort to listen to the things that mattered most to the patient/family and provision of care that respected patient wishes.

**Measure Type:** PRO-PM or Patient Experience of Care

**Level of Analysis:** Facility

**Data Source(s):** Patient Survey; Patient-Reported Data and Surveys

**Development Status:** Fully Developed

**Endorsement Status:** Endorsed

**CMS-Provided Rationale for Measure Consideration:**

CMS is considering adding the Hospice CAHPS Survey Care Preferences measure to the Hospice Quality Reporting Program measure set. This measure will fill a gap in care by assessing the following key processes of hospice care: explaining care options, formulating goals of care that reflect patient and family preferences, and then creating a plan of care that aims to achieve those goals. This aspect of care has been identified by hospice stakeholders as important to assessing the quality of hospice care. The Hospice CAHPS Survey supports the CMS National Quality Strategy by fostering engagement and the Universal Foundation and promotes person-centered care.

**Table 3.3.1. MUC2023-183 Brief Summary of Measure Information**

CMS MERIT Submission Information MUC2023-183	Description
Measure name	CAHPS Hospice Survey Care Preferences
MUC ID	MUC2023-183
Cascade priority	Person-Centered Care
Measure steward	Centers for Medicare & Medicaid Services
Measure developer	Centers for Medicare & Medicaid Services

CMS MERIT Submission Information MUC2023-183	Description
<b>Program submitted to</b>	Hospice Quality Reporting Program
<b>Committee assigned to</b>	Post-Acute Care/Long-Term Care Committee
<b>Is this a new measure in this year’s MUC list?</b>	Yes
<b>If not a new measure, then describe the history of this measure in prior MUC list inclusion</b>	N/A
<b>Is the measure currently used in a CMS program?</b>	No
<b>If previously used, please describe the history of the measure in CMS program</b>	New measure. Never reviewed by Measure Applications Partnership (MAP) Workgroup or used in a CMS program.
<b>Is this measure being proposed to meet a statutory requirement?</b>	Section 181(i)(5)(C) of the Affordable Care Act
<b>CBE endorsement status</b>	Endorsed; Care Preferences is a new measure within CBE 2651, which includes all CAHPS Hospice Survey measures.
<b>CBE endorsement number if applicable</b>	2651
Measure Specification Details	
<b>Measure description</b>	<p>Care Preferences is a multi-item measure derived from the CAHPS® Hospice Survey, Version 9.0, a 39-item standardized questionnaire and data collection methodology. The survey is intended to measure the care experiences of hospice decedents and their primary caregivers. Survey respondents are the primary informal caregivers (i.e., family members or friends) of patients who died while receiving hospice care. The Care Preferences measure is composed of responses to the following two survey items:</p> <p>Did the hospice team make an effort to listen to the things that mattered most to you or your family member?</p> <p>Did the hospice team provide care that respected your family member’s wishes?</p>
<b>Data source</b>	Patient Survey; Patient-Reported Data and Surveys
<b>Level of analysis</b>	Facility
<b>Numerator</b>	CMS calculates CAHPS Hospice Survey measure scores using top-, middle-, and bottom-box scoring. The top-box score refers to the percentage of caregiver respondents that give the most positive response(s). The bottom-box score refers

CMS MERIT Submission Information MUC2023-183	Description
	<p>to the percentage of caregiver respondents that give the least positive response(s). The middle box is the proportion remaining after the top and bottom boxes have been calculated. Both survey items in the Care Preferences multi-item measure use a “Yes, definitely/Yes, somewhat/No” response scale. The top-box numerator is the number of respondents who answer “Yes, definitely” and the bottom-box numerator is the number of respondents who answer “No.”</p>
<b>Denominator</b>	<p>CAHPS Hospice Survey respondents are the adult primary caregivers of patients who died while receiving care from a given hospice in a given month. A survey is defined as completed when at least 50 percent of the questions applicable to all decedents/caregivers are answered. The denominator for the Care Preferences measure is the number of respondents with completed surveys who answer at least one item within the multi-item measure.</p>
<b>Numerator exclusions</b>	<p>N/A</p>
<b>Denominator exclusions</b>	<p>Cases are excluded from the measure denominator if:</p> <ul style="list-style-type: none"> <li>● The hospice patient is still alive</li> <li>● The decedent’s age at death was less than 18</li> <li>● The decedent died within 48 hours of his/her last admission to hospice care</li> <li>● The decedent had no caregiver of record</li> <li>● The decedent had a caregiver of record, but the caregiver does not have a U.S. or U.S. Territory home address</li> <li>● The decedent had no caregiver other than a nonfamilial legal guardian</li> <li>● The decedent or caregiver requested that they not be contacted (i.e., by signing a no publicity request while under the care of hospice or otherwise directly requesting not to be contacted)</li> <li>● The caregiver is institutionalized, has mental/physical incapacity, has a language barrier, or is deceased</li> <li>● The caregiver reports on the survey that he or she “never” oversaw or took part in decedent’s hospice care.</li> </ul> <p>In addition, as noted above, cases are also excluded from the measure denominator if the caregiver reports on the survey that their family member did NOT receive hospice care at home or in an assisted living facility.</p>
<b>Denominator exceptions</b>	<p>N/A</p>

CMS MERIT Submission Information MUC2023-183	
<b>Risk adjustment</b>	Yes
<b>Development stage</b>	Fully Developed
<b>Target population</b>	All Payer
<b>Measure type</b>	PRO-PM or Patient Experience of Care
<b>Is the measure a composite or component of a composite?</b>	N/A
Digital Measure Information	
<b>Is this measure an eCQM?</b>	N/A
<b>If eCQM, what is the Measure Authoring Tool (MAT) number?</b>	N/A
<b>If eCQM, does the measure have a Health Quality Measures Format (HQMF) specification in alignment with the latest HQMF and eCQM standards, and does the measure align with Clinical Quality Language (CQL) and Quality Data Model (QDM)?</b>	N/A

Table 3.3.2. MUC2023-183 CAHPS Hospice Survey Care Preferences Measure Evaluation

MUC2023-183 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<b>Importance:</b> Does the measure align with goals and priorities? ( <i>Concept of Interest</i> )	For all CAHPS Hospice Survey sub-measures, there were significant positive associations between the proportion of patients receiving staff visits and hospices' CAHPS Hospice Survey measure performance. For this sub-measure, this association started at the sixth decile of visits (corresponding to 84.6% and higher of patients). This	--	The study population is the same as the target quality program population.

MUC2023-183 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	and other findings suggest the measures are sensitive to differences in best practice clinical processes. <sup>16</sup>		
<p><b>Conformance:</b> Does the measure as specified align with the conceptual intent? (<i>Concept of Interest</i>)</p>	<p>Exclusions appear appropriate and are focused on patient ineligibility (alive, less than 18 years of age, or died within 48 hours of hospice admission) or a caregiver who cannot be contacted or is not willing or able to respond.</p> <p>Testing of the new Caregiver Preference domain is based on a mode experiment (hospice n=56) designed to also evaluate the impact of including a webmail survey mode option.</p> <p>Care Preference Survey items were tested for internal consistency (Cronbach's alpha 0.75) and construct validity (intercorrelations between care preferences measure and other CAHPS Hospice measures range 0.53-0.86, i.e., medium to large).</p>		<p>Most persons and entities in the quality program population are included in the specification.</p> <p>Data element reliability and validity extrapolate to the quality program population.</p>

<sup>16</sup> Teno JM, Anhang Price R, Parast L, Haas A, Elliott MN. (2019). More Professional Visits in the Last Days of Life are Associated with Better Hospice Care Experiences. Presentation to the American Academy of Hospice and Palliative Medicine Annual Assembly.

MUC2023-183 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Feasibility:</b> Does the measure’s specification and data collection minimize burden? <i>(Concept of Interest)</i></p>	<p>For this measure, 99% of hospices not reporting CAHPS measures in 2021 were exempt for size, per CMS. The survey is offered to caregivers in three modes and eight languages. CAHPS measures receives annual updates and training for vendors and hospices. There are no licensing fees associated with the survey. Hospices bear no direct burden for collecting or reporting data when using a survey contractor.</p>	<p>A survey contractor costs an average of approximately \$4,000 per hospice annually.</p>	<p>The people, processes, and technology required for data collection and reporting extrapolate to the quality program population.</p> <p>Most entities in the quality program population have access to the people, processes, and technology needed for data collection and reporting.</p>
<p><b>Importance:</b> Will performance improvement to the benchmark have a significant impact on population outcomes? <i>(Context of Use)</i></p>	<p>Some variability in performance scores (n=54): mean 90.2 (range: 77.9 to 97.2; interquartile range=5.7), median 91.4.</p> <p>There is significant evidence of a gap by social risk factor.</p> <p>The measure potentially impacts 323,790 decedents/caregivers annually.</p> <p>Patient- and family-centeredness of care is a central goal of hospice care and a CMS Meaningful Measures 2.0 priority area. Nine out of 9 caregivers who responded to the questions agreed the measure information is important to know and could help improve care for similar patients.</p>	<p>Possibly limited room for improvement in the Care Preferences domain.</p>	<p>Most of the performance improvements to the benchmark have a significant impact on quality program population outcomes.</p>

MUC2023-183 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Reliability:</b> Is measure performance scientifically sound? <i>(Context of Use)</i></p>	<p>Signal-to-noise analysis was performed (n=56): mean, 0.78; minimum 0.34; 5th, 0.37; 25th, 0.51; median, 0.66; 75th 0.80; 95th, 0.92; maximum, 0.99. Developers expect that a national sample will have greater variance than the mode experience sample, and reliability results will be higher.</p> <p>For Care Preferences, about 55% of entities have a reliability greater than 0.6.</p>	<p>For Care Preferences, about 45% of entities have a reliability less than 0.6.</p>	<p>Most entities have reliability above the threshold (0.60) <i>within</i> the quality program population.</p>
<p><b>Validity:</b> Can providers/facilities/care systems reasonably influence and improve outcomes on this measure? <i>(Context of Use)</i></p>	<p>Construct validity was tested using Pearson correlation, comparing the top-box measure score with global measures of Overall Rating of Hospice Care (r=.84, p&lt;.001; strong) and Willingness to Recommend the Hospice (r=.90, p&lt;.001; strong) (n=54).</p> <p>Missing data for items ranged from 0.8-1.1%. In face validity testing, 25 out of 25 voting members of the CBE Geriatrics and Palliative Care Committee (Fall 2022 cycle) passed the measure on validity standards in all three domains.</p>	<p>Overall Hospice CAHPS survey response rate is ~30%, though slightly higher in the mode experiment.</p> <p>No clinical guidelines were identified.</p>	<p>There is an association between the entity and the measure focus <i>within</i> the quality program population.</p> <p>There is limited articulation of the way an entity may improve performance on the measure focus within the program population.</p>
<p><b>Threats to Validity:</b> If appropriate, is the measure risk adjusted to</p>	<p>Risk adjustment (RA) model is based on prior research showing how patient and caregiver characteristics unrelated to quality</p>	<p>Overall survey response rate is ~30%.</p>	<p>N/A</p>



MUC2023-183 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
account for factors outside entity control?  <i>(Context of Use)</i>	of care can affect Medicare CAHPS responses. <sup>17,18,19</sup>  RA model includes: days between death and survey response; decedent age; payer; primary diagnosis; length of final hospice episode; respondent's age, education, relationship to decedent, and language. RA model was validated using Kendall's tau to compare scores with and without adjustment except for the Care Preferences domain, which is new). Measure score also adjusts for survey mode.	RA model was validated prior to the addition of the Care Preferences domain.	
<b>Usability:</b> Is there opportunity for improvement on this measure in the intended use setting?  <i>(Context of Use)</i>	CAHPS data are publicly available, and the results, compiling the prior 8 quarters, are updated quarterly.  Hospice providers can preview data before release.  Feedback collected through public comment in 2019 and 2023 motivated instrument updates in current submission (including	--	There is an explicit articulation of the resources and context that might facilitate improvement <i>within</i> the quality program population.

<sup>17</sup> Elliott MN, Swartz R, Adams J, Spritzer KL and Hays R (2001). "Case-mix adjustment of the National CAHPS Benchmarking Data 1.0: A violation of model assumptions?" *Hlth Serv Res* 36(3): 555-574.

<sup>18</sup> Elliott MN, Zaslavsky AM, Goldstein E, Lehrman W, Hambarsoomian K, Beckett MK and Giordano L (2009). "Effects of survey mode, patient mix, and nonresponse on CAHPS Hospital Survey scores." *Hlth Serv Res* 44(2): 501-508.

<sup>19</sup> Zaslavsky AM, Zaboriski LB, Ding L, Shaul JA, Cioffi MJ, Cleary PD (2001). Adjusting performance measures to ensure equitable plan comparisons. *Health Care Fin Rev*; 22(3): 109-126.

MUC2023-183 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	<p>shorter instrument and the webmail mode experiment).</p> <p>In the most recent public reporting period, CAHPS Hospice Survey measure scores were publicly reported for 2,996 (50%) of the 5,996 active Medicare-certified hospices, which collectively provided care to 96% of all hospice decedents.</p>		

### MUC2023-183 Simulated Measure Reliability Tables

The performance score is the percentage of respondents who answer positively for each entity.

Reliability (signal-to-noise) is calculated by  $\frac{\sigma_{between}^2}{\sigma_{between}^2 + \sigma_{within}^2}$ .  $\sigma_{between}^2$  is estimated by the variance of the performance score across the 56 entities.  $\sigma_{within}^2$  is the variance (standard deviation squared) of the score within a single entity. The measure report indicates a median signal-to-noise reliability of 0.66.

#### Simulated decile tables:

Simulation was used to create a dataset that mirrors, as closely as possible, the mean, standard deviation, and percentile information provided for the performance score and calculated reliability. Tables 3.3.3 and 3.3.4 are created from the simulated dataset and provide reviewers with a more standardized format to assess reliability.

For Table 3.3.3, entities were sorted by performance score, and the average score by decile (estimated from the simulated data) is reported along with the number of entities included in each average. Average, standard deviation, and minimum and maximum scores are also included.

**Table 3.3.3. MUC2023-183 Importance (Decile by performance score)**

MUC2023-183	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
<b>Mean Score</b>	90.00 (12.3)	0.00	63.84	81.75	85.94	88.87	91.12	93.22	95.78	99.78	100.00	100.00	100.00
<b>Entities</b>	4639	32	464	464	464	464	464	464	464	464	464	463	1335

For Table 3.3.4, entities were sorted by reliability, and the average reliability by decile (estimated from the simulated data) is reported along with the number of entities included in each average. Average, minimum, and maximum reliability and expected events are also included.

**Table 3.3.4. MUC2023-183 Reliability (Decile by reliability)**

MUC2023-183	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
<b>Mean Reliability</b>	0.62	0.01	0.07	0.18	0.31	0.45	0.59	0.73	0.88	1.00	1.00	1.00	1.00
<b>Entities</b>	4639	33	464	464	464	464	464	464	464	464	464	463	1367

**Assumptions:**

The measure report estimates an annual denominator size of 323,790 or that many total patients. In 2018, CMS reported 4,639 Medicare certified hospices.

**Interpretation:**

The median reliability based on the simulated dataset is 0.66, the same as is given in the measure report. About 45% of entities may have reliability below 0.6. Methods may need to be considered to mitigate entities with lower reliability.

### 3.4 MUC2023-191 CAHPS Hospice Survey Hospice Team Communication

**Description:** Hospice Team Communication is a multi-item measure derived from the CAHPS Hospice Survey, Version 9.0, a 39-item standardized questionnaire and data collection methodology. The survey is intended to measure the care experiences of hospice decedents and their primary caregivers. The Hospice Team Communication measure is composed of responses to the following five Hospice Team Communication focused survey items.

**Measure Type:** PRO-PM or Patient Experience of Care

**Level of Analysis:** Facility

**Data Source(s):** CAHPS Hospice Survey; Patient-Reported Data and Surveys

**Development Status:** Fully Developed

**Endorsement Status:** Endorsed

**CMS-Provided Rationale for Measure Consideration:**

CMS is considering adding the Hospice CAHPS Survey Hospice Team Communication measure to the Hospice Quality Reporting Program (HQRP) measure set. The CAHPS Hospice Survey Hospice Team Communication measure assesses a key process of hospice care: the degree to which hospice keeps the hospice primary caregiver informed, listens to their concerns, and explains things in a way they can understand. The measure has been in the HQRP since 2017. The substantive updates of the measure include the removal of one question from the composite (“While your family member was in hospice care, how often did anyone from the hospice team give you confusing or contradictory information about your family member’s condition or care?”). This item was removed because of the complexity of its wording, low intraclass correlation coefficient (ICC) and low correlation with overall rating, and ceiling effects (that is, very high scores across hospices). The Hospice CAHPS Survey supports the CMS National Quality Strategy by fostering engagement and the Universal Foundation and promotes person-centered care.

**Table 3.4.1. MUC2023-191 Brief Summary of Measure Information**

CMS MERIT Submission Information MUC2023-191	Description
<b>Measure name</b>	CAHPS Hospice Survey Hospice Team Communication
<b>MUC ID</b>	MUC2023-191
<b>Cascade priority</b>	Person-Centered Care

CMS MERIT Submission Information MUC2023-191	
Measure steward	Description
Measure steward	Centers for Medicare & Medicaid Services
Measure developer	Centers for Medicare & Medicaid Services
Program submitted to	Hospice Quality Reporting Program
Committee assigned to	Post-Acute Care/Long-Term Care Committee
Is this a new measure in this year's MUC list?	No
If not a new measure, then describe the history of this measure in prior MUC list inclusion	Measure currently used in a CMS program, but the measure is undergoing substantial change
Is the measure currently used in a CMS program?	Yes
If previously used, please describe the history of the measure in CMS program	Hospice Quality Reporting Program (2017-Present)
Any other program the measure is in use	N/A
Is this measure being proposed to meet a statutory requirement?	Section 181(i)(5)(C) of the Affordable Care Act
CBE endorsement status	Endorsed; Revisions to the Hospice Team Communication measure since last endorsement include changes to item wording and deletion of one survey item.
CBE endorsement number if applicable	CBE 2651
Measure Specification Details	
Measure description	<p>Hospice Team Communication is a multi-item measure derived from the CAHPS® Hospice Survey, Version 9.0, a 39-item standardized questionnaire and data collection methodology. The survey is intended to measure the care experiences of hospice decedents and their primary caregivers. Survey respondents are the primary informal caregivers (i.e., family members or friends) of patients who died while receiving hospice care. The Hospice Team Communication measure is composed of responses to the following five survey items:</p> <ol style="list-style-type: none"> <li>1) How often did the hospice team let you know when they would arrive to care for your family member?</li> <li>2) How often did the hospice team explain things in a way that was easy to understand?</li> </ol>

CMS MERIT Submission Information MUC2023-191	Description
	3) How often did the hospice team keep you informed about your family member's condition? 4) How often did the hospice team listen carefully to you when you talked with them about problems with your family member's hospice care? 5) While your family member was in hospice care, how often did the hospice team listen carefully to you?
<b>Data source</b>	CAHPS Hospice Survey; Patient-Reported Data and Surveys
<b>Level of analysis</b>	Facility
<b>Numerator</b>	CMS calculates CAHPS Hospice Survey measure scores using top-, middle-, and bottom-box scoring. The top-box score refers to the percentage of caregiver respondents that give the most positive response(s). The bottom-box score refers to the percentage of caregiver respondents that give the least positive response(s). The middle box is the proportion remaining after the top and bottom boxes have been calculated. The items in the Hospice Team Communication measure use a "Never/Sometimes/Usually/Always" response scale. The top-box numerator is the number of respondents who answer "Always" and the bottom-box numerator is the number of respondents who answer "Never" or "Sometimes."
<b>Denominator</b>	CAHPS Hospice Survey respondents are the adult primary caregivers of patients who died while receiving care from a given hospice in a given month. A survey is defined as completed when at least 50 percent of the questions applicable to all decedents/caregivers are answered. The denominator for the Hospice Team Communication measure is the number of respondents with completed surveys who answer at least one item within the multi-item measure.
<b>Numerator exclusions</b>	N/A
<b>Denominator exclusions</b>	Cases are excluded from the measure denominator if: <ul style="list-style-type: none"> <li>● The hospice patient is still alive</li> <li>● The decedent's age at death was less than 18</li> <li>● The decedent died within 48 hours of his/her last admission to hospice care</li> <li>● The decedent had no caregiver of record</li> <li>● The decedent had a caregiver of record, but the caregiver does not have a U.S. or U.S. Territory home address</li> <li>● The decedent had no caregiver other than a nonfamilial legal guardian</li> </ul>

CMS MERIT Submission Information MUC2023-191	Description
	<ul style="list-style-type: none"> <li>• The decedent or caregiver requested that they not be contacted (i.e., by signing a no publicity request while under the care of hospice or otherwise directly requesting not to be contacted)</li> <li>• The caregiver is institutionalized, has mental/physical incapacity, has a language barrier, or is deceased</li> <li>• The caregiver reports on the survey that he or she “never” oversaw or took part in decedent’s hospice care.</li> </ul> <p>In addition, as noted above, cases are also excluded from the measure denominator if the caregiver reports on the survey that their family member did NOT receive hospice care at home or in an assisted living facility.</p>
<b>Denominator exceptions</b>	N/A
<b>Risk adjustment</b>	Yes
<b>Development stage</b>	Fully Developed
<b>Target population</b>	All Payer
<b>Measure type</b>	PRO-PM or Patient Experience of Care
<b>Is the measure a composite or component of a composite?</b>	N/A
<b>Digital Measure Information</b>	
<b>Is this measure an eCQM?</b>	N/A
<b>If eCQM, what is the Measure Authoring Tool (MAT) number?</b>	N/A
<b>If eCQM, does the measure have a Health Quality Measures Format (HQMF) specification in alignment with the latest HQMF and eCQM standards, and does the measure align with Clinical Quality Language (CQL) and Quality Data Model (QDM)?</b>	N/A

**Table 3.4.2. MUC2023-191 CAHPS Hospice Survey Hospice Team Communication Measure Evaluation**

MUC2023-191 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Importance:</b> Does the measure align with goals and priorities? <i>(Concept of Interest)</i></p>	<p>For all CAHPS Hospice Survey sub-measures, there were significant positive associations between the proportion of patients receiving staff visits and hospices' CAHPS Hospice Survey measure performance. For this sub-measure, this association started at the sixth decile of visits (corresponding to 84.6% and higher of patients). This and other findings suggest the measures are sensitive to differences in best practice clinical processes.<sup>20</sup></p>	<p>--</p>	<p>The study population is the same as the target quality program population.</p>
<p><b>Conformance:</b> Does the measure as specified align with the conceptual intent? <i>(Concept of Interest)</i></p>	<p>Testing of the new and updated domains is based on a mode experiment (hospice n=56) designed to also evaluate the impact of including a webmail survey mode option.</p> <p>Exclusions appear appropriate and are focused on patient ineligibility (alive, less than 18 years of age, or died within 48 hours of hospice admission) or a caregiver who cannot be contacted or is not willing or able to respond.</p> <p>Hospice Team Communication survey items were tested for</p>	<p>--</p>	<p>Most persons and entities in the quality program population are included in the specification.</p> <p>Data element reliability and validity extrapolate to the quality program population.</p>

<sup>20</sup> Teno JM, Anhang Price R, Parast L, Haas A, Elliott MN. (2019). More Professional Visits in the Last Days of Life are Associated with Better Hospice Care Experiences. Presentation to the American Academy of Hospice and Palliative Medicine Annual Assembly.



MUC2023-191 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	<p>internal consistency (Cronbach's alpha 0.84) and construct validity (intercorrelations between care preferences measure and other CAHPS Hospice measures range 0.59-0.89, i.e., medium to large).</p>		
<p><b>Feasibility:</b> Does the measure's specification and data collection minimize burden? <i>(Concept of Interest)</i></p>	<p>For this measure, 99% of hospices not reporting CAHPS measures in 2021 were exempt for size, per CMS. The survey is offered to caregivers in three modes and eight languages. Annual updates and training for vendors and hospices. No licensing fees are associated with the survey. Hospices bear no direct burden for collecting or reporting data when using a survey contractor.</p>	<p>A survey contractor costs an average of approximately \$4,000 per hospice annually.</p>	<p>The people, processes, and technology required for data collection and reporting extrapolate to the quality program population.</p> <p>Most entities in the quality program population have access to the people, processes, and technology needed for data collection and reporting.</p>
<p><b>Importance:</b> Will performance improvement to the benchmark have a significant impact on population outcomes? <i>(Context of Use)</i></p>	<p>Performance scores (n=54) demonstrate variability and room for improvement: mean 81.5 (range: 66.8 to 91.0; interquartile range=5.1); median 82.5. There is significant evidence of a gap by social risk factor. The measure potentially impacts 323,790 decedents/caregivers annually. Patient- and family-centeredness of care is a central goal of hospice care and a CMS Meaningful Measures 2.0 priority area. All caregivers who responded to the questions agreed the measure</p>	<p>--</p>	<p>Most of the performance improvements to the benchmark have a significant impact on quality program population outcomes.</p>

MUC2023-191 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	information is important to know and could help improve care for similar patients.		
<p><b>Reliability:</b> Is measure performance scientifically sound? (Context of Use)</p>	<p>Signal-to-noise analysis was performed (n=56): mean, 0.84; minimum, 0.42; 5th, 0.46; 25th, 0.59; median, 0.73; 75th, 0.85; 95th, 0.94; maximum, 1.00.</p> <p>For Hospice Team Communication, slightly more than 50% of entities have a reliability greater than 0.6.</p>	<p>For Hospice Team Communication slightly less than 50% of entities have a reliability less than 0.6</p>	<p>Most entities have reliability above the threshold (0.60) <i>within</i> the quality program population.</p>
<p><b>Validity:</b> Can providers/facilities/care systems reasonably influence and improve outcomes on this measure? (Context of Use)</p>	<p>Construct validity was tested using Pearson correlation, comparing the top-box measure score with global measures of Overall Rating of Hospice Care (r=0.84, p&lt;.001; strong) and Willingness to Recommend the Hospice (r=0.83, p&lt;.001; strong) (n=54) Missing data for items ranged from 0.8-3.0%.</p>	<p>Overall Hospice CAHPS survey response rate is ~30%, though slightly higher in the mode experiment.</p> <p>No clinical guidelines have been identified.</p>	<p>There is an association between the entity and the measure focus <i>within</i> the quality program population.</p> <p>There is limited articulation of the way an entity may improve performance on the measure focus within the program population.</p>
<p><b>Threats to Validity:</b> If appropriate, is the measure risk adjusted to account for factors outside entity control?</p>	<p>RA model is based on prior research showing how patient and caregiver characteristics unrelated to quality of care can affect Medicare CAHPS responses.<sup>21,22,23</sup></p>	<p>Overall survey response rate is ~30%.</p> <p>RA model was validated prior to the specification update.</p>	

<sup>21</sup> Elliott MN, Swartz R, Adams J, Spritzer KL and Hays R (2001). "Case-mix adjustment of the National CAHPS Benchmarking Data 1.0: A violation of model assumptions?" *Hlth Serv Res* 36(3): 555-574.

<sup>22</sup> Elliott MN, Zaslavsky AM, Goldstein E, Lehrman W, Hambarsoomian K, Beckett MK and Giordano L (2009). "Effects of survey mode, patient mix, and nonresponse on CAHPS Hospital Survey scores." *Hlth Serv Res* 44(2): 501-508.

<sup>23</sup> Zaslavsky AM, Zaborski LB, Ding L, Shaul JA, Cioffi MJ, Cleary PD (2001). Adjusting performance measures to ensure equitable plan comparisons. *Health Care Fin Rev*; 22(3): 109-126.

MUC2023-191 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<i>(Context of Use)</i>	RA model includes: days between death and survey response; decedent age; payer; primary diagnosis; length of final hospice episode; respondent's age, education, relationship to decedent, and language. RA model was validated using Kendall's tau to compare scores with and without adjustment except for the Care Preferences domain, which is new). Measure score also adjusts for survey mode.		
<p><b>Usability:</b> Is there opportunity for improvement on this measure in the intended use setting?</p> <p><i>(Context of Use)</i></p>	<p>CAHPS data are publicly available, and the results, compiling the prior 8 quarters, are updated quarterly. (NOTE: 183 is a new measure domain.)</p> <p>Hospice providers can preview data before release. Feedback collected through public comment in 2019 and 2023 motivated instrument updates in current submission (including shorter instrument and the webmail mode experiment). In the most recent public reporting period, CAHPS Hospice Survey measure scores were publicly reported for 2,996 (50%) of the 5,996 active Medicare-certified hospices, which collectively provided care to 96% of all hospice decedents. The Hospice Team Communication domain is endorsed</p>	--	There is an explicit articulation of the resources and context that might facilitate improvement <i>within</i> the quality program population.

MUC2023-191 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
	and currently used in the HQR program; however, note that both have been updated in this submission.		

### MUC2023-191 Simulated Measure Reliability Tables

The performance score is the percentage of respondents who answer positively for each entity.

Reliability (signal-to-noise) is calculated by  $\frac{\sigma_{between}^2}{\sigma_{between}^2 + \sigma_{within}^2}$ .  $\sigma_{between}^2$  is estimated by the variance of the performance score across the 56 entities.  $\sigma_{within}^2$  is the variance (standard deviation squared) of the score within a single entity. The measure report indicates a median signal-to-noise reliability of 0.73.

**Simulated decile tables:**

Computer simulation was used to create a dataset that mirrors, as closely as possible, the mean, standard deviation and percentile information provided for the performance score and calculated reliability. Tables 3.4.3 and 3.4.4 are created from the simulated dataset and provide reviewers with a more standardized format to assess reliability.

For 3.4.3, entities were sorted by performance score, and the average score by decile (estimated from the simulated data) is reported along with the number of entities included in each average. Average, standard deviation, and minimum and maximum scores are also included.

**Table 3.4.3. MUC2023-191 Importance (Decile by performance score)**

MUC2023-191	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
<b>Mean Score</b>	81.2 (23.5)	0.00	23.76	66.26	74.51	79.56	83.80	87.82	96.19	100.00	100.00	100.00	100.00
<b>Entities</b>	4639	228	464	464	464	464	464	464	464	464	464	463	1606

For Table 3.4.4, entities were sorted by reliability, and the average reliability by decile (estimated from the simulated data) is reported along with the number of entities included in each average. Average, minimum, and maximum reliability and expected events are also included.

**Table 3.4.4. MUC2023-191 Reliability (Decile by reliability)**

MUC2023-191	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
<b>Mean Reliability</b>	0.64	0.03	0.05	0.15	0.28	0.44	0.62	0.86	1.00	1.00	1.00	1.00	1.00
<b>Entities</b>	4639	100	464	464	464	464	464	464	464	464	464	463	1834

**Assumptions:**

The measure report estimates an annual denominator size of 325,320 or that many total patients in 2018, CMS reported 4,639 Medicare certified hospices.

**Interpretation:**

The median reliability based on the simulated dataset is 0.73, the same as is given in the measure report. Slightly less than 50% of entities may have reliability below 0.6. Methods may need to be considered to mitigate entities with lower reliability.

### 3.5. MUC2023-192 CAHPS Hospice Survey Getting Hospice Care Training

**Description:** Hospice Team Communication is a multi-item measure derived from the CAHPS Hospice Survey, Version 9.0, a 39-item standardized questionnaire and data collection methodology. The survey is intended to measure the care experiences of hospice decedents and their primary caregivers. The Getting Hospice Care Training measure is composed of responses to a survey item on receipt of training on caring for a family member.

**Measure Type:** PRO-PM or Patient Experience of Care

**Level of Analysis:** Facility

**Data Source(s):** CAHPS Hospice Survey; Patient-Reported Data and Surveys

**Development Status:** Fully Developed

**Endorsement Status:** Endorsed

**CMS-Provided Rationale for Measure Consideration:**

CMS is considering adding the Hospice CAHPS Survey Getting Hospice Care Training measure to the Hospice Quality Reporting Program (HQRP) measure set. The Getting Hospice Care Training measure assesses a key process of hospice care: the degree to which the hospice attends to the needs of the hospice primary caregiver for information and training to safely care for the patient at home. The measure has been in the HQRP since 2017. The substantive updates of the measure include replacing five separate questions with one new item (“Hospice teams may teach you how to care for family members who need pain medicine, have trouble breathing, are restless or agitated, or have other care needs. Did the hospice team teach you how to care for your family member?”) This update was made to address stakeholders’ requests for a shorter instrument to reduce burden on survey respondents. The Hospice CAHPS Survey supports the CMS National Quality Strategy by fostering engagement and the Universal Foundation and promotes person-centered care.

**Table 3.5.1. MUC2023-192 Brief Summary of Measure Information**

CMS MERIT Submission Information MUC2023-192	Description
<b>Measure name</b>	CAHPS Hospice Survey Getting Hospice Care Training
<b>MUC ID</b>	MUC2023-192

CMS MERIT Submission Information MUC2023-192	
	Description
<b>Cascade priority</b>	Person-Centered Care
<b>Measure steward</b>	Centers for Medicare & Medicaid Services
<b>Measure developer</b>	Centers for Medicare & Medicaid Services
<b>Program submitted to</b>	Hospice Quality Reporting Program
<b>Committee assigned to</b>	Post-Acute Care/Long-Term Care Committee
<b>Is this a new measure in this year’s MUC list?</b>	No
<b>If not a new measure, then describe the history of this measure in prior MUC list inclusion</b>	Measure currently used in a CMS program, but the measure is undergoing substantial change and has been revised to replace several survey items with one new item.
<b>Is the measure currently used in a CMS program?</b>	Yes
<b>If previously used, please describe the history of the measure in CMS program</b>	Hospice Quality Reporting (2017-Present)
<b>Any other program the measure is in use</b>	N/A
<b>Is this measure being proposed to meet a statutory requirement?</b>	Section 181(i)(5)(C) of the Affordable Care Act
<b>CBE endorsement status</b>	Endorsed; Since the last endorsement, the Getting Hospice Care Training measure has been revised to replace several survey items with one new item.
<b>CBE endorsement number if applicable</b>	CBE 2651
Measure Specification Details	
<b>Measure Description</b>	Getting Hospice Care Training is a single-item measure derived from the CAHPS® Hospice Survey, Version 9.0, a 39-item standardized questionnaire and data collection methodology. The survey is intended to measure the care experiences of hospice decedents and their primary caregivers. Survey respondents are the primary informal caregivers (i.e., family members or friends) of patients who died while receiving hospice care. The Getting Hospice Care Training measure is composed of responses to the following survey item:

CMS MERIT Submission Information MUC2023-192	Description
	<ul style="list-style-type: none"> <li>Hospice teams may teach you how to care for family members who need pain medicine, have trouble breathing, are restless or agitated, or have other care needs. Did the hospice team teach you how to care for your family member?</li> </ul>
<b>Data source</b>	CAHPS Hospice Survey; Patient-Reported Data and Surveys
<b>Level of analysis</b>	Facility
<b>Numerator</b>	<p>CMS calculates CAHPS Hospice Survey measure scores using top-, middle-, and bottom-box scoring. The top-box score refers to the percentage of caregiver respondents that give the most positive response(s). The bottom-box score refers to the percentage of caregiver respondents that give the least positive response(s). The middle box is the proportion remaining after the top and bottom boxes have been calculated. The survey item in the Getting Hospice Care Training measure uses a “Yes, definitely/Yes, somewhat/No” response scale. The top-box numerator is the number of respondents who answer “Yes, definitely” and the bottom-box numerator is the number of respondents who answer “No.”</p>
<b>Denominator</b>	<p>CAHPS Hospice Survey respondents are the adult primary caregivers of patients who died while receiving care from a given hospice in a given month. A survey is defined as completed when at least 50 percent of the questions applicable to all decedents/caregivers are answered. The denominator for the Getting Hospice Care Training measure is the number of respondents with completed surveys who (a) indicate that their family member received hospice care at home or in an assisted living facility and (b) answer the item that composes measure.</p>
<b>Numerator exclusions</b>	N/A
<b>Denominator exclusions</b>	<p>Cases are excluded from the measure denominator if:</p> <ul style="list-style-type: none"> <li>The hospice patient is still alive</li> <li>The decedent’s age at death was less than 18</li> <li>The decedent died within 48 hours of his/her last admission to hospice care</li> <li>The decedent had no caregiver of record</li> <li>The decedent had a caregiver of record, but the caregiver does not have a U.S. or U.S. Territory home address</li> <li>The decedent had no caregiver other than a nonfamilial legal guardian</li> </ul>



CMS MERIT Submission Information MUC2023-192	Description
	<ul style="list-style-type: none"> <li>• The decedent or caregiver requested that they not be contacted (i.e., by signing a no publicity request while under the care of hospice or otherwise directly requesting not to be contacted)</li> <li>• The caregiver is institutionalized, has mental/physical incapacity, has a language barrier, or is deceased</li> <li>• The caregiver reports on the survey that he or she “never” oversaw or took part in decedent’s hospice care.</li> </ul> <p>In addition, as noted above, cases are also excluded from the measure denominator if the caregiver reports on the survey that their family member did NOT receive hospice care at home or in an assisted living facility.</p>
<b>Denominator exceptions</b>	N/A
<b>Risk adjustment</b>	Yes
<b>Development stage</b>	Fully Developed
<b>Target population</b>	All Payer
<b>Measure type</b>	PRO-PM or Patient Experience of Care
<b>Is the measure a composite or component of a composite?</b>	N/A
Digital Measure Information	
<b>Is this measure an eCQM?</b>	N/A
<b>If eCQM, what is the Measure Authoring Tool (MAT) number?</b>	N/A
<b>If eCQM, does the measure have a Health Quality Measures Format (HQMF) specification in alignment with the latest HQMF and eCQM standards, and does the measure align with Clinical Quality Language (CQL) and Quality Data Model (QDM)?</b>	N/A

**Table 3.5.2. MUC2023-192 CAHPS Hospice Survey Getting Hospice Care Training Measure Evaluation**

MUC2023-192 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Importance:</b> Does the measure align with goals and priorities?  (<i>Concept of Interest</i>)</p>	<p>For all CAHPS Hospice Survey sub-measures, there were significant positive associations between the proportion of patients receiving staff visits and hospices' CAHPS Hospice Survey measure performance. For this sub-measure, this association started at the eighth decile of visits (corresponding to 89.9% and higher of patients). This and other findings suggest the measures are sensitive to differences in best practice clinical processes.<sup>24</sup> CMS revised and streamlined the measure in response to stakeholder feedback that sought to simplify and shorten the CAHPS Hospice Survey.</p>		<p>The study population is the same as the target quality program population.</p>
<p><b>Conformance:</b> Does the measure as specified align with the conceptual intent? (<i>Concept of Interest</i>)</p>	<p>Getting Hospice Care Training survey item was tested for construct validity (intercorrelations between training measure and other CAHPS Hospice measures range 0.48-0.59, i.e., medium).</p>	<p>--</p>	<p>Most persons and entities in the quality program population are included in the specification.</p> <p>Data element reliability and validity extrapolate to the quality program population.</p>

<sup>24</sup> Teno JM, Anhang Price R, Parast L, Haas A, Elliott MN. (2019). More Professional Visits in the Last Days of Life are Associated with Better Hospice Care Experiences. Presentation to the American Academy of Hospice and Palliative Medicine Annual Assembly.

MUC2023-192 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Feasibility:</b> Does the measure’s specification and data collection minimize burden? <i>(Concept of Interest)</i></p>	<p>For this measure, 99% of hospices not reporting CAHPS measures in 2021 were exempt for size, per CMS. The survey is offered to caregivers in three modes and eight languages. Annual updates and training for vendors and hospices. No licensing fees are associated with the survey. Hospices bear no direct burden for collecting or reporting data when using a survey contractor.</p>	<p>A survey contractor costs an average of approximately \$4,000 per hospice annually.</p>	<p>The people, processes, and technology required for data collection and reporting extrapolate to the quality program population.</p> <p>Most entities in the quality program population have access to the people, processes, and technology needed for data collection and reporting.</p>
<p><b>Importance:</b> Will performance improvement to the benchmark have a significant impact on population outcomes? <i>(Context of Use)</i></p>	<p>Performance scores (n=54) demonstrate variability and room for improvement: mean 82.4 (range: 60.4 to 97.2; interquartile range=8.9); median 84.2.</p> <p>There is significant evidence of a gap by social risk factor. The measure potentially impacts 323,790 decedents/caregivers annually. Patient- and family-centeredness of care is a central goal of hospice care and a CMS MM 2.0 priority area.</p> <p>All of the caregivers who responded to the questions agreed the measure information is important to know and could help improve care for similar patients.</p>		<p>Most of the performance improvements to the benchmark have a significant impact on quality program population outcomes.</p>
<p><b>Reliability:</b> Is measure performance scientifically sound?</p>	<p>Signal-to-noise analysis was performed (n=56): mean, 0.69, minimum, 0.24; 5th, 0.26; 25th,</p>	<p>For Getting Hospice Care Training, about half of hospices have reliability below 0.60. The revised single-item</p>	<p>Some entities have reliability above the threshold (0.60) <i>within</i> the quality program population.</p>

MUC2023-192 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<i>(Context of Use)</i>	<p>0.39; median, 0.55; 75th, 0.72; 95th, 0.88; maximum 0.99.</p> <p>Developers expect that a national sample will have greater variance than the mode experience sample, and reliability results will be higher.</p> <p>ICCs are expected to be higher in national implementation given greater variability in size and other characteristics of the thousands of hospices that participate in ongoing CAHPS Hospice Survey data collection.</p> <p>For Getting Hospice Care Training, about half of hospices have reliability above 0.6.</p>	<p>Getting Hospice Care Training measure that is currently under MUC review has a slightly lower ICC than the multi-item version of the measure in current use.</p>	
<p><b>Validity:</b> Can providers/facilities/care systems reasonably influence and improve outcomes on this measure?</p> <p><i>(Context of Use)</i></p>	<p>Construct validity was tested using Pearson correlation, comparing the top box measure score with global measures of Overall Rating of Hospice Care (r=0.56, p&lt;.001; moderate) and Willingness to Recommend the Hospice (r=0.49, p&lt;.001; moderate) (n=54)</p> <p>Missing data for the item was 1.1%. In face validity testing, 25 out of 25 voting members of the CBE Geriatrics and Palliative Care Committee (Fall 2022 cycle) passed the measure on validity standards in all three domains.</p>	<p>Overall Hospice CAHPS survey response rate is ~30%, though slightly higher in the mode experiment.</p> <p>No clinical guidelines were identified.</p>	<p>There is an association between the entity and the measure focus <i>within</i> the quality program population.</p> <p>There is limited articulation of the way an entity may improve performance on the measure focus within the program population.</p>

MUC2023-192 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Threats to Validity:</b> If appropriate, is the measure risk adjusted to account for factors outside entity control?</p> <p><i>(Context of Use)</i></p>	<p>Risk Adjustment (RA) model is based on prior research showing how patient and caregiver characteristics unrelated to quality of care can affect Medicare CAHPS responses.<sup>25,26,27</sup></p> <p>RA model includes: days between death and survey response; decedent age; payer; primary diagnosis; length of final hospice episode; respondent's age, education, relationship to decedent, and language. RA model was validated using Kendall's tau to compare scores with and without adjustment except for the Care Preferences domain, which is new). Measure score also adjusts for survey mode.</p>	<p>Overall survey response rate is ~30% RA model was validated prior to the specification update.</p>	

<sup>25</sup> Elliott MN, Swartz R, Adams J, Spritzer KL and Hays R (2001). "Case-mix adjustment of the National CAHPS Benchmarking Data 1.0: A violation of model assumptions?" *Hiith Serv Res* 36(3): 555-574.

<sup>26</sup> Elliott MN, Zaslavsky AM, Goldstein E, Lehrman W, Hambarsoomian K, Beckett MK and Giordano L (2009). "Effects of survey mode, patient mix, and nonresponse on CAHPS Hospital Survey scores." *Hiith Serv Res* 44(2): 501-508.

<sup>27</sup> Zaslavsky AM, Zaborski LB, Ding L, Shaul JA, Cioffi MJ, Cleary PD (2001). Adjusting performance measures to ensure equitable plan comparisons. *Health Care Fin Rev*; 22(3): 109-126.

MUC2023-192 Criteria/Assertions	Measure Benefits & Evidence Supporting Inclusion	Areas for Additional Consideration	External Validity (suitability for selected quality program and population)
<p><b>Usability:</b> Is there opportunity for improvement on this measure in the intended use setting?</p> <p><i>(Context of Use)</i></p>	<p>CAHPS data are publicly available, and the results, compiling the prior 8 quarters, are updated quarterly.</p> <p>Hospice providers can preview data before release.</p> <p>Feedback collected through public comment in 2019 and 2023 motivated instrument updates in current submission (including shorter instrument and the webmail mode experiment).</p> <p>In the most recent public reporting period, CAHPS Hospice Survey measure scores were publicly reported for 2,996 (50%) of the 5,996 active Medicare-certified hospices, which collectively provided care to 96% of all hospice decedents.</p> <p>The Getting Hospice Care Training domains are endorsed and currently used in the HQR program; however, note that both have been updated in this submission.</p>	<p>--</p>	<p>There is an explicit articulation of the resources and context that might facilitate improvement <i>within</i> the quality program population.</p>

### MUC2023-192 Simulated Measure Reliability Tables

The performance score is the percentage of respondents who answer positively for each entity.

Reliability (signal-to-noise) is calculated by  $\frac{\sigma_{between}^2}{\sigma_{between}^2 + \sigma_{within}^2}$ .  $\sigma_{between}^2$  is estimated by the variance of the performance score across the 56 entities.  $\sigma_{within}^2$  is the variance (standard deviation squared) of the score within a single entity. The measure report indicates a median signal-to-noise reliability of 0.55, below the desired 0.6 threshold.

**Simulated decile tables:**

Computer simulation was used to create a dataset that mirrors, as closely as possible, the mean, standard deviation, and percentile information provided for the performance score and calculated reliability. Tables 3.5.3 and 3.5.4 are created from the simulated dataset and provide reviewers with a more standardized format to assess reliability.

For Table 3.5.3, entities were sorted by performance score, and the average score by decile (estimated from the simulated data) is reported along with the number of entities included in each average. Average, standard deviation, and minimum and maximum scores are also included.

**Table 3.5.3. MUC2023-192 Importance (Decile by performance score)**

MUC2023-192	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
<b>Mean Score</b>	82.39 (12.35)	0.00	57.41	70.33	75.62	79.43	82.38	85.13	87.94	90.82	94.85	100.00	100.00
<b>Entities</b>	4639	7	464	464	464	464	464	464	464	464	464	463	488

For Table 3.5.4, entities were sorted by reliability, and the average reliability by decile (estimated from the simulated data) is reported along with the number of entities included in each average. Average, minimum, and maximum reliability and expected events are also included.

**Table 3.5.4. MUC2023-192 Reliability (Decile by reliability)**

MUC2023-192	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
<b>Mean Reliability</b>	0.59	0.04	0.15	0.29	0.39	0.48	0.56	0.63	0.71	0.79	0.90	1.00	1.00
<b>Entities</b>	4639	17	464	464	464	464	464	464	464	464	464	463	495

**Assumptions:**

The measure report estimates an annual denominator size of 198,505 or that many total patients. In 2018, CMS reported 4,639 Medicare certified hospices.

**Interpretation:**

The median reliability based on the simulated dataset is 0.60 (slightly higher than the value of 0.55 given in the submission materials). About 50% of entities may have reliability below 0.6. Methods may need to be considered to mitigate entities with lower reliability.



## Appendix A. Excerpts from the CMS 2023 Measures Under Consideration List Program-Specific Measure Needs and Priorities<sup>28</sup>

### Hospice Quality Reporting Program

#### Program History and Structure:

- The Hospice Quality Reporting Program (HQRP) was established in accordance with Section 1814(i)(5) of the Social Security Act, as amended by section 3004(c) of the Affordable Care Act and further amended by CAA of 2021.
- The HQRP applies to all patients in Medicare-certified hospices, regardless of payer source.
- HQRP measure development and selection activities are considered established national priorities and requires input from multi-stakeholder groups.
- Beginning in FY 2014, hospices that failed to submit quality data were subject to a two-percentage point (2%) reduction to their annual payment. This changes to a four-percentage point (4%) reduction beginning in FY 2024.

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<sup>28</sup> CMS. 2023 MUC List Program Specific Measure Needs and Priorities. Accessed 8<sup>th</sup> November 2023.  
<https://mmshub.cms.gov/sites/default/files/2023-MUC-List-Program-Specific-Measure-Needs-and-Priorities.pdf>

**Current Measure Information:**

Measure Type	Number of Measures
Composite	2
Cost/Resource Use	0
Intermediate Outcome	0
Outcome	0
Patient-Reported Outcome-Based Performance Measure (PRO-PM)	1
Process	1
Structure	0
<b>Total</b>	<b>4</b>

Meaningful Measures 2.0 Priority	Number of Measures
Person-centered Care	4
Equity	0
Safety	0
Affordability and Efficiency	0
Chronic Conditions	0
Wellness and Prevention	0
Seamless Care Coordination	0
Behavioral Health	0
<b>Total</b>	<b>4</b>