

Hospice Quality Reporting Program Quality Measure Specifications

User's Manual

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Chapter 1: Manual Organization and Measures

The purpose of this manual is to present the methods used to calculate quality measures that are included in the Centers for Medicare & Medicaid Services (CMS) Hospice Quality Reporting Program (HQRP), including all measures finalized for the Calendar Year 2021 HQRP. Quality measures are tools that help measure or quantify healthcare processes, outcomes, patient or resident perceptions and organizational structure/systems that are associated with the ability to provide high-quality services related to one or more quality goals.¹ This manual provides detailed information for each quality measure, including quality measure definitions, inclusion and exclusion criteria, and measure calculation specifications. An overview of the HQRP and additional information pertaining to public reporting is publicly available and can be accessed through the HQRP website.² Outlined below is the organization of this manual and an overview of the information found in each section.

This manual is organized by chapter, and each chapter contains sections that provide additional details. **Chapter 1** presents the purpose of the manual, explaining how the manual is organized. The remaining chapters are organized by quality measure and provide detailed information about measure specifications and reporting components. **Chapter 2** describes the composite measure derived from Hospice Item Set (HIS) data, the Hospice and Palliative Care Composite Process Measure: Comprehensive Assessment at Admission (NQF #3235). **Chapter 3** describes the claims-based measure, Hospice Visits in the Last Days of Life. Table 1-1 below lists the measures that have been removed from HQRP.

Table 1-1: Hospice Quality Measures Removed from HQRP

Quality Measure	CMS ID	Measure Description	Removal Date from Review & Correct	Removal Date from Preview Report	Removal Date from Hospice Compare
Hospice Visits when Death is Imminent, Measure 1	2921	The percentage of patient stays receiving at least one visit from registered nurses, physicians, nurse practitioners, or physician assistants in the final 3 days of life.	TBD	November 2020	February 2021
Hospice Visits when Death is Imminent, Measure 2	2922	The percentage of hospice patient stay receiving at least two visits from medical social workers, chaplains or spiritual counselors, licensed practical nurses or aides in the final 7 days of life.	TBD	Never publicly reported	Never publicly reported

¹ Centers for Medicare & Medicaid Services. (August 2018). Quality Measures. Accessed on November 14, 2018. Available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/index.html>

² <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting>

Chapter 2: Hospice Item Set-based Composite Measure

The purpose of this chapter is to describe the methodology employed to select records from data submitted to the Centers for Medicare & Medicaid Services (CMS) using the Hospice Item Set (HIS) under the Hospice Quality Reporting Program (HQRP) for the purpose of computing quality measures (QMs).

Section 1: Definitions

Target period. The span of time that defines the QM reporting period (e.g., a calendar quarter).

Target date. The target date for a record is defined as follows:

- For an admission record (A0250 Reason for Assessment = [01]), the target date is equal to the admission date (A0220). This is the admission target date.
- For a discharge record (A0250 Reason for Assessment = [09]), the target date is equal to the discharge date (A0270). This is the discharge target date.

Data selection period. The span of time that determines which data are used to calculate the QM for a target period. Each target period is associated with a data selection period (e.g., a calendar year with data updated quarterly). Records with the target date within the data selection period are assigned to a target period for reporting. The data selection period is not necessarily the same as the target period. For example, a target period can be a calendar quarter while the data selection period can be a year.

Patient data stream. The patient's data stream consists of all records for the specific patient at a specific hospice.

Sort order. The records in a patient's data stream must be sorted by the following variables:

- Provider Internal ID
- Resident Internal ID
- Target date (descending): This will cause records to appear in reverse chronological order so that the most recent records appear first in the data stream. This will also ensure that the discharge record appears prior to the admission record in the data stream, when a discharge record for a patient stay is available (i.e., the patient was discharged).
- Item A0250 Reason for Assessment (descending): If more than one record shares a target date (e.g., the patient was admitted and discharged on the same day), this will cause the discharge record to appear first in the data stream, followed by the admission record.

Stay. The period of time between a patient's admission to a hospice and either (a) a discharge or (b) the end of the target period, whichever comes first. A patient can have multiple stays assigned to a target period.

- A patient stay starts with an admission record (A0250 = [01]). The **stay start date** is the admission date (A0220) on the admission record.
 - When the admission record that starts a stay is missing (i.e., when a discharge record has no matching admission record for the same patient with the same admission date and in the same hospice), the **stay start date** is the admission date (A0220) on the discharge record.
- A patient stay ends with either (a) a discharge record (A0250 = [09]) or (b) the end of the target period, whichever comes first.

- When a patient stay ends with a discharge record (A0250 = [09]), the **stay end date** is the discharge date (A0270) on the discharge record.
- The **stay end date** must be the same as or later than the **stay start date**.
- Both the admission and the discharge records associated with the patient stay must have identical admission dates (A0220).
 - When a patient stay ends with the end of the target period (this typically indicates that the patient is still enrolled with the hospice at the end of the target period), the **stay end date** is the end of the target period.
- The admission and discharge records that define the start and the end of patient stays are paired by matching the patient identifier (State Code and Resident Internal ID), hospice identifier (Provider Internal Number), and admission date (A0220). If multiple admission records (or multiple discharge records) share the same information in these matching criteria, the most recent chronological submission is kept and used. The submission time is first determined by submission date (SUBMSN_DT) and then, if multiple records are submitted on the same day, by the highest-numbered Hospice Assessment ID (HOSPC_ASMT_ID).
- The definitions above generate three types of stays for a target period:
 - **Type 1:** stays with both the admission and the discharge records (i.e., discharged stays).
 - **Type 2:** stays with the discharge record but no admission record (i.e., discharged stays but missing the admission records).
 - **Type 3:** stays with the admission record but no discharge record (i.e., active stays as of the end of the target period).

Patient Stay for QM sample. A **Type 1** patient stay is eligible to be included in the QM sample if the patient stay has a discharge record (A0250 = [09]) with the discharge date (A0270) within the data selection period. A patient can have multiple stays included in the QM sample. All eligible stays for a patient are included.

- For QM calculation purposes, both the admission and the discharge records are assigned to a data selection period and a target period based on the discharge date.
- The patient stays included in a QM sample could span across quarters, which means the admission record could have a target date outside the data selection period.

Length of Stay (LOS). Length of stay is the number of days within a stay, that is, from the stay start date through the stay end date.

- When counting the number of days, include the **stay start date** but not the **stay end date**, unless the start and end of the stay occurred on the same day in which case the number of days in the stay is equal to 1.

Rounding Rule. All HIS-based quality measure scores, including national averages, are rounded to one decimal. To round off to the value of one decimal, if the digit in the second place is greater than 5, add 1 to the first digit, otherwise, leave the first digit unchanged. Drop all digits following the first digit.

Section 2: Record Selection and Measure Calculation

A specific QM is calculated by selecting eligible records from patient data streams and applying the QM definitions to those selected records. The first section below describes the selection of records for each QM for the HQR. The second section describes how each QM is calculated for HQR.

Record Selection

An admission-anchored QM is designed to measure quality of care around hospice admission. Table 2-1 lists the admission-anchored QMs captured by the HIS.

Table 2-1: Admission-anchored QMs

NQF Number	Measure Name	Earliest Date of Patient Admission included in Measure Calculation
NQF #1641	Hospice and Palliative Care—Treatment Preferences	July 1, 2014
NQF #1647	Beliefs/Values Addressed (if desired by the patient)	July 1, 2014
NQF #1634	Hospice and Palliative Care—Pain Screening	July 1, 2014
NQF #1637	Hospice and Palliative Care—Pain Assessment	July 1, 2014
NQF #1639	Hospice and Palliative Care—Dyspnea Screening	July 1, 2014
NQF #1638	Hospice and Palliative Care—Dyspnea Treatment	July 1, 2014
NQF #1617	Patients Treated with an Opioid Who Are Given a Bowel Regimen	July 1, 2014
NQF #3235	Hospice and Palliative Care Composite Process Measure: Comprehensive Assessment at Admission	April 1, 2017

The eligible records for the admission-anchored QMs are selected as follows (note that ***bold italic*** text indicates terms defined in Chapter 2, Section 1: Definitions):

1. Determine the ***target period*** and ***data selection*** period.
2. Create ***patient stays*** and calculate ***length of stay***.
 - a. Sort the records in all ***patient data streams*** according to the ***sort order***.
 - b. Identify ***stay(s)*** for each patient. For each ***stay***, identify ***stay start date*** and the admission record (when available); identify ***stay end date*** and the discharge record (when available).
 - c. Calculate ***length of stay***
3. Identify ***QM sample***:
 - a. Select stays to be included in the ***QM sample*** if the patient stays have a discharge record with the ***target date*** within the ***data selection period***. All eligible stays for a patient are included; thus, a patient can have multiple stays included in the QM sample.
4. Select each admission record (A0250 Reason for Assessment = [01]) associated with each patient stay for the ***QM sample***.
5. Apply the QM specifications to the selected admission records. Round all QM scores using the ***rounding rule***.

Measure Calculation

Using the definitions in Tables 4-1 to 4-8 in Chapter 4, the following shows the steps to calculate the QMs:

NQF #1641: Hospice and Palliative Care—Treatment Preferences

Using the definitions in Table 4-1, the following steps are used to calculate the measure:

1. Identify excluded stays:
 - 1.1 Patient stay is excluded if the patient is under 18 years of age as indicated by the birth date **(A0900)** and admission date **(A0220)**; **OR**
 - 1.2 **Type 2 and 3** patient stays.
2. Calculate the denominator count:

Calculate the total number of **Type 1** stays that do not meet the exclusion criteria.
3. Calculate the hospice's overall numerator:

Calculate the total number of stays in the denominator that meet any of the following criteria:

 - 3.1 The patient/responsible party was asked about preference regarding the use of cardiopulmonary resuscitation **(F2000A = [1,2])** no more than 7 days prior to admission or within 5 days of the admission date **($-7 \leq F2000B - A0220 \leq 5$ and $F2000B \neq [-,^{\wedge})$)**; **OR**
 - 3.2 The patient/responsible party was asked about preferences regarding life-sustaining treatments other than CPR **(F2100A = [1,2])** no more than 7 days prior to admission or within 5 days of the admission date **($-7 \leq F2100B - A0220 \leq 5$ and $F2100B \neq [-,^{\wedge})$)**; **OR**
 - 3.3 The patient/responsible party was asked about preference regarding hospitalization **(F2200A = [1,2])** no more than 7 days prior to admission or within 5 days of the admission date **($-7 \leq F2200B - A0220 \leq 5$ and $F2200B \neq [-,^{\wedge})$)**.
4. Calculate the hospice's overall observed score:

Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

NQF #1647: Beliefs & Values Addressed (if desired by the patient)

Using the definitions in Table 4-2, the following steps are used to calculate the measure:

1. Identify excluded stays:
 - 1.1 Patient stay is excluded if patient is under 18 years of age as indicated by the birth date **(A0900)** and admission date **(A0220)**; **OR**
 - 1.2 **Type 2 and 3** patient stays.
2. Calculate the denominator count:

Calculate the total number of **Type 1** stays that do not meet the exclusion criteria.
3. Calculate the numerator count:

Calculate the total number of stays in the denominator that the patient and/or caregiver was asked about spiritual/existential concerns **(F3000A = [1,2])** no more than 7 days prior to admission or within 5 days of the admission date **($-7 \leq F3000B - A0220 \leq 5$ and $F3000B \neq [-,^{\wedge})$)**.

4. Calculate the hospice's overall observed score:
Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

NQF #1634: Hospice and Palliative Care—Pain Screening

Using the definitions in Table 4-3, the following steps are used to calculate the measure:

1. Identify excluded stays:
 - 1.1 Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**); **OR**
 - 1.2 **Type 2 and 3** patient stays.
2. Calculate the denominator count:
Calculate the total number of **Type 1** stays that do not meet the exclusion criteria.
3. Calculate the hospice's overall numerator:
Calculate the total number of stays in the denominator that meet any of the following criteria:
 - 3.1 The patient was screened for pain within 2 days of the admission date (**J0900B – A0220 ≤ 2 and J0900B ≠ [-,^]**) and reported that they had no pain (**J0900C = [0]**); **OR**
 - 3.2 The patient was screened for pain within 2 days of the admission date (**J0900B – A0220 ≤ 2 and J0900B ≠ [-,^]**), the patient's pain severity was rated mild, moderate, or severe (**J0900C = [1,2,3]**), **AND** a standardized pain tool was used (**J0900D = [1,2,3,4]**).
4. Calculate the hospice's overall observed score:
Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

NQF #1637: Hospice and Palliative Care—Pain Assessment

Using the definitions in Table 4-4, the following steps are used to calculate the measure:

1. Identify excluded stays:
 - 1.1 Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**); **OR**
 - 1.2 **Type 2 and 3** patient stays.
2. Calculate the denominator count:
Calculate the total number of **Type 1** stays in the denominator where the patient's pain severity was rated mild, moderate, or severe (**J0900C = [1,2,3]**) that do not meet the exclusion criteria.
3. Calculate the numerator count:
Calculate the total number of stays where a comprehensive pain assessment was completed within 1 day of the pain screening during which the patient was screened positive for pain (**J0910B – J0900B ≤ 1 and J0910B and J0900B ≠ [-,^]**) **AND** included at least 5 of the following characteristics: location, severity, character, duration, frequency, what relieves or worsens the pain, and the effect on

function or quality of life (**5 or more items in J0910C1 – J0910C7 checked and not all J0910C boxes = [-,^]**).

4. Calculate the hospice's overall observed score:
Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

NQF #1639: Hospice and Palliative Care—Dyspnea Screening

Using the definitions in Table 4-5, the following steps are used to calculate the measure:

1. Identify excluded stays:
 - 1.1 Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**); **OR**
 - 1.2 **Type 2 and 3** patient stays.
2. Calculate the denominator count:
Calculate the total number of **Type 1** stays that do not meet the exclusion criteria.
3. Calculate the numerator count:
Calculate the total number of stays in the denominator where the patient was screened for shortness of breath within 2 days of the admission date (**J2030B – A0220 ≤ 2 and J2030B ≠ [-,^]**).
4. Calculate the hospice's overall observed score:
Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

NQF #1638: Hospice and Palliative Care—Dyspnea Treatment

Using the definitions in Table 4-6, the following steps are used to calculate the measure:

1. Identify excluded stays:
 - 1.1 Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**); **OR**
 - 1.2 **Type 2 and 3** patient stays.
2. Calculate the denominator count:
Calculate the total number of **Type 1** stays where the screening indicated the patient had shortness of breath (**J2030C = [1]**), that do not meet the exclusion criteria.
3. Calculate the hospice's overall numerator:
Calculate the total number of stays in the denominator that meet any of the following criteria:
 - 3.1 The patient declined treatment (**J2040A = [1]**); **OR**
 - 3.2 Treatment for shortness of breath was initiated prior to the screening for shortness of breath or within 1 day of the screening for shortness of breath during which the patient screened positive for shortness of breath (**J2040B – J2030B ≤ 1 and J2040B and J2030B ≠ [-,^]**).

4. Calculate the hospice's overall observed score:
Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

NQF #1617: Patient Treated with an Opioid Who Are Given a Bowel Regimen

Using the definitions in Table 4-7, the following steps are used to calculate the measure:

1. Identify Excluded Records (excluded stays):
 - 1.1 Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**); **OR**
 - 1.2 **Type 2 and 3** patient stays.
2. Calculate the denominator count:
Calculate the total number of **Type 1** stays where a scheduled opioid was initiated or continued (**N0500A = [1]**), that do not meet the exclusion criteria.
3. Calculate the hospice's overall numerator:
Calculate the total number of stays in the denominator that meet any of the following criteria:
 - 3.1 There is documentation of why a bowel regimen was not initiated or continued (**N0520A = [1]**); **OR**
 - 3.2 A bowel regimen was initiated or continued within 1 day of a scheduled opioid being initiated or continued (**N0520B – N0500B ≤ [1]** and **N0520B and N0500B ≠ [-,^]**).
4. Calculate the hospice's overall observed score:
Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

NQF #3235: Hospice and Palliative Care Composite Process Measure: Comprehensive Assessment at Admission

Using the definitions in Table 4-8, the following steps are used to calculate the measure:*

1. Identify excluded stays:
 - 1.1 Patient stay is excluded if the patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**); **OR**
 - 2.1 **Type 2 and 3** patient stays.
2. Calculate the denominator count: Calculate the total number of **Type 1** stays that do not meet the exclusion criteria.

* For more information about the Hospice and Palliative Care Composite Process Measure – Comprehensive Assessment at Admission, including calculation methodology, please see the Hospice Comprehensive Assessment Quality Measure (QM) Background and Methodology Fact Sheet. (<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting/Downloads/Hospice-Comprehensive-Assessment-QM-Background-and-Methodology-Fact-Sheet.pdf>)

3. Calculate the hospice's overall numerator: Calculate the total number of stays in the denominator that meet the following criteria:

3.1 The patient/responsible party was asked about preference regarding the use of cardiopulmonary resuscitation (**F2000A = [1,2]**) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq \text{F2000B} - \text{A0220} \leq 5$ and **F2000B** $\neq [-,^{\wedge}]$)

OR

The patient/responsible party was asked about preferences regarding life-sustaining treatments other than CPR (**F2100A = [1,2]**) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq \text{F2100B} - \text{A0220} \leq 5$ and **F2100B** $\neq [-,^{\wedge}]$)

OR

The patient/responsible party was asked about preferences regarding hospitalization (**F2200A = [1,2]**) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq \text{F2200B} - \text{A0220} \leq 5$ and **F2200B** $\neq [-,^{\wedge}]$)

AND

3.2 The patient and/or caregiver was asked about spiritual/existential concerns (**F3000A = [1,2]**) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq \text{F3000B} - \text{A0220} \leq 5$ and **F3000B** $\neq [-,^{\wedge}]$).

AND

3.3 The patient was screened for pain within 2 days of the admission date (**J0900B - A0220** ≤ 2 and **J0900B** $\neq [-,^{\wedge}]$) and reported that they had no pain (**J0900C = [0]**)

OR

The patient was screened for pain within 2 days of the admission date (**J0900B - A0220** ≤ 2 and **J0900B** $\neq [-,^{\wedge}]$), the patient's pain severity was rated mild, moderate, or severe (**J0900C = [1,2,3]**), **AND** a standardized pain tool was used (**J0900D = [1,2,3,4]**)

AND[†]

3.4 For a patient whose pain severity was rated mild, moderate, or severe (**J0900C = [1,2,3]**) during the pain screening, a comprehensive pain assessment was completed within 1 day of the pain screening during which the patient screened positive for pain (**J0910B - J0900B** ≤ 1 and **J0910B** and **J0900B** $\neq [-,^{\wedge}]$) **AND** included at least 5 of the following characteristics: location, severity, character, duration, frequency, what relieves or worsens the pain, and the effect on function or quality of life (**5 or more items in J0910C1 - J0910C7 checked and not all J0910C boxes = [-,^{\wedge}]**)

[†] Denotes paired measures. For paired measures, some patients may not qualify for the second component of the paired measure. In this instance, in the calculation of the composite measure, the patient will be eligible for the numerator as if hospices completed both care processes for the patient. For example, if a patient screened negative for pain, they are not eligible for the component pain assessment measure, however, in the composite measure, the patient would be considered to have had both processes completed (screening and assessment) and thus counted toward the numerator of the composite measure, provided all other composite measure numerator requirements are met.

OR

The patient reported that they had no pain during the pain screening (**J0900C = [0]**)

AND

- 3.5 The patient was screened for shortness of breath within 2 days of the admission date (**J2030B – A0220 ≤ 2 and J2030B ≠ [-,^]**)

AND[‡]

- 3.6 For a patient that screened positive for shortness of breath (**J2030C = [1]**), the patient declined treatment (**J2040A = [1]**)

OR

Treatment for shortness of breath was initiated prior to the screening for shortness of breath or within 1 day of the screening for shortness of breath during which the patient screened positive for shortness of breath (**J2040B – J2030B ≤ 1 and J2040B and J2030B ≠ [-,^]**)

OR

The patient screened negative for shortness of breath (**J2030C = [0]**)

AND[‡]

- 3.7 For a patient who had a scheduled opioid initiated or continued (**N0500A = [1]**), there is documentation of why a bowel regimen was not initiated or continued (**N0520A = [1]**)

OR

For a patient who had a scheduled opioid initiated or continued (**N0500A = [1]**) a bowel regimen was initiated or continued within 1 day of a scheduled opioid being initiated or continued (**N0520B – N0500B ≤ [1] and N0520B and N0500B ≠ [-,^]**)

OR

The patient did not have a scheduled opioid initiated or continued (**N0500A = [0]**).

4. Calculate the hospice's overall observed score: Divide the hospice's numerator count by its denominator count to obtain the hospice's observed score; that is, divide the result of step 3 by the result of step 2. The score is converted to a percent value by multiplying by 100. Round the score using the **rounding rule**.

National Average Calculation

To calculate the national average for the Comprehensive Assessment at Admission QM, take the sum of all the hospices' percent value scores for that QM and divide by the number of hospices. Round the national average using the **rounding rule**, as defined in Chapter 2, Section 1.

[‡] The Bowel Regimen item (**N0520**) is only completed if a scheduled opioid was initiated or continued (**N0500A = [1]**). If a scheduled opioid was not initiated or continued (**N0500A = [0]**), the patient will still be eligible for the composite measure numerator. For example, if a patient did not have a scheduled opioid initiated or continued, the patient would be counted toward the numerator of the composite measure, provided all other composite measure numerator requirements are met.

Chapter 3: Claims-based Measure

Section 1: Measure Description

Hospice Visits in the Last Days of Life indicates the hospice provider's proportion of patients who have received visits from a registered nurse or medical social worker (non-telephonically) on at least two out of the final three days of the patient's life.

The object of this measure is to capture the provision of services at the end-of-life. Evidence from clinical organizations and panels, as well as from individual studies, supports the measure's basis that visits to patients at the end of life are associated with improved experiences of care. The last few days before death is typically the period in the terminal illness trajectory with the highest symptom burden.¹ During this time, patients experience many physical and emotional symptoms, necessitating close care and attention from the integrated hospice team and drawing increasingly on hospice team resources.^{2,3,4}

Hospice responsiveness during times of patient and caregiver need is an important aspect of care.⁵ Although Medicare-certified hospices do not have mandated minimum requirements for visits during routine home care, at the end of life, hospices should be equipped to meet the higher symptom and caregiving burdens of patients and their caregivers during this critical period.⁶ Clinician visits to patients at the end of life are associated with decreased risk of hospitalization and emergency room visits, decreased likelihood of a hospital-related disenrollment, as well as decreased odds of dying in the hospital.^{7,8,9} In addition, clinician visits to patients at the end of life is also associated with decreased distress for caregivers and higher satisfaction with home care.¹⁰

¹ Hui D et al. (2014). Clinical Signs of Impending Death in Cancer Patients. *The Oncologist*. 19(6):681-687. doi:10.1634/theoncologist.2013-0457.

² de la Cruz, M., et al. (2014). Delirium, agitation, and symptom distress within the final seven days of life among cancer patients receiving hospice care. *Palliative & Supportive Care*, 13(2): 211-216. doi: 10.1017/S1478951513001144

³ Dellon, E. P., et al. (2010). Family caregiver perspectives on symptoms and treatments for patients dying from complications of cystic fibrosis. *Journal of Pain & Symptom Management*, 40(6): 829-837. doi: 10.1016/j.jpainsymman.2010.03.024

⁴ Kehl, K. A., et al. (2013). A systematic review of the prevalence of signs of impending death and symptoms in the last 2 weeks of life. *American Journal of Hospice & Palliative Care*, 30(6): 601-616. doi: 10.1177/1049909112468222

⁵ Ellington, L., et al. (2016). Interdisciplinary Team Care and Hospice Team Provider Visit Patterns during the Last Week of Life. *Journal of Palliative Medicine*, 19(5), 482-487. doi: 10.1089/jpm.2015.0198

⁶ Teno, J. M., et al. (2016). Examining Variation in Hospice Visits by Professional Staff in the Last 2 Days of Life. *JAMA Internal Medicine*, 176(3): 364-370. doi: 10.1001/jamainternmed.2015.7479

⁷ Seow, H., Barbera, L., Howell, D., & Dy, S. M. (2010). Using more end-of-life homecare services is associated with using fewer acute care services: A population-based cohort study. *Medical Care*, 48(2): 118-124. doi: 10.1097/MLR.0b013e3181c162ef

⁸ Phongtankuel, V., et al. (2018). Association Between Nursing Visits and Hospital-Related Disenrollment in the Home Hospice Population. *American Journal of Hospice & Palliative Medicine*, 35(2): 316-323. doi: 10.1177/1049909117697933

⁹ Almaawi, U., et al. (2014). Are family physician visits and continuity of care associated with acute care use at end-of-life? A population-based cohort study of homecare cancer patients. *Palliative Medicine*, 28(2), 176-183. doi: 10.1177/0269216313493125

¹⁰ Pivodic, L., Harding, R., Calanzani, N., McCrone, P., Hall, S., Deliens, L., & Gomes, B. (2015). Home care by general practitioners for cancer patients in the last 3 months of life: An epidemiological study of quality and associated factors. *Palliative Medicine*, 30(1), 64-74. doi:10.1177/0269216315589213

Visits by clinical staff who can assess symptoms and make changes to the plans of care as well as work with the patient and the primary caregiver to provide the appropriate palliation and emotional support (e.g., nurses and social workers) are important to the quality of care hospices deliver, as noted by the NQF's preferred practices on the recognition and management of the actively dying patient.¹¹ During the development of the Family Evaluation of Hospice Care survey, families voiced the importance of visits by these staff in the last days of life.¹²

Section 2: Data Sources and Measure Calculation

Data Sources

The measure is constructed from Medicare hospice claims records, which are already collected by CMS. Claims data are used for provider payments and subject to audit, and therefore considered accurate and reliable for measure developments. Claims data are used to calculate publicly-reported quality measures in other CMS quality reporting programs. Claims are readily available and require no additional data submission beyond what is already collected in the normal course of business. Therefore, this measure poses no additional data collection burden to providers, to patients, or to caregivers.

Target Population

The target population is Medicare Part A enrolled beneficiaries discharged from hospice services during the measure time window. Note that all beneficiaries in Medicare Advantage convert to Fee-for-Service upon election to hospice.

Measure Target Period

The measure is calculated using one year of claims data. All hospice episodes that were eligible are assigned to the year based upon the beneficiary's date of discharge from hospice. Data from Federal Fiscal Year 2018 (10/1/17 – 9/30/18) were used to develop this measure.

Measure Calculation

Hospice Visits in the Last Days of Life

1. The data are all Medicare hospice claims within relevant the time period (the measure development time period was Federal Fiscal Year 2018; 10/1/17 – 9/30/18)
2. Identify all Medicare hospice decedents discharged to death within the time period of data.
3. The exclusion criteria are that the:
 - Patient did not expire in hospice care as indicated by reason for discharge (exclude if the patient discharge status code, **PTNT_DSCHRG_STUS_CD**, does not equal [40, 41, or 42])
 - Patient received any continuous home care, respite care or general inpatient care in the final three days of life (exclude if **revenue codes** = [0652, 0655, or 0656])
 - Patient was enrolled in hospice one or two days, only
4. Cases meeting the target process are identified as the number of patient stays in the denominator for which registered nurses or medical social workers provided visits on at least two days of the final three days of life

¹¹ Teno, J. M., et al. (2016). Examining Variation in Hospice Visits by Professional Staff in the Last 2 Days of Life. *JAMA Internal Medicine*, 176(3): 364-370. doi: 10.1001/jamainternmed.2015.7479

¹² Teno, J. M., et al. (2016). Examining Variation in Hospice Visits by Professional Staff in the Last 2 Days of Life. *JAMA Internal Medicine*, 176(3): 364-370. doi: 10.1001/jamainternmed.2015.7479

- Registered nurse visits are identified by revenue code **055x** with the presence of HCPCS code **G0299**
 - Non-telephonic visits are medical social workers are identified by revenue code **056x** (other than 0569); HCPCS code **G0155**
5. The rates of patients meeting the target process are calculated for each hospice provider with at least 20 patients in the denominator during the time period of data.
 - For each hospice, divide the total number of patients in the numerator (Step 4) by the total number of patients in the denominator (Step 2 and Step 3) and multiply by 100
 - The measure is not calculated for hospices with fewer than 20 patients in the denominator
 6. For this process measure there are no measure score risk adjustments

Chapter 4: Measure Logical Specifications

This chapter provides the specifications for each measure in the Hospice QRP.

CMS implemented the HIS as part of the HQRP in the FY 2014 Hospice Wage Index final rule (78 FR 48234-48281). The HIS is a standardized set of items intended to capture patient-level data on each hospice stay. HIS V2.00.0 items on the admission record can be used to calculate the National Quality Forum (NQF) endorsed Hospice and Palliative Care Composite Process Measure: Comprehensive Assessment at Admission measure. The purpose of this section is to describe the measure's logical specifications.

Table 4-1. Treatment Preferences (NQF #1641)

Measure Description
The percentage of hospice patient stays with chart documentation that the hospice discussed (or attempted to discuss) preferences for life-sustaining treatments.
Measure Specifications – All items are from the admission record of the stay
Numerator
Type 1 patient stays from the denominator are included in the numerator if they meet the following criteria:
- The patient/responsible party was asked about preference regarding the use of cardiopulmonary resuscitation (F2000A = [1,2]) no more than 7 days prior to admission or within 5 days of the admission date (-7 ≤ F2000B – A0220 ≤ 5 and F2000B ≠ [-,^]); OR - The patient/responsible party was asked about preferences regarding life-sustaining treatments other than CPR (F2100A = [1,2]) no more than 7 days prior to admission or within 5 days of the admission date (-7 ≤ F2100B – A0220 ≤ 5 and F2100B ≠ [-,^]); OR - The patient/responsible party was asked about preference regarding hospitalization (F2200A = [1,2]) no more than 7 days prior to admission or within 5 days of the admission date (-7 ≤ F2200B – A0220 ≤ 5 and F2200B ≠ [-,^]).
Denominator
All patient stays except for those with exclusions.
Exclusions
Patient stays are excluded if the patient is:
- Under 18 years of age as indicated by the birth date (A0900) and admission date (A0220); OR Type 2 or 3 patient stays.

Table 4-2. Beliefs/Values Addressed (if desired by the patient) (NQF #1647)

Measure Description
The percentage of hospice patient stays with documentation of a discussion of spiritual/existential concerns or documentation that the patient and/or caregiver did not want to discuss.
Measure Specifications – All items are from the admission record of the stay
Numerator Type 1 patient stays from the denominator are included in the numerator if they meet the following criteria: - The patient and/or caregiver was asked about spiritual/existential concerns (F3000A = [1,2]) no more than 7 days prior to admission or within 5 days of the admission date (-7 ≤ F3000B – A0220 ≤ 5 and F3000B ≠ [-,^]) Denominator All patient stays except for those with exclusions. Exclusions Patient stays are excluded if the patient is: - Under 18 years of age as indicated by the birth date (A0900) and admission date (A0220); OR Type 2 or 3 patient stays.

Table 4-3. Pain Screening (NQF #1634)

Measure Description
The percentage of hospice patient stays during which the patient was screened for pain during the initial nursing assessment.
Measure Specifications – All items are from the admission record of the stay
Numerator Type 1 patient stays from the denominator are included in the numerator if they meet the following criteria: - The patient was screened for pain within 2 days of the admission date ($J0900B - A0220 \leq 2$ and $J0900B \neq [-,^A]$) and reported that they had no pain ($J0900C = [0]$); OR - The patient was screened for pain within 2 days of the admission date ($J0900B - A0220 \leq 2$ and $J0900B \neq [-,^A]$), the patient's pain severity was rated mild, moderate, or severe ($J0900C = [1,2,3]$), and a standardized pain tool was used ($J0900D = [1,2,3,4]$). Denominator All patient stays except for those with exclusions. Exclusions Patient stays are excluded if the patient is: - Under 18 years of age as indicated by the birth date ($A0900$) and admission date ($A0220$); OR Type 2 or 3 patient stays.

Table 4-4. Pain Assessment (NQF #1637)

Measure Description
The percentage of hospice patient stays during which the patient screened positive for pain and received a comprehensive assessment of pain within 1 day of screening.
Measure Specifications – All items are from the admission record of the stay
Numerator Type 1 patient stays from the denominator are included in the numerator if they meet the following criteria: - A comprehensive pain assessment was completed within 1 day of the pain screening during which the patient was screened positive for pain (J0910B – J0900B ≤ 1 and J0910B and J0900B ≠ [-,^]) and included at least 5 of the following characteristics: location, severity, character, duration, frequency, what relieves or worsens the pain, and the effect on function or quality of life (5 or more items in J0910C1 – J0910C7 checked and not all J0910C boxes = [-,^]). Denominator Patient stays, except for those with exclusions, are included in the denominator if they meet the following criteria: - The patient's pain severity was rated mild, moderate, or severe (J0900C = [1,2,3]). Exclusions Patient stays are excluded if the patient is: - Under 18 years of age as indicated by the birth date (A0900) and admission date (A0220); OR Type 2 or 3 patient stays.

Table 4-5. Dyspnea Screening (NQF #1639)

Measure Description
The percentage of hospice patient stays during which the patient was screened for dyspnea during the initial nursing assessment.
Measure Specifications – All items are from the admission record of the stay
Numerator Type 1 patient stays from the denominator, except for those with exclusions, are included in the numerator if they meet the following criteria: The patient was screened for shortness of breath within 2 days of the admission date (J2030B – A0220 ≤ 2 and J2030B ≠ [-,^]).
Denominator All patient stays except for those with exclusions.
Exclusions Patient stays are excluded if the patient is: - Under 18 years of age as indicated by the birth date (A0900) and admission date (A0220); OR Type 2 or 3 patient stays.

Table 4-6. Dyspnea Treatment (NQF #1638)

Measure Description
The percentage of hospice patient stays during which the patient screened positive for dyspnea and received treatment within 1 day of the screening.
Measure Specifications – All items are from the admission record of the stay
Numerator Type 1 patient stays from the denominator are included in the numerator if they meet the following criteria: • The patient declined treatment (J2040A = [1]); OR • Treatment for shortness of breath was initiated prior to the screening for shortness of breath or within 1 day of the screening for shortness of breath during which the patient screened positive for shortness of breath (J2040B – J2030B ≤ 1 and J2040B and J2030B ≠ [-,^]).
Denominator Patient stays, except for those with exclusions, are included in the denominator if they meet the following criteria: • The screening indicated the patient had shortness of breath (J2030C = [1]).
Exclusions Patient stays are excluded if the patient is: • Under 18 years of age as indicated by the birth date (A0900) and admission date (A0220); OR • Type 2 or 3 patient stays.

Table 4-7. Patients Treated with an Opioid who are Given a Bowel Regimen (NQF #1617)

Measure Description
The percentage of patient stays with vulnerable adults treated with an opioid that are offered/prescribed a bowel regimen or documentation of why this was not needed.
Measure Specifications – All items are from the admission record of the stay
Numerator Type 1 patient stays from the denominator are included in the numerator if they meet the following criteria: • There is documentation of why a bowel regimen was not initiated or continued (N0520A = [1]); OR • A bowel regimen was initiated or continued within 1 day of a scheduled opioid being initiated or continued (N0520B – N0500B ≤ [1] and N0520B and N0500B ≠ [-,^]).
Denominator Patient stays, except for those with exclusions, are included in the denominator if they meet the following criteria: • A scheduled opioid was initiated or continued (N0500A = [1]).
Exclusions Patient stays are excluded if the patient is: • Under 18 years of age as indicated by the birth date (A0900) and admission date (A0220); OR • Type 2 or 3 patient stays.

Table 4-8. Hospice and Palliative Care Composite Process Measure: Comprehensive Assessment at Admission (NQF #3235)

Measure Description
The percentage of hospice stays during which patients received a comprehensive patient assessment at hospice admission.
Measure Specifications
Numerator Type 1 patient stays from the denominator are included in the numerator if they meet the following criteria: - The patient/responsible party was asked about preference regarding the use of cardiopulmonary resuscitation ($F2000A = [1,2]$) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq F2000B - A0220 \leq 5$ and $F2000B \neq [-,^*]$) OR preferences regarding life-sustaining treatments other than CPR ($F2100A = [1,2]$) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq F2100B - A0220 \leq 5$ and $F2100B \neq [-,^*]$) OR preference regarding hospitalization ($F2200A = [1,2]$) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq F2200B - A0220 \leq 5$ and $F2200B \neq [-,^*]$) - AND - The patient and/or caregiver was asked about spiritual/existential concerns ($F3000A = [1,2]$) no more than 7 days prior to admission or within 5 days of the admission date ($-7 \leq F3000B - A0220 \leq 5$ and $F3000B \neq [-,^*]$) - AND - The patient was screened for pain within 2 days of the admission date ($J0900B - A0220 \leq 2$ and $J0900B \neq [-,^*]$) and reported that they had no pain ($J0900C = [0]$) OR The patient was screened for pain within 2 days of the admission date ($J0900B - A0220 \leq 2$ and $J0900B \neq [-,^*]$), the patient's pain severity was rated mild, moderate, or severe ($J0900C = [1,2,3]$), and a standardized pain tool was used ($J0900D = [1,2,3,4]$) - AND* - For a patient whose pain severity was rated mild, moderate, or severe ($J0900C = [1,2,3]$), a comprehensive pain assessment was completed within 1 day of the pain screening during which the patient screened positive for pain ($J0910B - J0900B \leq 1$ and $J0910B$ and $J0900B \neq [-,^*]$) and included at least 5 of the following characteristics: location, severity, character, duration, frequency, what relieves or worsens the pain, and the effect on function or quality of life (5 or more items in $J0910C1 - J0910C7$ checked and not all $J0910C$ boxes = $[-,^*]$) OR the patient reported that they had no pain during the pain screening ($J0900C = [0]$) - AND - The patient was screened for shortness of breath within 2 days of the admission date ($J2030B - A0220 \leq 2$ and $J2030B \neq [-,^*]$) - AND* - For a patient that screened positive for shortness of breath ($J2030C = [1]$), the patient declined treatment ($J2040A = [1]$) OR Treatment for shortness of breath was initiated prior to the screening for shortness of breath or within 1 day of the screening for shortness of breath during which the patient screened positive for shortness of breath ($J2040B - J2030B \leq 1$ and $J2040B$ and $J2030B \neq [-,^*]$) OR the patient screened negative for shortness of breath ($J2030C = [0]$) - AND† - For a patient who had a scheduled opioid initiated or continued ($N0500A = [1]$), there is documentation of why a bowel regimen was not initiated or continued ($N0520A = [1]$) OR A bowel regimen was initiated or continued within 1 day of a scheduled opioid being initiated or continued ($N0520B - N0500B \leq [1]$ and $N0520B$ and $N0500B \neq [-,^*]$) OR the patient did not have a scheduled opioid initiated or continued ($N0500A = [0]$). Denominator Patient stays, except for those with exclusions, are included in the denominator.

Measure Description
Exclusions Patient stays are excluded if the patient is: - Under 18 years of age as indicated by the birth date (A0900) and admission date (A0220); - OR Type 2 or 3 patient stays.

*Denotes paired measures. For paired measures, some patients may not qualify for the second component of the paired measure. In this instance, in the calculation of the composite measure, the patient will be eligible for the numerator as if hospices completed both care processes for the patients. For example, if a patient screened negative for pain, they are not eligible for the component pain assessment measure, however, in the composite measure, the patient would be considered to have had both processes completed (screening and assessment) and thus counted toward the numerator of the composite measure, provided all other composite measure numerator requirements are met.

†The Bowel Regimen item (**N0520**) is only completed if a scheduled opioid was initiated or continued (**N0500A = [1]**). If a scheduled opioid was not initiated or continued (**N0500A = [0]**), the patient will still be eligible for the composite measure numerator. For example, if a patient did not have a scheduled opioid initiated or continued, the patient would be counted toward the numerator of the composite measure, provided all other composite measure numerator requirements are met.

Table 4-9. Hospice Visits in the Last Days of Life (claims-based)

Measure Description
The percentage of patients who have received visits from a registered nurse or medical social worker on at least two out of the final three days of the patient's life.
Measure Specifications
Numerator The number of patient stays in the denominator in which the patient and/or caregiver received visits from registered nurses or medical social workers on at least two of the final three days of the patient's life, as captured by hospice claims records. Registered nurse visits are identified by revenue code 055x with the presence of Healthcare Common Procedure Coding System (HCPCS) code G0299 . Non-telephonic visits by medical social workers are identified by revenue code 056x (other than 0569); HCPCS code G0155 .
Denominator All hospice patient stays enrolled in hospice except those meeting exclusion criteria as identified below.
Exclusions Patient stays are excluded from the measure if the patient did not expire in hospice care or if the patient received any continuous home care, respite care, or general inpatient care in the final three days of life. The exclusion criteria are: • Patient did not expire in hospice care as indicated by reason for discharge (exclude if the patient discharge status code, PTNT_DSCHRG_STUS_CD, does not equal [40, 41, or 42]) • Patient received any continuous home care, respite care or general inpatient care in the final three days of life (exclude if revenue codes = [0652, 0655, or 0656]). • Patient was enrolled in hospice one or two days, only.