



# Hospice Quality Reporting Program Quality Measure Specifications

## User's Manual

*Version 1.00*

**Effective as of October 1, 2021**

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## **Chapter 1: Background and Manual Organization**

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Quality measures (QMs) 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.<sup>1</sup> The purpose of this manual is to present the methods used to calculate quality measures in the Centers for Medicare & Medicaid Services (CMS) Hospice Quality Reporting Program (HQRP). An overview of the HQRP and additional information pertaining to public reporting are available on the HQRP website.<sup>2</sup>

To view your provider's HQRP reports, please visit the CASPER Reporting application. The CASPER Reporting link is available to providers on the Welcome to the CMS QIES Systems for Providers webpage. You will log into the application using your QIES User ID and password credentials. The hospice-specific reports are located in the Hospice Provider and Hospice Quality Reporting Program report categories. Data submission deadlines and other important dates can be found on the key dates webpage: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting/Public-Reporting-Key-Dates-for-Providers>.

This manual reflects the HQRP measures in the Fiscal Year 2022 Hospice Wage Index and Payment Update Final Rule.<sup>3</sup> Starting in FY 2022, HQRP includes four measures that capture quality throughout the hospice stay. These measures are the Hospice and Palliative Care Composite Process Measure: HIS Comprehensive Assessment at Admission, NQF #3235 (hereinafter referred to as the “HIS Comprehensive Assessment at Admission (NQF# 3235)”), Hospice Visits in Last Days of Life (HVLDL), the Hospice Care Index (HCI), and the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Hospice Survey. The HIS Comprehensive Assessment at Admission (NQF# 3235) measures care processes at admission. The HVLDL measures care processes during the last three days of life before discharge. The HCI measures care processes throughout the hospice stay. The CAHPS® Hospice Survey measures caregiver experience of hospice care.

This manual provides detailed information for the HIS based measure and two administrative data (claims-based) measures. While the previous manual included only HIS measures, this manual has been expanded to include HIS and claims-based measures. Given its new scope and broader focus, this manual is designated the HQRP QM Specifications User’s Manual v1.00.

The CAHPS® Hospice Survey is not covered in this manual. For information on Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Hospice Survey based quality measures, please the CAHPS Hospice Survey website at:

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<sup>1</sup> Centers for Medicare & Medicaid Services. Hospice Quality Reporting Program. Available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting>

<sup>2</sup> HQRP website. Available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting>

<sup>3</sup> Centers for Medicare & Medicaid Services. Fiscal Year 2022 Hospice Wage Index and Payment Update Final Rule. Available at: <https://www.govinfo.gov/content/pkg/FR-2021-08-04/pdf/2021-16311.pdf>

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting/CAHPS%C2%AE-Hospice-Survey>.<sup>4</sup>

Outlined below is the organization of this manual and an overview of the information found in each section. Chapter 1 provides an overview of the manual, and the remaining chapters are organized by quality measure and provide detailed information about measure specifications and reporting components.

- **Chapter 1** explains the purpose and structure of this manual.
- **Chapter 2** details the HIS-based composite measure, the Hospice and Palliative Care Composite Process Measure: Comprehensive Assessment at Admission, NQF #3235 (hereinafter referred to as the “HIS Comprehensive Assessment at Admission (NQF# 3235)”).
- **Chapter 3** details the claims-based measure based on 8 quarters of Medicare hospice claims data, Hospice Visits in the Last Days of Life (HVLDL).<sup>5</sup>
- **Chapter 4** details the claims-based measure based on 8 quarters of Medicare hospice claims data, the Hospice Care Index (HCI).
- **Chapter 5** provides the specifications for the HIS and claims-based HQRP measures.

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<sup>4</sup> Centers for Medicare & Medicaid Services. CAHPS Hospice Survey. Available at:  
<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting/CAHPS%C2%AE-Hospice-Survey>.

<sup>5</sup> Centers for Medicare & Medicaid Services. Paperwork Reduction Act. Available at:  
<https://www.cms.gov/regulations-and-guidancelegislationpaperworkreductionactof1995pra-listing/cms-10390>

## **Chapter 2: Hospice and Palliative Care Composite Process Measure: HIS Comprehensive Assessment at Admission (NQF #3235)**

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### *Section 1: Measure Description*

The purpose of this chapter is to describe the **HIS Comprehensive Assessment at Admission (NQF #3235)**. This quality measure is calculated from the Hospice Item Set (HIS) data submitted to CMS under the Hospice Quality Reporting Program (HQRP). The HIS Comprehensive Assessment at Admission (NQF# 3235) captures whether multiple key care processes were completed upon patients' admissions to hospice. It is a single measure reflecting the following process measures: Beliefs/Values Addressed if desired by the patient, Treatment Preferences, Pain Screening, Pain Assessment, Dyspnea Treatment, Dyspnea Screening, and Patients Treated with an Opioid who are Given a Bowel Regimen.

As of FY2022, the seven process measures will no longer be individually publicly reported. The composite measure is the only HIS measure that will be reported. It will be reported as an "all or none" measure. This single measure requires hospices to perform all seven care processes to receive credit. The HIS Comprehensive Assessment at Admission (NQF# 3235) is calculated by selecting eligible records (described in Section 2 of this Chapter) from patient data streams and applying the definitions to those selected records.

### *Section 2: Data Sources*

#### **Record Selection**

An admission-anchored QM is designed to measure quality of care around hospice admission.

The eligible records for the HIS Comprehensive Assessment at Admission (NQF# 3235) are selected as follows (note that ***bold italic*** text indicates terms defined in Appendix 1):

1. Determine the ***target period*** and ***reporting*** period.<sup>6</sup>
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 ***HIS Comprehensive Assessment at Admission (NQF #3235) sample***:
  - a. Select stays to be included in the ***HIS Comprehensive Assessment at Admission (NQF #3235) sample*** if the patient stays have a discharge record with the ***target***

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<sup>6</sup> Since no data reflecting services provided January 1, 2020 through June 30, 2020 will be used in CMS's calculations for the Medicare quality reporting programs, assessment-based measures will: (a) Exclude any quality stay that began or ended in Q1 or Q2 2020 (January 1, 2020 through June 30, 2020), and (b) Exclude any quality stays that span Q1 and Q2 2020 (quality stays that began prior to January 1, 2020 and ended after June 30, 2020).

**date** within the **reporting period**. All eligible stays for a patient are included; thus, a patient can have multiple stays included in the HIS Comprehensive Assessment at Admission (NQF# 3235) sample.

4. Select each admission record (A0250 Reason for Assessment = [01]) associated with each patient stay for the **HIS Comprehensive Assessment at Admission (NQF #3235) sample**.
5. Apply the HIS Comprehensive Assessment at Admission (NQF# 3235) specifications to the selected admission records. Round all HIS Comprehensive Assessment at Admission (NQF# 3235) scores using the **rounding rule**.

### **Section 3: Measure Calculation**

Below are the steps to calculate the HIS Comprehensive Assessment at Admission (NQF# 3235) using the individual component measures that comprise it.

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

The following steps are used to calculate the measure:<sup>7</sup>

1. Identify excluded stays:
  - a. 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**
  - b. **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 the following criteria:
  - a. 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** ≠ [-, ^]);  
**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

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<sup>7</sup> For more information about the Hospice and Palliative Care Composite Process Measure – HIS 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>)

to admission or within 5 days of the admission date ( $-7 \leq F2100B - A0220 \leq 5$  and  $F2100B \neq [-,^]$ );

**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 ( $-7 \leq F2200B - A0220 \leq 5$  and  $F2200B \neq [-,^]$ ).

**AND**

- b. 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**

- c. 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**

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]**).

**AND<sup>8</sup>**

- d. 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 ≠ [-,^]**) 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]**).

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<sup>8</sup> 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.

**AND**

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

**AND<sup>9</sup>**

- f. 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<sup>10</sup>**

- g. 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]**).

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<sup>9</sup> 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.

<sup>10</sup> 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.

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***, as defined in Appendix 1.

### ***Section 4: Public Reporting Threshold***

Hospices must have at least 20 patients in the denominator (i.e., 20 hospice admissions by patients at least 18 years of age) during the reporting period for measure scores to be publicly reported. Hospices that do not meet this threshold will have measure scores suppressed.

### ***Section 5: National and State Average Calculation***

To calculate the national average for the HIS Comprehensive Assessment at Admission (NQF #3235) QM, take the national sum of all the hospices' individual numerators and divide by the total summation of nationwide hospices' individual denominators. Statewide averages are calculated by dividing the statewide summations of numerators by statewide summation of denominators among all hospices located in that state. Round the national and state averages using the ***rounding rule***, as defined in Appendix 1. Note that both state and national averages include the scores of hospices that are suppressed on Care Compare and the Provider Data Catalogue because the numbers of claims, stays, etc. did not meet the minimum threshold for public reporting.

### ***Section 6: HIS Comprehensive Assessment at Admission (NQF#3235), Component Measure Specifications***

The following are the seven components used to calculate the NQF#3235, HIS Comprehensive Assessment at Admission. Each of these components measures a hospice care process. The HIS Comprehensive Assessment at Admission (NQF# 3235) captures all seven component measures into a single QM. The seven component measures are described in Table 2-1 followed by component measure specifications.

**Table 2-1. HIS Comprehensive Assessment at Admission (NQF #3235) Component Measures**

NQF Number	Measure Name
3235	<p>Hospice and Palliative Care Composite Process Measure: HIS Comprehensive Assessment at Admission (NQF# 3235)</p> <p>Includes the following components:</p> <ul style="list-style-type: none"> <li>• Beliefs/Values Addressed (if desired by the patient)</li> <li>• Treatment Preferences</li> <li>• Pain Screening</li> <li>• Pain Assessment</li> <li>• Dyspnea Screening</li> </ul>

- Dyspnea Treatment
- Patients Treated with an Opioid Who Are Given a Bowel Regimen

### **Component Measure 1 of NQF #3235: Beliefs & Values Addressed (if desired by the patient)**

Below are the steps to calculate the component, Beliefs & Values Addressed (if desired by the patient):

1. Identify excluded stays:
  - a. Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**);  
**OR**
  - b. **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 ≠ [-,^]**).
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**.

### **Component Measure 2 of NQF #3235: Treatment Preferences**

Below are the steps to calculate the Treatment Preferences component:

1. Identify excluded stays:
  - a. 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**
  - b. **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:

- a. 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**
- b. 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  $F2100B \neq [-,^]$ );  
**OR**
- c. 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  $F2200B \neq [-,^]$ ).

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**.

### Component Measure 3 of NQF #3235: Pain Screening

Below are the steps to calculate Pain Screening:

1. Identify excluded stays:

- a. Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**);  
**OR**
- b. **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:

- a. 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**

- b. 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***.

#### **Component Measure 4 of NQF #3235: Pain Assessment**

Below are the steps to calculate the component, Pain Assessment:

1. Identify excluded stays:
  - a. Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**);  
**OR**
  - b. **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:
5. 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***.

#### **Component Measure 5 of NQF #3235: Dyspnea Screening**

Below are the steps to calculate the component, Dyspnea Screening:

1. Identify excluded stays:

- a. Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**);
 

**OR**

  - b. **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**.

#### **Component Measure 6 of NQF #3235: Dyspnea Treatment**

Below are the steps to calculate the component, Dyspnea Treatment:

1. Identify excluded stays:
  - a. Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**);
 

**OR**

  - b. **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:
  - a. The patient declined treatment (**J2040A = [1]**);
 

**OR**

  - b. 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***.

### **Component Measure 7 of NQF #3235: Patients Treated with an Opioid Who Are Given a Bowel Regimen**

Below are the steps to calculate the component, Patients Treated with an Opioid Who Are Given a Bowel Regimen:

1. Identify Excluded Records (excluded stays):
  - a. Patient stay is excluded if patient is under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**);  
**OR**  
b. **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:
  - a. There is documentation of why a bowel regimen was not initiated or continued (**N0520A = [1]**);  
**OR**  
b. 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***.

## **Chapter 3: Hospice Visits in the Last Days of Life (Claims-based)**

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### ***Section 1: Measure Description***

**Hospice Visits in the Last Days of Life** measure indicates the hospice provider's proportion of Medicare Fee-for-Service patients who have received in-person visits from a registered nurse (RN) or medical social worker (MSW) 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. The last few days before death are typically the period in the terminal illness's trajectory with the highest symptom burden.<sup>11</sup> During this time, patients experience many physical and emotional symptoms, necessitating close monitoring and drawing increasingly on hospice team resources.<sup>12,13,14</sup> Although Medicare-certified hospices are not given minimum visit mandates 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.<sup>15</sup>

Finally, this QM replaces a previously implemented QM, Hospice Visits when Death is Imminent. The major change for the new QM was the data source, using claims data instead of records from the Hospice Item Set. Additionally, the original specifications were changed after reviewing the results from performance testing.<sup>16</sup>

### ***Section 2: Data Sources***

#### **Data Sources**

The measure is constructed from 8 quarters of Medicare Fee-for-Service hospice claims records, which are already collected by CMS.

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<sup>11</sup> 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.

<sup>12</sup> 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

<sup>13</sup> Dellow, 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

<sup>14</sup> 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

<sup>15</sup> 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/jamaintermmed.2015.7479

<sup>16</sup> For more information, see *Hospice Visits When Death is Imminent: Measure Validity Testing Summary and Re-Specifications* (2020); accessible via: <https://www.cms.gov/files/document/hqrphospice-visits-when-death-imminent-testing-re-specification-reportoctober-2020.pdf>.

## **Target Population**

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

## **Measure Target Period<sup>17</sup>**

The measure is calculated using 8 quarters of pooled Medicare Fee-for-Service claims data. That is, all data from across the 8 quarters are combined. All hospice claims that were eligible are assigned to the reporting period based upon the beneficiary's date of discharge from hospice.<sup>18</sup>

## ***Section 3: Measure Calculation***

### **Hospice Visits in the Last Days of Life**

Below are the steps to calculate the HVLDL measure:

1. The data are all Medicare hospice claims within the relevant time period (covering 8 quarters of data)
2. Calculate the denominator:
  - a. Identify all Medicare hospice decedents discharged due to death within the reporting period.
  - b. The exclusion criteria are that the:
    - i. 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]**)  
**OR**
    - ii. 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]**)  
**OR**
    - iii. Patient was enrolled in hospice one or two days, only
3. Calculate the numerator:
  - a. Cases meeting the target process are identified as the number of patient stays in the denominator for which registered nurses (RN) or medical social workers provided visits on at least two days of the final three days of life

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<sup>17</sup> Since no data reflecting services provided January 1, 2020 through June 30, 2020 will be used in CMS's calculations for the Medicare quality reporting programs, claims-based measures will: (a) Exclude any quality stay that began or ended in Q1 or Q2 2020 (January 1, 2020 through June 30, 2020), and (b) Exclude any quality stays that span Q1 and Q2 2020 (quality stays that began prior to January 1, 2020 and ended after June 30, 2020).

<sup>18</sup> Note at the time of development, a single year of data, Federal Fiscal Year 2018 (10/1/2017 – 9/30/18) was used for initial performance testing and calculations).

- i. Registered nurse visits are identified by revenue code **055x** with the presence of HCPCS code **G0299**. For HVLDL, only RN visits are included.
  - ii. In-person visits from medical social workers are identified by revenue code **056x** (other than **0569**); HCPCS code **G0155**
  - iii. The last three days are defined as: the day of death, the day prior to death, and two days prior to death.
4. Calculate the measure score as the rates of patients meeting the target process.
  - a. For each hospice, divide the total number of patients in the numerator (Step 3) by the total number of patients in the denominator (Step 2) and multiply by 100
  - b. The measure is not calculated for hospices with fewer than 20 patients in the denominator
5. For any process measure, there are no risk adjustments to the measure score

#### ***Section 4: Public Reporting Threshold***

Hospices must have at least 20 patients in the denominator (i.e., 20 hospice discharges to death with enrollment of at least three days, and without any continuous home care, respite care or general inpatient care in the final three days of life) during the reporting period for measure scores to be publicly reported. Hospices that do not meet this threshold will have measure scores suppressed.

#### ***Section 5: National and State Average Calculation***

To calculate the national average for the Hospice Visits in the Last Days of Life, take the national sum of all the hospices' individual numerators and divide by the total summation of nationwide hospices' individual denominators. Statewide averages are calculated by dividing the statewide summations of numerators by statewide summation of denominators among all hospices whose offices are located in that state. Round the national and state averages using the **rounding rule**, as defined in Appendix 1. Note that both state and national averages include the scores of hospices that are suppressed on Care Compare and the Provider Data Catalogue because the numbers of claims, stays, etc. did not meet the minimum threshold for public reporting.

## **Chapter 4: Hospice Care Index (Claims-based)**

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### *Section 1: Measure Description*

The **Hospice Care Index** (HCI) captures care processes occurring throughout the hospice stay, between admission and discharge. The HCI is a single measure comprising ten indicators calculated from Medicare claims data. The indicators included in the HCI are: Continuous Home Care (CHC) or General Inpatient (GIP) Provided, Gaps in Skilled Nursing Visits, Early Live Discharges, Late Live Discharges, Burdensome Transitions (Type 1) - Live Discharges from Hospice Followed by Hospitalization and Subsequent Hospice Readmission, Burdensome Transitions (Type 2) - Live Discharges from Hospice Followed by Hospitalization with the Patient Dying in the Hospital, Per-beneficiary Medicare Spending, Skilled Nursing Care Minutes per Routine Home Care (RHC) Day, Skilled Nursing Minutes on Weekends, and Visits Near Death.

The index design of the HCI simultaneously monitors all ten indicators. Collectively these indicators represent different aspects of hospice service and thereby characterize hospices comprehensively, rather than on just a single care dimension. Each indicator equally affects the single HCI score, reflecting the equal importance of each aspect of care delivered from admission to discharge.

### *Section 2: Data Sources*

#### **Data Sources**

The measure is constructed from 8 quarters of 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 development. 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, patients, or 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<sup>19</sup>**

The measure is calculated using 8 quarters of pooled Medicare Fee-for-Service claims data.<sup>20</sup> That is, all data from across the 8 quarters are combined. All hospice stays that were eligible are assigned to the target period based upon the beneficiary's date of discharge from hospice.

## ***Section 3: Measure Calculation***

A hospice's HCI score is the sum of indicators for which a hospice has met the earned point criteria. Each HCI indicator is assigned a criterion that determines whether that indicator contributes to the hospice's total index score. The criteria reflect either normative performance standards (such as providing certain kinds of services) or reference criteria relative to national hospice performance (such as performing higher or lower than a certain percentage of all hospices). Hospices will score worse if they meet fewer indicators' criteria and will score better if they meet more indicators' criteria.

A hospice is awarded a point for meeting each criterion for each of the 10 HCI indicators. A hospice's HCI score is the sum of the points earned from meeting the criterion of each indicator, with 10 as the highest score a hospice can attain for the HCI quality measure. Section 6 of this Chapter describes the process used to calculate each HCI indicator from the relevant data sources (see also Table 5-3).

## ***Section 4: Public Reporting Threshold***

Hospices must have at least 20 claims with dates ending during the reporting period for the HCI overall measure score to be publicly reported. Hospices that do not meet this threshold will have the HCI overall measure score suppressed. The individual 10 HCI indicators do not have a minimum threshold, and these will be reported in the Provider Data Catalogue as long as the hospice has at least 20 claims overall.

## ***Section 5: National and State Average Calculation***

To calculate the national average for the Hospice Care Index, take the sum of all the hospices' total HCI scores and divide by the number of hospices. To calculate the state averages, take the sum of all the hospices' total HCI scores within each state and divide by the number of hospices located in that state. Round the national and state averages using the ***rounding rule***, as defined in Appendix 1.

National averages for the individual indicators are similarly calculated by taking the sum of all the indicators numerator scores and divided by the denominator sum nationwide (for a particular indicator). Similarly, state indicator averages are calculated by dividing the sum of numerator

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<sup>19</sup> Since no data reflecting services provided January 1, 2020 through June 30, 2020 will be used in CMS's calculations for the Medicare quality reporting programs, claims-based measures will: (a) Exclude any quality stay that began or ended in Q1 or Q2 2020 (January 1, 2020 through June 30, 2020), and (b) Exclude any quality stays that span Q1 and Q2 2020 (quality stays that began prior to January 1, 2020 and ended after June 30, 2020).

<sup>20</sup> Data from Federal Fiscal Years 2017-2019 (10/1/16 – 9/30/19) were used to develop this measure.

values by the sum of denominator values for all hospices located within that state. The national and state indicator averages are also rounded using the *rounding rule* from Appendix 1.

Note that both state and national averages include the scores of hospices that are suppressed on Care Compare and the Provider Data Catalogue because the numbers of claims, stays, etc. did not meet the minimum threshold for public reporting.

## ***Section 6: HCI Indicator Specifications***

Each indicator is a key component of the HCI measure, and the ten indicators are described in Table 4-1 followed by indicator specifications.

**Table 4-2: Hospice Care Index Indicators**

<b>HCI Indicator</b>	<b>Description</b>	<b>Index Earned Point Criteria</b>
Continuous Home Care (CHC) or General Inpatient (GIP) Provided	The percentage of hospice service days that were provided at the Continuous Home Care (CHC) or General Inpatient (GIP) level of care.	Hospice Score Above 0%
Gaps in Skilled Nursing Visits	The percentage of hospice elections, of at least 30 days, where the patient experienced at least one gap between nursing visits exceeding 7 days.	Below 90 Percentile Rank
Early Live Discharges	The percentage of all live discharges from hospice occurring within the first 7 days after hospice admission.	Below 90 Percentile Rank
Late Live Discharges	The percentage of all live discharges from hospice occurring on or after 180 days after hospice admission.	Below 90 Percentile Rank
Burdensome Transitions (Type 1)  Live Discharges from Hospice Followed by Hospitalization and Subsequent Hospice Readmission	The percentage of all live discharges from hospice that were followed by hospitalization within two days and followed by hospice readmission within two days of hospital discharge.	Below 90 Percentile Rank
Burdensome Transitions (Type 2)  Live Discharges from Hospice Followed by Hospitalization with the Patient Dying in the Hospital	The percentage of all live discharges from hospice that were followed by hospitalization within two days, and where the patient also died during the inpatient hospitalization stay.	Below 90 Percentile Rank

Per-beneficiary Medicare Spending	Average per-beneficiary Medicare payments (in U.S. dollars): the total number of payments Medicare paid to hospice providers divided by the total number of hospice beneficiaries served.	Below 90 Percentile Rank
Skilled Nursing Care Minutes per Routine Home Care (RHC) Day	Average total skilled nurse minutes provided by hospices on all Routine Home Care (RHC) service days: the total number of skilled nurse minutes provided by the hospice on all RHC service days divided by the total number of RHC days the hospice serviced.	Above 10 Percentile Rank
Skilled Nursing Minutes on Weekends	The percentage of skilled nurse minutes that occurred on Saturdays or Sundays out of all skilled nurse visits provided by the hospice during RHC service days.	Above 10 Percentile Rank
Visits Near Death	The percentage of beneficiaries receiving at least one visit by a skilled nurse or social worker during the last three days of the patient's life (a visit on the date of death, the date prior to the date of death, or two days prior to the date of death).	Above 10 Percentile Rank

## 1. Continuous Home Care (CHC) or General Inpatient (GIP) Provided

1. Calculate the denominator: The total number of hospice service days provided at any level of care within a reporting period.
2. Calculate the numerator: The total number of CHC or GIP service days provided by the hospice within a reporting period.
  - a. The provision of CHC and GIP are identified on hospice claims by the presence of hospice revenue center codes **0652** (CHC) and **0656** (GIP).
3. Index Earned Point Criterion: Hospices earn a point towards the HCI if they provided at least one CHC or GIP service day within a reporting period.

## 2. Gaps in Skilled Nursing Visits

1. Calculate the denominator: The total number of elections with the hospice, excluding hospice elections where the patient elected hospice for less than 30 days within a reporting period.
2. Calculate the numerator: The number of elections with the hospice where the patient experienced at least one gap between skilled nursing visits (i.e. those from a RN or LPN) exceeding seven days, excluding hospice elections where the patient elected hospice for less than 30 days within a reporting period.

- a. Days of hospice service are identified based on the presence of revenue center codes **0651** (RHC), **0652** (CHC), **0655** (IRC), and **0656** (GIP) on hospice claims.
  - b. Identify the dates billed for RHC, IRC, and GIP by examining the corresponding revenue center date (which identifies the first day in the sequence of days by level of care) and the revenue center units (which identify the number of days (including the first day) in the sequence of days by level of care).
  - c. Identify the dates billed for CHC by examining the revenue center date.<sup>21</sup>
  - d. A hospice stay is defined as a sequence of consecutive days for a particular beneficiary that are billed under the hospice benefit. A gap of at least one day without hospice ends the sequence. Hospice stays that include less than 30 consecutive days of hospice are excluded.
  - e. Nursing visits are identified if any of the following criteria are met:
    - i. The presence of revenue center code **055x** (Skilled Nursing) on the hospice claim. The date of the visit is recorded in the corresponding revenue center date. This code includes both RN and LPN visits.
    - ii. The presence of revenue code **0652** (CHC) on the hospice claim. Days billed as CHC require at least eight hours of care by hospice staff, with at least half the hours provided by nursing care. Therefore, we assume any day with CHC care also included nursing visits, even if not explicitly recorded.
    - iii. The presence of revenue code **0656** (GIP) on the hospice claim. Because Medicare does not require hospices to record all visits on the claim for the GIP level of care, we assume that days billed as GIP will include nursing visits even if not explicitly recorded.
3. Based on the above information, if within a hospice stay, there are eight or more consecutive days where no nursing visits are provided, no CHC is provided, and no GIP is provided, then the hospice stay is identified as having a gap in nursing visits greater than seven days.
4. For each hospice, the number of stays with at least one gap of eight or more days without a nursing visit (for stays of 30 or more days) is divided by the number of stays of 30 or more days.
5. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual hospice score for gaps in nursing visits greater than seven days falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

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<sup>21</sup> Hospices bill each day of CHC on a separate line item on the hospice claim.

### **3. Early Live Discharges**

1. Calculate the denominator: The total number of all live discharges from the hospice within a reporting period.
  - a. Live discharges are assigned to a particular reporting period based on the date of the live discharge (which corresponds to the through date on the claim indicating the live discharge).
  - b. Live discharges occur when the patient discharge status code on a hospice claim does not equal a value from the following list: “30”, “40”, “41”, “42”, “50”, “51”.
2. Calculate the numerator: The total number of live discharges from the hospice occurring within the first seven days of hospice within a reporting period.
  - a. Whether a live discharge occurs during the first seven days of hospice is assessed by looking at a patient’s lifetime length of stay in hospice.<sup>22</sup>
3. For each hospice, divide the number of live discharges in the first seven days of hospice by the number of live discharges.
4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual percentage of live discharges on or before the seventh day of hospice falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

### **4. Late Live Discharges**

1. Calculate the denominator: The total number of all live discharges from the hospice within a reporting period.
  - a. Live discharges are assigned to a particular reporting period based on the date of the live discharge (which corresponds to the through date on the claim indicating the live discharge).
  - b. Live discharges occur when the patient discharge status code on a hospice claim does not equal a value from the following list: “30”, “40”, “41”, “42”, “50”, “51”.
2. Calculate the numerator: The total number of live discharges from the hospice occurring on or after 180 days of enrollment in hospice within a reporting period. Measure whether a live discharge occurs on or after the 180th day of hospice by looking at a patient’s lifetime length of stay in hospice.
3. For each hospice, divide the number of live discharges that occur on or after the 180th day of hospice by the number of live discharges.
4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual hospice score for live discharges on or after the 180<sup>th</sup> day of hospice falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

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<sup>22</sup> That is, measure the first seven days of hospice over a patient’s lifetime and potentially across multiple hospice elections and fiscal years.

- 5. Burdensome Transitions (Type 1) - Live Discharges from Hospice Followed by Hospitalization and Subsequent Hospice Readmission**
  1. Calculate the denominator: The total number of all live discharges from the hospice within a reporting period.
    - a. Live discharges occur when the patient discharge status code does not equal a value from the following list: "30", "40", "41", "42", "50", "51".
  2. Calculate the numerator: The total number of live discharges from the hospice followed by hospital admission within two days, then hospice readmission within two days of hospital discharge within a reporting period.
    - a. Hospitalizations are found by looking at all Fee-for-Service Medicare inpatient claims.
    - b. Overlapping inpatient claims are combined to determine the full length of a hospitalization (looking at the earliest from date and latest through date from a series of overlapping inpatient claims).
    - c. To be counted, the "from" date of the hospitalization had to occur no more than two days after the date of hospice live discharge. From there, identify all beneficiaries that ended their hospitalization and were readmitted back to hospice no more than two days after the last date of the hospitalization.
  3. For each hospice, divide the number of live discharges that are followed by a hospitalization (within two days of hospice discharge) and then followed by a hospice readmission (within two days of hospitalization) in a given fiscal year by the number of live discharges in that same fiscal year.
  4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual hospice score for Type 1 burdensome transitions falls below the 90<sup>th</sup> percentile ranking among hospices nationally.
- 6. Burdensome Transitions (Type 2) - Live Discharges from Hospice Followed by Hospitalization with the Patient Dying in the Hospital**
  1. Calculate the denominator: The total number of all live discharges from the hospice within a reporting year.
    - a. Live discharges occur when the patient discharge status code does not equal a value from the following list: "30", "40", "41", "42", "50", "51".
  2. Calculate the numerator: The total number of live discharges from the hospice followed by a hospitalization within two days of live discharge with death in the hospital within a reporting year.
    - a. Hospitalizations are found by looking at all Fee-for-Service Medicare inpatient claims.

- b. Overlapping inpatient claims are combined to determine a full length of a hospitalization (looking at the earliest from date and latest through date from a series of overlapping inpatient claims).
  - c. To be counted, the “from” date of the hospitalization had to occur no more than two days after the date of hospice live discharge. From there, identify all beneficiaries whose date of death is listed as occurring during the dates of the hospitalization.
3. For each hospice, divide the number of live discharges that are followed by a hospitalization (within two days of hospice discharge) and then the patient dies in the hospital in a given fiscal year by the number of live discharges in that same fiscal year.
  4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual hospice score for Type 2 burdensome transitions falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

## **7. Per-beneficiary Medicare Spending**

1. Calculate the denominator: Total number of beneficiaries electing hospice with the hospice within a reporting period.
  - a. Count the number of unique beneficiaries on all hospice claims in the same period for a particular hospice.
2. Calculate the numerator: Total Medicare hospice payments received by a hospice within a reporting period.
  - a. Sum together all payments on hospice claims for a particular reporting year for a particular hospice.
3. Medicare spending per beneficiary is calculated by dividing the total payments by the total number of unique beneficiaries.
4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their average Medicare spending per beneficiary falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

## **8. Skilled Nursing Care Minutes per Routine Home Care (RHC) Day**

1. Calculate the denominator: The total number of RHC days provided by a hospice within a reporting period.
  - a. Identify RHC days by the presence of revenue code **0651** on the hospice claim.
  - b. Identify the dates of RHC service by the corresponding revenue center date (which identifies the first day of RHC) and the revenue center units (which identifies the number of days of RHC (including the first day of RHC)).

2. Calculate the numerator: Total skilled nursing minutes provided by a hospice on all RHC service days within a reporting period.
  - a. Identify nursing visits by the presence of revenue code **055x** (Skilled Nursing) on the claim. This indicator includes both RN and LPN visits to recognize the frequency of skilled nursing visits and to maintain consistency in HCI when using revenue center code 055x.
  - b. Count skilled nursing visits where the corresponding revenue center date overlaps with one of the days of RHC previously identified.
  - c. Calculate the minutes of skilled nursing visits by taking the corresponding revenue center units and multiplying by 15.
3. For each hospice, sum together all skilled nursing minutes provided on RHC days and divide by the sum of RHC days.
4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual hospice score for Nursing Minutes per RHC day falls above the 10<sup>th</sup> percentile ranking among hospices nationally.

## 9. Skilled Nursing Minutes on Weekends

1. Calculate the denominator: Total skilled nursing minutes provided by the hospice during RHC service days within a reporting period.
  - a. Identify RHC days by the presence of revenue code **0651** on the hospice claim.
  - b. Identify the dates of RHC service by the corresponding revenue center date (which identifies the first day of RHC) and the revenue center units (which identifies the number of days of RHC (including the first day of RHC)).
  - c. Identify nursing visits by the presence of revenue code **055x** (Skilled Nursing) on the claim. This indicator includes both RN and LPN visits to recognize the frequency of skilled nursing visits and to maintain consistency in HCI when using revenue center code 055x.
  - d. Count skilled nursing visits where the corresponding revenue center date overlaps with one of the days of RHC previously identified.
  - e. Calculate the minutes of skilled nursing visits by taking the corresponding revenue center units and multiplying by 15.
2. Calculate the numerator: Total sum of minutes provided by the hospice during skilled nursing visits during RHC service days occurring on Saturdays or Sundays within a reporting period.
3. For each hospice, sum together all skilled nursing minutes provided on RHC days that occur on a Saturday or Sunday and divide by the sum of all skilled nursing minutes provided on all RHC days.

4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual hospice score for percentage of skilled nursing minutes provided during the weekend is above the 10<sup>th</sup> percentile ranking among hospices nationally.

## 10. Visits Near Death

1. Calculate the denominator: The number of decedent beneficiaries with at least one day of hospice during the last three days of life.
2. Calculate the numerator: The number of decedent beneficiaries receiving a visit by a skilled nurse or social worker for the hospice in the last three days of the beneficiary's life within a reporting period.
  - a. Determine if a beneficiary was in hospice for at least one day during their last three days of life by comparing days of hospice enrollment from hospice claims to their date of death.
  - b. Identify skilled nursing visits and medical social service visits by the presence of revenue codes **055x** (Skilled Nursing) and **056x** (Medical Social Services) on the claim.
    - i. Identify the dates of those visits by the revenue center date for those revenue codes.
    - ii. Assume that days billed as GIP (revenue code **0656**) include skilled nursing (i.e., RNs and LPNs) visits.
3. For each hospice, divide the number of beneficiaries with a nursing or medical social services visit on a hospice claim during the last three days of life by the number of beneficiaries with at least one day of hospice during the last three days of life.
4. Index Earned Point Criterion: Hospices earn a point towards the HCI if their individual hospice score for percentage of decedents receiving a visit by a skilled nurse or social worker in the last three days of life falls above the 10<sup>th</sup> percentile ranking among hospices nationally.

## **Chapter 5: Measure Logical Specifications**

This chapter provides the specifications for each measure in the Hospice QRP based on HIS and administrative data (claims-based). For information on the CAHPS® Hospice Survey, please visit the CAHPS Hospice Survey website at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Hospice-Quality-Reporting/CAHPS%C2%AE-Hospice-Survey>.

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 V3.00.0 items on the admission record can be used to calculate the National Quality Forum (NQF) endorsed Hospice and Palliative Care Composite Process Measure: HIS Comprehensive Assessment at Admission (NQF# 3235). The purpose of this section is to describe the measure's logical specifications.

**Table 5-1. Hospice and Palliative Care Composite Process Measure: Comprehensive Assessment at Admission (NQF #3235)**

Measure Description
Percentage of patient stays during which the patient received all care processes captured by quality measures Patients Treated with an Opioid who are Given a Bowel Regimen, Pain Screening, Pain Assessment, Dyspnea Treatment, Dyspnea Screening, Beliefs/Values Addressed if desired by the patient, Treatment Preferences, as applicable.
Measure Specifications
<p><b>Numerator</b></p> <p><b>Type 1</b> patient stays from the denominator are included in the numerator if they meet the following criteria:</p> <ul style="list-style-type: none"><li>• The patient/responsible party was asked about preference regarding the use of cardiopulmonary resuscitation (<b>F2000A = [1,2]</b>) no more than 7 days prior to admission or within 5 days of the admission date (<math>-7 \leq F2000B - A0220 \leq 5</math> and <b>F2000B ≠ [-,^]</b>) OR preferences regarding life-sustaining treatments other than CPR (<b>F2100A = [1,2]</b>) no more than 7 days prior to admission or within 5 days of the admission date (<math>-7 \leq F2100B - A0220 \leq 5</math> and <b>F2100B ≠ [-,^]</b>) OR preference regarding hospitalization (<b>F2200A = [1,2]</b>) no more than 7 days prior to admission or within 5 days of the admission date (<math>-7 \leq F2200B - A0220 \leq 5</math> and <b>F2200B ≠ [-,^]</b>) <b>AND</b></li><li>• The patient and/or caregiver was asked about spiritual/existential concerns (<b>F3000A = [1,2]</b>) no more than 7 days prior to admission or within 5 days of the admission date (<math>-7 \leq F3000B - A0220 \leq 5</math> and <b>F3000B ≠ [-,^]</b>) <b>AND</b></li><li>• The patient was screened for pain within 2 days of the admission date (<b>J0900B - A0220 ≤ 2</b> and <b>J0900B ≠ [-,^]</b>) and reported that they had no pain (<b>J0900C = [0]</b>) OR The patient was screened for pain within 2 days of the admission date (<b>J0900B - A0220 ≤ 2</b> and <b>J0900B ≠ [-,^]</b>), the patient's pain severity was rated mild, moderate, or severe (<b>J0900C = [1,2,3]</b>), and a standardized pain tool was used (<b>J0900D = [1,2,3,4]</b>)</li></ul>

**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 ≤ 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 = [-,^]**) 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 ≤ 2 and J2030B ≠ [-,^]**)

**AND<sup>23</sup>**

- 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<sup>24</sup>**

- 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 ≤ 1 and N0520B and N0500B ≠ [-,^]**) 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.

***Exclusions***

Patient stays are excluded if the patient is:

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<sup>23</sup> 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.

<sup>24</sup> 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.

- Under 18 years of age as indicated by the birth date (**A0900**) and admission date (**A0220**);  
*OR*
- **Type 2 or 3** patient stays.

**The following specifications describe the calculation of the seven components of the HIS Comprehensive Assessment at Admission (NQF #3235). Meeting the requirements for all seven components is the algorithmic equivalent of the requirements for the overall composite. The components are calculated separately to inform the area(s) by which the there was a failure to receive measure credit.**

### **1. Beliefs/Values Addressed (if desired by the patient)**

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.

#### ***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 ( $-7 \leq F3000B - A0220 \leq 5$  and  $F3000B \neq [-,^]$ )

#### ***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.

### **2. Treatment Preferences**

The percentage of hospice patient stays with chart documentation that the hospice discussed (or attempted to discuss) preferences for life-sustaining treatments.

#### ***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*
- 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  $F2100B \neq [-,^]$ );  
*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 ( $-7 \leq F2200B - A0220 \leq 5$  and  $F2200B \neq [-,^]$ ).

#### ***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.

### **3. Pain Screening**

The percentage of hospice patient stays during which the patient was screened for pain during the initial nursing assessment.

#### ***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 ≤ 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 ≤ 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]**).

#### ***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.

## **4. Pain Assessment**

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.

### ***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.

## **5. Dyspnea Screening**

The percentage of hospice patient stays during which the patient was screened for dyspnea during the initial nursing assessment.

### ***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.

**6. Dyspnea Treatment**

The percentage of hospice patient stays during which the patient screened positive for dyspnea and received treatment within 1 day of the screening.

***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.

**7. Patients Treated with an Opioid who are Given a Bowel Regimen**

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.

***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 5-2. Hospice Visits in the Last Days of Life (claims-based)**

Measure Description
The proportion of hospice patients who have received in-person 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.
Measure Specifications
<p><b>Numerator</b></p> <p>The number of patient stays in the denominator in which the patient and/or caregiver received in person 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.</p> <p>Registered nurse visits are identified by revenue code <b>055x</b> with the presence of Healthcare Common Procedure Coding System (HCPCS) code <b>G0299</b>. Non-telephonic visits by medical social workers are identified by revenue code <b>056x</b> (other than 0569); HCPCS code <b>G0155</b>.</p> <p>The last three days are defined as: the day of death (the same as the date provided in <b>A0270</b>, Discharge Date), the day prior to death (calculated as <b>A0270</b> minus 1), and two days prior to death (calculated as <b>A0270</b> minus 2).</p> <p><b><i>Denominator</i></b></p> <p>All hospice patient stays except those meeting exclusion criteria as identified below.</p> <p><b><i>Exclusions</i></b></p> <p>Patient stays are excluded if the patient:</p> <ul style="list-style-type: none"> <li>• Did not expire in hospice care as indicated by reason for discharge (exclude if the patient discharge status code, <b>PTNT_DSCHRG_STUS_CD</b>, does not equal <b>[40, 41, or 42]</b>) <i>OR</i></li> </ul>

**Measure Description**

- 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]**).  
*OR*
- Was enrolled in hospice for less than three days.

**Table 5-3. Hospice Care Index (claims-based)**

Measure Description
The degree to which a hospice met criteria for care processes occurring during the middle of hospice elections.
Measure Specifications
<b>Total Index Score</b> The sum out of a possible 10 indicators for which a hospice achieved the Index Earned Point Criterion as identified below.
<b>1. Continuous Home Care (CHC) or General Inpatient (GIP) Provided</b>  <b>Numerator</b> The total number of CHC or GIP service days provided by the hospice within a given year. The provision of CHC and GIP are identified on hospice claims by the presence of revenue center codes <b>0652</b> (CHC) and <b>0656</b> (GIP).  <b>Denominator</b> The total number of hospice service days provided by the hospice at any level of care within a given year.  <b>Index Earned Point Criterion</b> Hospices earn a point towards the HCI if they provided at least one CHC or GIP service day within a given year.  <b>2. Gaps in Skilled Nursing Visits</b>  <b>Numerator</b> The number of elections with the hospice where the patient experienced at least one gap between nursing visits exceeding seven days, excluding hospice elections where the patient elected hospice for less than 30 days within a given year.  Days of hospice service are identified based on the presence of revenue center codes <b>0651</b> (RHC), <b>0652</b> (CHC), <b>0655</b> (IRC), and <b>0656</b> (GIP) on hospice claims.  Dates billed for RHC, IRC, and GIP are identified by examining the corresponding revenue center date (which identifies the first day in the sequence of days by level of care) and the revenue center units (which identify the number of days (including the first day) in

### **Measure Description**

the sequence of days by level of care). Dates billed for CHC are identified by examining the revenue center date.<sup>25</sup>

A hospice stay is defined as a sequence of consecutive days for a particular beneficiary that are billed under the hospice benefit. A gap of at least one day without hospice ends the sequence. Hospice stays that include less than 30 consecutive days of hospice are excluded. examined the timing of the provision of nursing visits within those stays.

Skilled nursing visits are identified if any of the following criteria are met:

- The presence of revenue center code **055x** (Skilled Nursing) on the hospice claim. The date of the visit is recorded in the corresponding revenue center date. This code includes both RN and LPN visits.
- The presence of revenue code **0652** (CHC) on the hospice claim.
- The presence of revenue code **0656** (GIP) on the hospice claim.

Based on the above information, if within a hospice stay, there are eight or more consecutive days where no nursing visits are provided, no CHC is provided, and no GIP is provided, then the hospice stay is identified as having a gap in nursing visits greater than seven days.

### ***Denominator***

The total number of elections with the hospice, excluding hospice elections where the patient elected hospice for less than 30 days within a given year.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual hospice score for gaps in nursing visits greater than seven days falls below the 90th percentile ranking among hospices nationally.

## **3. Early Live Discharges**

### ***Numerator***

The total number of live discharges from the hospice occurring within the first seven days of hospice within a given year.

Live discharges are assigned to a particular year based on the date of the live discharge (which corresponds to the through date on the claim indicating the live discharge).

Live discharges occur when the patient discharge status code on a hospice claim does not equal a value from the following list: “30”, “40”, “41”, “42”, “50”, “51”.

Whether a live discharge occurs during the first seven days of hospice is assessed by looking at a patient’s lifetime length of stay in hospice.<sup>26</sup>

<sup>25</sup> Hospices bill each day of CHC on a separate line item on the hospice claim.

<sup>26</sup> That is, measure the first seven days of hospice over a patient’s lifetime and potentially across multiple hospice elections and fiscal years.

## Measure Description

### ***Denominator***

The total number of all live discharges from the hospice within a given year.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual percentage of live discharges on or before the seventh day of hospice falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

## **4. Late Live Discharges**

### ***Numerator***

The total number of live discharges from the hospice occurring on or after 180 days of enrollment in hospice within a given year.

Live discharges are assigned to a particular year based on the date of the live discharge (which corresponds to the through date on the claim indicating the live discharge).

Live discharges occur when the patient discharge status code on a hospice claim does not equal a value from the following list: “30”, “40”, “41”, “42”, “50”, “51”.

Whether a live discharge occurs on or after the 180<sup>th</sup> day of hospice is assessed by looking at a patient’s lifetime length of stay in hospice.

### ***Denominator***

The total number of all live discharges from the hospice within a given year.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual hospice score for live discharges on or after the 180<sup>th</sup> day of hospice falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

## **5. Burdensome Transitions (Type 1) - Live Discharges from Hospice Followed by Hospitalization and Subsequent Hospice Readmission**

### ***Numerator***

The total number of live discharges from the hospice followed by hospital admission within two days, then hospice readmission within two days of hospital discharge within a given year.

Live discharges occur when the patient discharge status code does not equal a value from the following list: “30”, “40”, “41”, “42”, “50”, “51”.

Hospitalizations are found by looking at all Fee-for-Service Medicare inpatient claims.

Overlapping inpatient claims are combined to determine the full length of a hospitalization (looking at the earliest from date and latest through date from a series of overlapping inpatient claims for a beneficiary).

## **Measure Description**

To be counted, the from date of the hospitalization had to occur no more than two days after the date of hospice live discharge. From there, identify all beneficiaries that ended their hospitalization and were readmitted back to hospice no more than two days after the last date of the hospitalization.

### ***Denominator***

The total number of all live discharges from the hospice within a given year.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual hospice score for Type 1 burdensome transitions falls below the 90<sup>th</sup> percentile ranking among hospices nationally.

## **6. Burdensome Transitions (Type 2) - Live Discharges from Hospice Followed by Hospitalization with the Patient Dying in the Hospital**

### ***Numerator***

The total number of live discharges from the hospice followed by a hospitalization within two days of live discharge with death in the hospital within a given year.

Live discharges occur when the patient discharge status code does not equal a value from the following list: “30”, “40”, “41”, “42”, “50”, “51”.

Hospitalizations are found by looking at all Fee-for-Service Medicare inpatient claims.

Overlapping inpatient claims are combined to determine a full length of a hospitalization (looking at the earliest from date and latest through date from a series of overlapping inpatient claims).

To be counted, the from date of the hospitalization had to occur no more than two days after the date of hospice live discharge. From there, identify all beneficiaries whose date of death is listed as occurring during the dates of the hospitalization.

### ***Denominator***

The total number of all live discharges from the hospice within a given year.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual hospice score for Type 2 burdensome transitions falls below the 90th percentile ranking among hospices nationally.

## **7. Per-beneficiary Medicare Spending**

### ***Numerator***

Total Medicare hospice payments received by a hospice within a given year.

The sum of all payments on hospice claims for a particular fiscal year for a particular hospice.

## Measure Description

### ***Denominator***

Total number of beneficiaries electing hospice with the hospice within a given year.

The number of unique beneficiaries on all hospice claims in the same year for a particular hospice.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their average Medicare spending per beneficiary falls below the 90th percentile ranking among hospices nationally.

## **8. Skilled Nursing Care Minutes per Routine Home Care (RHC) Day**

### ***Numerator***

Total skilled nursing minutes provided by a hospice on all RHC service days within a given year.

RHC days are identified by the presence of revenue code **0651** on the hospice claim. Dates of RHC service are identified by the corresponding revenue center date (which identifies the first day of RHC) and the revenue center units (which identifies the number of days of RHC (including the first day of RHC)).

Skilled nursing visits are identified by the presence of revenue code **055x** (Skilled Nursing) on the claim. This code includes both RN and LPN visits.

Skilled nursing visits are counted where the corresponding revenue center date overlaps with one of the days of RHC previously identified.

Minutes of skilled nursing visits are calculated by taking the corresponding revenue center units and multiplying by 15.

### ***Denominator***

The total number of RHC days provided by a hospice within a given year.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual hospice score for Nursing Minutes per RHC day falls above the 10<sup>th</sup> percentile ranking among hospices nationally.

## **9. Skilled Nursing Minutes on Weekends**

### ***Numerator***

Total sum of minutes provided by the hospice during skilled nursing visits during RHC service days occurring on Saturdays or Sundays within a given year.

RHC days are identified by the presence of revenue code **0651** on the hospice claim. Dates of RHC service are identified by the corresponding revenue center date (which identifies the first day of RHC) and the revenue center units (which identifies the number of days of RHC (including the first day of RHC)).

## **Measure Description**

Skilled nursing visits are identified by the presence of revenue code **055x** (Skilled Nursing) on the claim. This code includes both RN and LPN visits.

Skilled nursing visits are counted where the corresponding revenue center date overlaps with one of the days of RHC previously identified.

Minutes of skilled nursing visits are calculated by taking the corresponding revenue center units and multiplying by 15.

### ***Denominator***

Total skilled nursing minutes provided by the hospice during RHC service days within a given year.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual hospice score for percentage of skilled nursing minutes provided during the weekend is above the 10<sup>th</sup> percentile ranking among hospices nationally.

## **10. Visits Near Death**

### ***Numerator***

The number of decedent beneficiaries receiving a visit by a skilled nurse or social worker staff for the hospice in the last three days of the beneficiary's life within a given year.

Whether a beneficiary was in hospice for at least one day during their last three days of life is determined by comparing days of hospice enrollment from hospice claims to their date of death.

Nursing visits and medical social service visits are identified by the presence of revenue codes **055x** (Skilled Nursing) and **056x** (Medical Social Services) on the claim. Dates of those visits are identified by the revenue center date for those revenue codes. The 055x revenue code includes both RN and LPN visits.

Days billed as GIP (revenue code **0656**) are assumed to include nursing visits.

### ***Denominator***

The number of decedent beneficiaries with at least one day of hospice during their last three days of life.

### ***Index Earned Point Criterion***

Hospices earn a point towards the HCI if their individual hospice score for percentage of decedents receiving a visit by a skilled nurse or social worker in the last three days of life falls above the 10th percentile ranking among hospices nationally.

## **Appendix 1: Definitions in Chapter 2 and Chapter 4**

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### ***Chapter 2: Hospice and Palliative Care Composite Process Measure: HIS Comprehensive Assessment at Admission (NQF #3235)***

The following definitions are used in the measure specifications for the HIS Comprehensive Assessment at Admission (NQF# 3235) and may assist understanding the calculation of the measure.

**Target period.** The span of time that defines the HIS Comprehensive Assessment at Admission (NQF# 3235) 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.

**Reporting period.** The span of time that determines which data are used to calculate the HIS Comprehensive Assessment at Admission (NQF# 3235) for a target period. Each target period is associated with a reporting period (e.g., a calendar year reporting period with data updated quarterly for a target period). Records with the target date within the reporting period are assigned to a target period for reporting. The reporting period is not necessarily the same as the target period. For example, a target period can be a calendar quarter while the reporting period can be a calendar 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 HIS Comprehensive Assessment at Admission (NQF #3235) sample.** A **Type 1** patient stay is eligible to be included in the HIS Comprehensive Assessment at

Admission (NQF# 3235) sample if the patient stay has a discharge record (A0250 = [09]) with the discharge date (A0270) within the reporting period. A patient can have multiple stays included in the HIS Comprehensive Assessment at Admission (NQF# 3235) sample. All eligible stays for a patient are included.

For HIS Comprehensive Assessment at Admission (NQF# 3235) calculation purposes, both the admission and the discharge records are assigned to a reporting period and a target period based on the discharge date.

- The patient stays included in a HIS Comprehensive Assessment at Admission (NQF# 3235) sample could span across quarters, which means the admission record could have a target date outside the reporting 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.** The HIS-based quality measure score, including national average, 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.

## *Chapter 4: Hospice Care Index (HCI)*

The following definitions are used in the measure specifications for HCI and may assist understanding of the measure's calculation.

**Indicator.** The HCI component indicators reflect various elements and outcomes of care provided between admission and discharge. The HCI uses information from all ten indicators to collectively represent a hospice's ability to address patients' needs, best practices hospices should observe, and/or care outcomes that matter to consumers. Each indicator is a key component of the HCI measure, and all ten are necessary to derive the HCI score.

**Index Earned Point Criterion.** Each of the ten HCI indicators has a defined threshold for determining whether a hospice receives a point towards its cumulative HCI score. If a hospice meets the criterion for an indicator, it earns a point towards the full index score.

## Appendix 2: Help Desk Contact List

