



Hospice Comprehensive Assessment Quality Measure (QM) Background and Methodology Fact Sheet (NQF #3235)

This fact sheet contains information about the Hospice and Palliative Care Composite Process Measure – Comprehensive Assessment at Admission (NQF #3235), also known as “the Hospice Comprehensive Assessment Quality Measure (QM)”.

Navigating this document—What are you looking for?

About this measure	How to interpret the measure in Patient stay-level and Hospice-level Casper QM Reports	How this measure will be reported
How conditional measures are accounted for in this measure	Measure calculation (numerator, denominator, exclusions)	Frequently Asked Questions about this measure

What is the Hospice and Palliative Care Composite Process Measure – Comprehensive Assessment at Admission (NQF #3235)?

The Hospice and Palliative Care Composite Process Measure – Comprehensive Assessment at Admission measure, also known as “the Hospice Comprehensive Assessment Measure,” captures, in a **single** measure, whether **multiple** key care processes were delivered upon patients’ admissions to hospice. The Hospice Quality Reporting Program (HQRP) Hospice Item Set (HIS) historically captured data on the seven care process quality measures (QM) performed upon patient admission to hospice, listed in **Table 1**. Each of these care processes are individually important, and the Hospice Comprehensive Assessment Measure captures, in a single measure, the proportion of patients for whom the hospice performed **all** seven care processes.

The Hospice Comprehensive Assessment is an “all or none” composite measure, which means that in order to receive credit for the Hospice Comprehensive Assessment measure for any given patient stay, the hospice must perform **all** seven care processes listed in **Table 1** for that patient, as applicable. The Hospice Comprehensive Assessment Measure is **not an average** of the hospice’s performance on individual care processes. As the Hospice Comprehensive Assessment Measure’s “all or none” criterion requires hospices to perform **all** seven care processes in order to receive credit, it is different from an average-based composite measure and sets a higher bar for performance.

Treatment Preferences (NQF #1641)
Beliefs/Values Addressed (if desired by patient) (NQF #1647)
Pain Screening (NQF #1634)
Pain Assessment (NQF #1637)
Dyspnea Screening (NQF #1639)
Dyspnea Treatment (NQF #1638)
Patients Treated with an Opioid Who Are Given a Bowel Regimen (NQF #1617)

How does the Hospice Comprehensive Assessment Measure account for conditional measures?

In addition to being an “all or none” measure, the Hospice Comprehensive Assessment Measure also includes conditional measures. Conditional measures are measures for which inclusion in the denominator is “dependent” or “conditional” on a response to a previous item. For example, for a patient to be included in the denominator of the dyspnea treatment measure (NQF #1638), the patient must have screened positive for dyspnea (NQF #1639).

This is because the hospice would not initiate treatment for shortness of breath unless the patient was actually short of breath.

Three of the seven care process measures accounted for in the Hospice Comprehensive Assessment Measure are conditional measures. The measures, and their conditions for inclusion, are as follows:

- **NQF #1637 Pain Assessment:** To be included in this measure, the patient must screen positive for pain as indicated by J0900C.
- **NQF #1638 Dyspnea Treatment:** To be included in this measure, the patient must screen positive for shortness of breath as indicated by J2030C.
- **NQF #1617 Patients Treated with an Opioid Who Are Given a Bowel Regimen:** To be included in this measure, a scheduled opioid must be initiated or continued as indicated by N0500A.

In the Hospice Comprehensive Assessment Measure, if a patient does not meet the denominator criteria for one of the conditional measures, the hospice will by default ‘receive credit’ for that conditional measure in the calculation of the Hospice Comprehensive Assessment Measure, even without having conducted that care process. For an example of why this is, please refer to the example in **Exhibit 1** of how conditional measures are treated differently in the Hospice Comprehensive Assessment Measure.

Exhibit 1. Example: Conditional Measures and the Hospice Comprehensive Assessment Measure

If a patient screened ‘negative’ for dyspnea, the patient would be ineligible for NQF#1638 Dyspnea Treatment. However, in the calculation of their Hospice Comprehensive Assessment Measure, the hospice would ‘receive credit’ for the Dyspnea Treatment component of the Hospice Comprehensive Assessment Measure even without completing the Dyspnea Treatment care process. This is because, based on the results of the patient’s dyspnea screening, it was appropriate for the hospice not to proceed with dyspnea treatment as the patient does not have dyspnea.

Please note that this methodology applies only to the calculation of the Hospice Comprehensive Assessment Measure, not the calculation of the individual component measures. **Table 2** below details how the three conditional measures are accounted for when calculating the Hospice Comprehensive Assessment Measure.

Table 2. What are the various ways that my hospice may receive credit for a conditional measure in the calculation of the Hospice Comprehensive Assessment Measure?

Note that this methodology does not apply to the calculation of the individual component measures.

NQF #1637 Pain Assessment	<ul style="list-style-type: none"> ➤ The patient reported pain during the pain screening, and a comprehensive pain assessment was completed within 1 day of the initial nursing assessment during which the patient screened positive for pain, including at least five of the required characteristics, OR ➤ The patient reported that they had no pain during the pain screening.
NQF #1638 Dyspnea Treatment	<ul style="list-style-type: none"> ➤ If the patient screened positive for shortness of breath but declined treatment for shortness of breath, OR ➤ If the patient reported shortness of breath during the dyspnea screening, and treatment for shortness of breath was initiated within 1 day of the initial nursing assessment during which the patient screened positive for shortness of breath, OR ➤ The patient screened negative for shortness of breath.
NQF #1617 Patients Treated with an Opioid Who Are Given a Bowel Regimen	<ul style="list-style-type: none"> ➤ There is documentation that a bowel regimen was initiated or continued within 1 day of a scheduled opioid being initiated or continued, OR ➤ There is documentation of why a bowel regimen was not initiated, OR ➤ A scheduled opioid was not initiated or continued.

Calculating the Hospice Comprehensive Assessment Measure

The Hospice Comprehensive Assessment Measure represents the percentage of patient stays during which the patient received **all seven of the individual Hospice Item Set (HIS) care process quality measures (QMs) (NQF #1617, NQF #1634, NQF #1637, NQF #1638, NQF #1639, NQF #1647, NQF #1641) for which they are eligible.**

Exhibit 2 below provides guidance on how to calculate the Hospice Comprehensive Assessment Measure for your hospice. For additional details about the Hospice Comprehensive Assessment Measure, see the [HQRP QM User's Manual](#) (in the Downloads section).

Exhibit 2. Calculating the Hospice Comprehensive Assessment Measure

Step 1: Identify patients that are eligible for the measure denominator. The denominator for the Hospice Comprehensive Assessment Measure includes all patient stays except for those that meet the denominator exclusion criteria outlined below:

Exclusion Criteria: Patients meeting any of the three conditions below will be excluded from the denominator:

1. Patients younger than 18 (as indicated by the birth date (A0900) and admission date (A0220),
2. Patients that have not been discharged from the hospice, as determined by the submission of a Hospice Item Set (HIS)-Discharge record, and
3. Discharged patients that do not have a matching HIS-Admission record.

Step 2: After identifying the patient stays that meet the denominator inclusion criteria (see above), **for each of these patient stays, check the seven component HIS QMs for which you have met the requirements and received credit for** (Remember that you may receive credit for conditional measures even if the patient was not eligible for the conditional QM itself (see **Table 2** above); conditional measures are indicated by “*”):

- Treatment Preferences (NQF #1641)**
- Beliefs/Values Addressed (if desired by patient) (NQF #1647)**
- Pain Screening (NQF #1634)**
- Pain Assessment (NQF #1637)***
- Dyspnea Screening (NQF #1639)**
- Dyspnea Treatment (NQF #1638)***
- Patients Treated with an Opioid Who Are Given a Bowel Regimen (NQF #1617)***

Step 3: For each patient stay, add up the number of component HIS QMs for which you met the requirements:

If your total = 7, this patient stay met the numerator criteria for the Hospice Comprehensive Assessment Measure and you **will receive credit** for this patient for the QM.

If your total is less than 7, this patient stay did not meet the numerator criteria for the Hospice Comprehensive Assessment Measure and you will **not** receive credit for this patient for this QM.

Step 4: To calculate your hospice's overall Hospice Comprehensive Assessment Measure score:
$$\frac{\text{the number of patient stays that met the numerator and received credit for the QM (Step 3)}}{\text{final denominator, after accounting for exclusion criteria (Step 1)}} \times 100$$

Reporting of the Hospice Comprehensive Assessment Measure

Providers are able to view their Hospice Comprehensive Assessment Measure scores on their Certification and Survey Provider Enhanced Reporting (CASPER) Hospice-Level Quality Measure Report and Hospice Patient Stay-Level Quality Measure Report (QM Reports), as well as on their Preview Reports in advance of public reporting on Hospice Compare. For information on accessing and interpreting CASPER QM Reports, please refer to the [CASPER QM Report Fact Sheet](#).

Understanding the footnote “d” on CASPER QM Reports

In addition to the “X”, “b”, “c” and “e” footnotes that providers are familiar with seeing on their CASPER QM Reports, providers may now notice another footnote on their reports: “d.” The footnote “d” indicates that the patient was admitted before the implementation of the measure and will not be included in the measure calculation. **Table 3** below defines each of the footnotes included on the CASPER QM Reports.

As the Hospice Comprehensive Assessment Measure was implemented in the Hospice Quality Reporting Program on April 1, 2017, the footnote “d” in the Hospice Comprehensive Assessment Measure column would indicate that the patient was admitted before this date and thus before the implementation of the measure, and therefore is not included in the measure calculation. For example, if a patient was admitted on March 1, 2017, which is before the implementation of the Hospice Comprehensive Assessment Measure, then this patient would not be included in the measure calculation. Although not eligible for the calculation of the Hospice Comprehensive Assessment Measure, patients admitted prior to April 1, 2017 will still be eligible for the seven component Hospice Item Set measures, and the hospice will be able to review performance on those measures (as applicable).

Table 3. CASPER QM Reports Footnotes

X: The patient met the denominator and numerator criteria for the measure. The hospice will “get credit” for this measure for this patient.
b: The patient met the denominator criteria but not the numerator criteria for the measure. The hospice will not get credit for this measure for this patient.
e: The patient did not meet the denominator criteria for the measure or was excluded from the measure. This measure does not apply to this patient and this patient will not count against or for a hospice in measure calculation.
c: The patient’s admission date was pulled from the discharge record because the admission record is missing. This patient is excluded from measure calculation because of this missing record.
d: The measure was implemented before the patient’s admission date. This patient is excluded from measure calculation for this measure.

For examples of how to interpret patient stay- and hospice-level Casper QM Reports and the Hospice Comprehensive Assessment Measure, see **Exhibits 3** and **4** below, respectively. For more details about CASPER QM Reports, including how to access CASPER QM Reports, please refer to the [CASPER QM Report Fact Sheet](#).

(continued on next page)

Exhibit 3: Patient stay-level Casper QM Report and the Hospice Comprehensive Assessment Measure

Patient stay-level data for sample hospice

Reporting period: 01/01/2017 – 12/31/2017

Patient Name	Patient ID	Admission Date	Discharge Date	Treatment Preferences	Beliefs/Values	Pain Screening	Pain Assessment	Dyspnea Screening	Dyspnea Treatment	Bowel Regimen	Hospice Comprehensive Assessment	Quality Measure Count
Patient F	123456	01/01/2017	05/31/2017	X	X	X	e	b	b	e	d	3
Patient G	234567	04/05/2017	07/08/2017	X	X	b	e	X	X	X	b	5
Patient H	345678	04/18/2017	05/04/2017	X	X	X	X	X	X	X	X	8
Patient J	456789	06/06/2017	06/13/2017	X	X	X	X	X	e	e	X	6
Patient K	567890	08/23/2017	10/30/2017	b	b	X	X	X	X	X	b	5
Patient L	678901	09/10/2017	11/15/2017	X	X	X	e	X	X	X	X	7
Patient M	789012	10/01/2017	12/29/2017	X	X	X	e	X	e	e	X	5
Patient N	890123	11/03/2017	12/31/2017	X	X	X	X	X	X	X	X	8

b = not triggered; **e** = excluded from the QM denominator; **X** = triggered; **d** = measure not implemented based on admission and/or discharge date(s)

This sample hospice had 8 discharged patients during the reporting period. However, not all of these patients triggered the Hospice Comprehensive Assessment Measure.

Patient F: Patient F was admitted on 01/01/2017, before the 04/01/2017 implementation date of the Hospice Comprehensive Assessment Measure. Therefore, the patient is not included in the measure calculation and footnote “d” appears.

Patient G and Patient K: Both Patient G and Patient K did not trigger the Hospice Comprehensive Assessment Measure (footnote “b”). These patients did not trigger the measure because the hospice did not complete one or more of the 7 care processes needed to trigger the measure. For example, the hospice did not complete a pain screening for Patient G and did not ask Patient K about treatment preferences or beliefs and values. Since the pain screening, treatment preferences, and beliefs and values measures are not conditional measures, the hospice did not get credit for the Hospice Comprehensive Assessment Measure for these two patients.

Patient J, Patient L, and Patient M: Patient J, Patient L, and Patient M triggered the Hospice Comprehensive Assessment Measure (footnote “X”). The hospice completed all **applicable** care processes for these patients. You may notice Patient J is excluded from the dyspnea treatment and bowel regimen measures, Patient L is excluded from the pain assessment measure, and Patient M is excluded from the pain assessment, dyspnea treatment, and bowel regimen measures. Because these three measures are conditional measures, the hospice still receives credit for the Hospice Comprehensive Assessment Measure. For example, Patient J was screened for dyspnea and the hospice may have determined the patient did not have any shortness of breath. Therefore, it was appropriate to not initiate dyspnea treatment and Patient J was excluded from this measure. Because the hospice made an appropriate decision by not initiating dyspnea treatment, the hospice is given credit for it when calculating the Hospice Comprehensive Assessment Measure.

Patient H and Patient N: Patient H and Patient N triggered all 7 care processes that make up the Hospice Comprehensive Assessment Measure. Patient H and Patient N, therefore, also received credit for the Hospice Comprehensive Assessment Measure.

Exhibit 4: Hospice-level Casper QM Report and the Hospice Comprehensive Assessment Measure

Hospice-level data for sample hospice
Reporting period: 01/01/2017 – 12/31/2017

Measure Name (NQF ID)	CMS Measure ID	Numerator	Denominator	Hospice Observed Percent
Treatment Preferences (NQF #1641)	H001.01	7	8	87.5
Beliefs/ Values (NQF #1647)	H002.01	7	8	87.5
Pain Screening (NQF #1634)	H003.01	7	8	87.5
Pain Assessment (NQF #1637)	H004.01	4	4	100.0
Dyspnea Screening (NQF #1639)	H005.01	7	8	87.5
Dyspnea Treatment (NQF #1638)	H006.01	5	6	83.3
Bowel Regimen (NQF #1617)	H007.01	5	5	100.0
Hospice Comprehensive Assessment (NQF #3235)	H008.01	5	7	71.4

Looking at the hospice-level data for this sample provider, one can see that this hospice had 5 patients meet the numerator criteria out of a total 7 patients included in the denominator, leading to a measure score of 71.4%. Patients H, J, L, M, and N are the five patients included in the numerator. The denominator is composed of these five patients, Patients G, and Patient K. Please note, Patient F is not included in either the numerator or denominator of the measure since the patient was admitted before the measure implementation date.

Please also note that the measure score for the Hospice Comprehensive Assessment Measure is lower than the measure scores of the 7 component measures. This is because of the “all or none” scoring approach of the measure. For more details on this scoring approach, see the Frequently Asked Question “My hospice’s Hospice Comprehensive Assessment Measure score is lower than the seven component HIS measures, and/or the numerator and denominator data does not match up with the sum of the numerator and denominator data of the seven component HIS measures. Why is this?”.

Frequently Asked Questions

Will hospices need to collect additional data for the Hospice Comprehensive Assessment Measure?

The Hospice Comprehensive Assessment Measure is calculated using existing Hospice Item Set (HIS) data items from the HIS V2.00.0, so there are no new or additional data submission requirements that providers need to comply with for this measure. As long as your hospice has been submitting HIS-Admission and HIS-Discharge records as usual, your hospice should not need to change data collection practices or resubmit any records to accommodate the implementation of the Hospice Comprehensive Assessment Measure.

Will patients that are admitted before April 1, 2017 and discharged after April 1, 2017 be eligible for inclusion in this measure?

Inclusion in the Hospice Comprehensive Assessment Measure is based on the patient's admission date, not the discharge date. Patient admissions occurring before April 1, 2017 will not be included in the measure; a footnote "d" indicating this will appear for these patients on the CASPER QM Report. Patient admissions occurring on or after April 1, 2017 will be eligible for inclusion in the measure calculation; further exclusion criteria for this measure can be found in the "Calculating the Hospice Comprehensive Assessment Measure" section above.

My hospice's Hospice Comprehensive Assessment Measure score is lower than the seven component HIS measures, and/or the numerator and denominator data does not match up with the sum of the numerator and denominator data of the seven component HIS measures. Why is this?

To qualify for the Hospice Comprehensive Assessment Measure numerator, the hospice must complete all seven component processes. For example, if a hospice delivered six of the seven individual care processes, then the hospice would not receive credit for the Hospice Comprehensive Assessment Measure. There is no 'partial credit' for this measure. Additionally, the Hospice Comprehensive Assessment Measure includes conditional measures, which may impact the calculation of the measure numerator. Not all patients qualify for the conditional measures, and in these instances, the Hospice Comprehensive Assessment Measure takes into account when patients are not eligible for the conditional care processes and should receive credit toward the Hospice Comprehensive Assessment Measure calculation. Further, patients admitted prior to April 1, 2017 are not eligible for inclusion in the Hospice Comprehensive Assessment Measure (because these admissions occurred prior to the implementation of this measure), but these patients are still eligible for inclusion in the seven component HIS measures (for more information on the implementation date, see the Frequently Asked Question above). The patient stay-level CASPER QM Report provides information on which patient stays trigger the seven individual HIS quality measures, as well as the Hospice Comprehensive Assessment Measure. For more information on how this measure is calculated, please see the "Composition of the Hospice Comprehensive Assessment Measure" section and **Exhibits 3 and 4** above.

As the Hospice Comprehensive Assessment Measure is not average-based and is instead an "all or none" composite measure, it is possible for the Hospice Comprehensive Assessment Measure score to be lower than the lowest component measure score. To understand why this is the case, refer to the "Composition of the Hospice Comprehensive Assessment Measure" section and see the example below in **Exhibit 5** which illustrates this concept using the context of school performance.

Exhibit 5. Understanding why your Hospice Comprehensive Assessment score may be lower than your individual component scores

The following simplified example, using school performance, may help explain why the “all or none” composition of the Hospice Comprehensive Assessment Measure could result in a lower measure score than your lowest component score.

A school has three students: Alex, John, and Erin. The school was supposed to teach the students three subjects: Math, Science, and English. Let’s look at how the school did:

	Math	Science	English
Alex	Yes	Yes	No
John	No	Yes	Yes
Erin	Yes	Yes	Yes

The school taught Alex: Math and Science.

The school taught John: Science and English.

The school taught Erin: Math, Science, and English.

How well did the school do at teaching each of the subjects?

Teaching Math: 66% – 2 out of 3 students learned Math

Teaching Science: 100% – 3 out of 3 students learned Science

Teaching English: 66% – 2 out of 3 students learned English

How well did the school do at teaching each student all of the subjects (i.e., “all or none” composite measure)?

The school only taught Math, Science, and English to 1 out of 3 students (Erin) – **33%** of students

How does this example relate to the Hospice Comprehensive Assessment Measure?

Calculating how well the school did at teaching *each* of the three subjects is similar to calculating how you did on each of the seven component measures. The rate at which the school taught Math had no relation to its rate of teaching science, just as a hospice’s score on treatment preferences has no relation to its pain screening score. The measure scores, or subjects in this example, are independent of each other.

Calculating how well the school did in teaching each student *all the subjects* is similar to calculating how you did on the Hospice Comprehensive Assessment Measure. Since this composite measure is an “all or none” measure, you have to complete all seven component measure processes to receive credit for the composite, just as you had to teach all three subjects to the students to receive credit in the above example. The composite measure sets a higher performance threshold, as can be seen in the school example, and this makes it possible for the “all or none” composite measure score to be lower than any individual component score.

Where can I find more information about the Hospice Comprehensive Assessment Measure?

For more information about the Hospice Comprehensive Assessment Measure, including measure specifications, please refer to the QM User’s Manual available for download of the HQR [Current Measures Page](#).

Further Questions?

For further questions about the Hospice Comprehensive Assessment Measure, please contact the Hospice Quality Help Desk at the email address:

Hospice Quality Help Desk: HospiceQualityQuestions@cms.hhs.gov

Questions about HIS and general questions about the HQRP program, reporting requirements, reporting deadlines, quality measures, and content-related questions on the Hospice CASPER QM Reports, Hospice Compare and Hospice Provider Preview Reports, can also be directed to this Help Desk.