

**Measure #457 (NQF 0216): Proportion Admitted to Hospice for less than 3 days- National Quality Strategy Domain: Effective Clinical Care**

**2017 OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**MEASURE TYPE:**  
Outcome

**DESCRIPTION:**  
Proportion of patients who died from cancer, and admitted to hospice and spent less than 3 days there

**INSTRUCTIONS:**  
This measure is to be reported a minimum of **once per performance period** for patients who died of cancer during the measurement year. It is anticipated that eligible clinicians who provide services for patients with the diagnosis of cancer will submit this measure.

**Measure Reporting:**  
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**  
Patients who died from cancer who were admitted to hospice

**Denominator Criteria (Eligible Cases):**

**Diagnosis of cancer (ICD-10-CM):** C00.0, C00.1, C00.2, C00.3, C00.4, C00.5, C00.6, C00.8, C00.9, C01, C02.0, C02.1, C02.2, C02.3, C02.4, C02.8, C02.9, C03.0, C03.1, C03.9, C04.0, C04.1, C04.8, C04.9, C05.0, C05.1, C05.2, C05.8, C05.9, C06.0, C06.1, C06.2, C06.80, C06.89, C06.9, C07, C08.0, C08.1, C08.9, C09.0, C09.1, C09.8, C09.9, C10.0, C10.1, C10.2, C10.3, C10.4, C10.8, C10.9, C11.0, C11.1, C11.2, C11.3, C11.8, C11.9, C12, C13.0, C13.1, C13.2, C13.8, C13.9, C14.0, C14.2, C14.8, C15.3, C15.4, C15.5, C15.8, C15.9, C16.1, C16.2, C16.3, C16.4, C16.5, C16.6, C16.8, C17.0, C17.1, C17.2, C17.3, C17.8, C17.9, C18.0, C18.1, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9, C19, C20, C21.0, C21.1, C21.2, C21.8, C22.0, C22.1, C22.2, C22.3, C22.4, C22.7, C22.8, C22.9, C23, C24.0, C24.1, C24.8, C24.9, C25.0, C25.1, C25.2, C25.3, C25.4, C25.7, C25.8, C25.9, C26.0, C26.1, C26.9, C30.0, C30.1, C31.0, C31.1, C31.2, C31.3, C31.8, C31.9, C32.0, C32.1, C32.2, C32.3, C32.8, C32.9, C33, C34.00, C34.01, C34.02, C34.10, C34.11, C34.12, C34.2, C34.30, C34.31, C34.32, C34.80, C34.81, C34.82, C34.90, C34.91, C34.92, C37, C38.0, C38.1, C38.2, C38.3, C38.4, C38.8, C39.0, C39.9, C40.00, C40.01, C40.02, C40.10, C40.11, C40.12, C40.20, C40.21, C40.22, C40.30, C40.31, C40.32, C40.80, C40.81, C40.82, C40.90, C40.91, C40.92, C41.0, C41.1, C41.2, C41.3, C41.4, C41.9, C43.0, C43.10, C43.11, C43.12, C43.20, C43.21, C43.22, C43.30, C43.31, C43.39, C43.4, C43.51, C43.52, C43.59, C43.60, C43.61, C43.62, C43.70, C43.71, C43.72, C43.8, C43.9, C44.00, C44.01, C44.02, C44.09, C44.101, C44.102, C44.109, C44.111, C44.112, C44.119, C44.121, C44.122, C44.129, C44.191, C44.192, C44.199, C44.201, C44.202, C44.209, C44.211, C44.212, C44.219, C44.221, C44.222, C44.229, C44.291, C44.292, C44.299, C44.300, C44.301, C44.309, C44.310, C44.311, C44.319, C44.320, C44.321, C44.329, C44.390, C44.391, C44.399, C44.40, C44.41, C44.42, C44.49, C44.500, C44.501, C44.509, C44.510, C44.511, C44.519, C44.520, C44.521, C44.529, C44.590, C44.591, C44.599, C44.601, C44.602, C44.609, C44.611, C44.612, C44.619, C44.621, C44.622, C44.629, C44.691, C44.692, C44.699, C44.701, C44.702, C44.709, C44.711, C44.712, C44.719, C44.721, C44.722, C44.729, C44.791, C44.792, C44.799, C44.80, C44.81, C44.82, C44.89, C44.90, C44.91, C44.92, C44.99, C45.0, C45.1, C45.2, C45.7, C45.9, C46.0, C46.1,

C46.2, C46.3, C46.4, C46.50, C46.51, C46.52, C46.7, C46.9, C47.0, C47.10, C47.11, C47.12, C47.20, C47.21, C47.22, C47.3, C47.4, C47.5, C47.6, C47.8, C47.9, C48.0, C48.1, C48.2, C48.8, C49.0, C49.10, C49.11, C49.12, C49.20, C49.21, C49.22, C49.3, C49.A1, C49.A2, C49.A3, C49.A4, C49.A5, C49.A9, C49.5, C49.8, C49.9, C4A.0, C4A.10, C4A.11, C4A.12, C4A.20, C4A.21, C4A.22, C4A.30, C4A.31, C4A.39, C4A.4, C4A.51, C4A.52, C4A.59, C4A.60, C4A.61, C4A.62, C4A.70, C4A.71, C4A.72, C4A.8, C4A.9, C50.011, C50.012, C50.019, C50.021, C50.022, C50.029, C50.111, C50.112, C50.119, C50.121, C50.122, C50.129, C50.211, C50.212, C50.219, C50.221, C50.222, C50.229, C50.311, C50.312, C50.319, C50.321, C50.322, C50.329, C50.411, C50.412, C50.419, C50.421, C50.422, C50.429, C50.511, C50.512, C50.519, C50.521, C50.522, C50.529, C50.611, C50.612, C50.619, C50.621, C50.622, C50.629, C50.811, C50.812, C50.819, C50.821, C50.822, C50.829, C50.911, C50.912, C50.919, C50.921, C50.922, C50.929, C51.0, C51.1, C51.2, C51.8, C51.9, C52, C53.0, C53.1, C53.8, C53.9, C54.0, C54.1, C54.2, C54.3, C54.8, C54.9, C55, C56.1, C56.2, C56.9, C57.00, C57.01, C57.02, C57.10, C57.11, C57.12, C57.20, C57.21, C57.22, C57.3, C57.4, C57.7, C57.8, C57.9, C58, C60.0, C60.1, C60.2, C60.8, C60.9, C61, C62.00, C62.01, C62.02, C62.10, C62.11, C62.12, C62.90, C62.91, C62.92, C63.00, C63.01, C63.02, C63.10, C63.11, C63.12, C63.2, C63.7, C63.8, C63.9, C64.1, C64.2, C64.9, C65.1, C65.2, C65.9, C66.1, C66.2, C66.9, C67.0, C67.1, C67.2, C67.3, C67.4, C67.5, C67.6, C67.7, C67.8, C67.9, C68.0, C68.1, C68.8, C68.9, C69.00, C69.01, C69.02, C69.10, C69.11, C69.12, C69.20, C69.21, C69.22, C69.30, C69.31, C69.32, C69.40, C69.41, C69.42, C69.50, C69.51, C69.52, C69.60, C69.61, C69.62, C69.80, C69.81, C69.82, C69.90, C69.91, C69.92, C70.0, C70.1, C70.9, C71.0, C71.1, C71.2, C71.3, C71.4, C71.5, C71.6, C71.7, C71.8, C71.9, C72.0, C72.1, C72.20, C72.21, C72.22, C72.30, C72.31, C72.32, C72.40, C72.41, C72.42, C72.50, C72.59, C72.9, C73, C74.00, C74.01, C74.02, C74.10, C74.11, C74.12, C74.90, C74.91, C74.92, C75.0, C75.1, C75.2, C75.3, C75.4, C75.5, C75.8, C75.9, C76.0, C76.1, C76.2, C76.3, C76.40, C76.41, C76.42, C76.50, C76.51, C76.52, C76.8, C77.0, C77.1, C77.2, C77.3, C77.4, C77.5, C77.8, C77.9, C78.00, C78.01, C78.02, C78.1, C78.2, C78.30, C78.39, C78.4, C78.5, C78.6, C78.7, C78.80, C78.89, C79.00, C79.01, C79.02, C79.10, C79.11, C79.19, C79.2, C79.31, C79.32, C79.40, C79.49, C79.51, C79.52, C79.60, C79.61, C79.62, C79.70, C79.71, C79.72, C79.81, C79.82, C79.89, C79.9, C7A.00, C7A.010, C7A.011, C7A.012, C7A.019, C7A.020, C7A.021, C7A.022, C7A.023, C7A.024, C7A.025, C7A.026, C7A.029, C7A.090, C7A.091, C7A.092, C7A.093, C7A.094, C7A.095, C7A.096, C7A.098, C7A.1, C7A.8, C7B.00, C7B.01, C7B.02, C7B.03, C7B.04, C7B.09, C7B.1, C7B.8, C80.0, C80.1, C80.2, C81.00, C81.01, C81.02, C81.03, C81.04, C81.05, C81.06, C81.07, C81.08, C81.09, C81.10, C81.11, C81.12, C81.13, C81.14, C81.15, C81.16, C81.17, C81.18, C81.19, C81.20, C81.21, C81.22, C81.23, C81.24, C81.25, C81.26, C81.27, C81.28, C81.29, C81.30, C81.31, C81.32, C81.33, C81.34, C81.35, C81.36, C81.37, C81.38, C81.39, C81.40, C81.41, C81.42, C81.43, C81.44, C81.45, C81.46, C81.47, C81.48, C81.49, C81.70, C81.71, C81.72, C81.73, C81.74, C81.75, C81.76, C81.77, C81.78, C81.79, C81.90, C81.91, C81.92, C81.93, C81.94, C81.95, C81.96, C81.97, C81.98, C81.99, C82.00, C82.01, C82.02, C82.03, C82.04, C82.05, C82.06, C82.07, C82.08, C82.09, C82.10, C82.11, C82.12, C82.13, C82.14, C82.15, C82.16, C82.17, C82.18, C82.19, C82.20, C82.21, C82.22, C82.23, C82.24, C82.25, C82.26, C82.27, C82.28, C82.29, C82.30, C82.31, C82.32, C82.33, C82.34, C82.35, C82.36, C82.37, C82.38, C82.39, C82.40, C82.41, C82.42, C82.43, C82.44, C82.45, C82.46, C82.47, C82.48, C82.49, C82.50, C82.51, C82.52, C82.53, C82.54, C82.55, C82.56, C82.57, C82.58, C82.59, C82.60, C82.61, C82.62, C82.63, C82.64, C82.65, C82.66, C82.67, C82.68, C82.69, C82.80, C82.81, C82.82, C82.83, C82.84, C82.85, C82.86, C82.87, C82.88, C82.89, C82.90, C82.91, C82.92, C82.93, C82.94, C82.95, C82.96, C82.97, C82.98, C82.99, C83.00, C83.01, C83.02, C83.03, C83.04, C83.05, C83.06, C83.07, C83.08, C83.09, C83.10, C83.11, C83.12, C83.13, C83.14, C83.15, C83.16, C83.17, C83.18, C83.19, C83.30, C83.31, C83.32, C83.33, C83.34, C83.35, C83.36, C83.37, C83.38, C83.39, C83.50, C83.51, C83.52, C83.53, C83.54, C83.55, C83.56, C83.57, C83.58, C83.59, C83.70, C83.71, C83.72, C83.73, C83.74, C83.75, C83.76, C83.77, C83.78, C83.79, C83.80, C83.81, C83.82, C83.83, C83.84, C83.85, C83.86, C83.87, C83.88, C83.89, C83.90, C83.91, C83.92, C83.93, C83.94, C83.95, C83.96, C83.97, C83.98, C83.99, C84.00, C84.01, C84.02, C84.03, C84.04, C84.05, C84.06, C84.07, C84.08, C84.09, C84.10, C84.11, C84.12, C84.13, C84.14, C84.15, C84.16, C84.17, C84.18, C84.19, C84.40, C84.41, C84.42, C84.43, C84.44, C84.45, C84.46, C84.47, C84.48, C84.49, C84.60, C84.61, C84.62, C84.63, C84.64, C84.65,

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**AND**

Patient encounter(s) during performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

Two or more encounters at the reporting site

**AND**

Patient enrolled in hospice: G9858

**AND**

Patients who died from cancer: G9859

**NUMERATOR:**

Patients who died from cancer and spent fewer than three days in hospice

**Numerator Instructions:**

**INVERSE MEASURE-** A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control.

**Numerator Options:**

*Performance Met:*

Patient spent less than three days in hospice care  
(G9860)

**OR**

*Performance Not Met:*

Patient spent greater than or equal to three days in hospice care (G9861)

**RATIONALE:**

Although the use of hospice and other palliative care services at the end of life has increased, many patients are enrolled in hospice for 3 days or less before their death, which limits the benefit they may gain from these services.

One recent retrospective study of more than 64,000 patients with cancer who were admitted to hospice found that over 16% of those patients were only enrolled in the last three days of life or less (O'Connor, 2014). The rate of patients who do not have a hospice referral prior to death continues to be higher than desired with one study reporting that more than 30% of patients were not referred and of those patients, only 7% had a documented discussion on the option of palliative care (O'Connor, 2015). Patients enrolled in hospice experience increased survival times along with a reduction in resource use such as aggressive end of life care and hospital admissions; benefits that increased the longer patients are enrolled in hospice (Lee, 2015; Langton, 2014).

Langton, J. M., B. Blanch, et al. (2014). "Retrospective studies of end-of-life resource utilization and costs in cancer care using health administrative data: a systematic review." Palliat Med **28**(10): 1167-1196.

Lee, Y. J., J. H. Yang, et al. (2015). "Association between the duration of palliative care service and survival in terminal cancer patients." Support Care Cancer **23**(4): 1057-1062.

O'Connor, T. L., N. Ngamphaiboon, et al. (2015). "Hospice utilization and end-of-life care in metastatic breast cancer patients at a comprehensive cancer center." J Palliat Med **18**(1): 50-55.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

A 2012 American Society of Clinical Oncology (ASCO) Provisional Clinical Opinion (PCO) addressed the integration of palliative care (PC) services into standard oncology care at the time a person is diagnosed with metastatic cancer and/or high symptom burden.

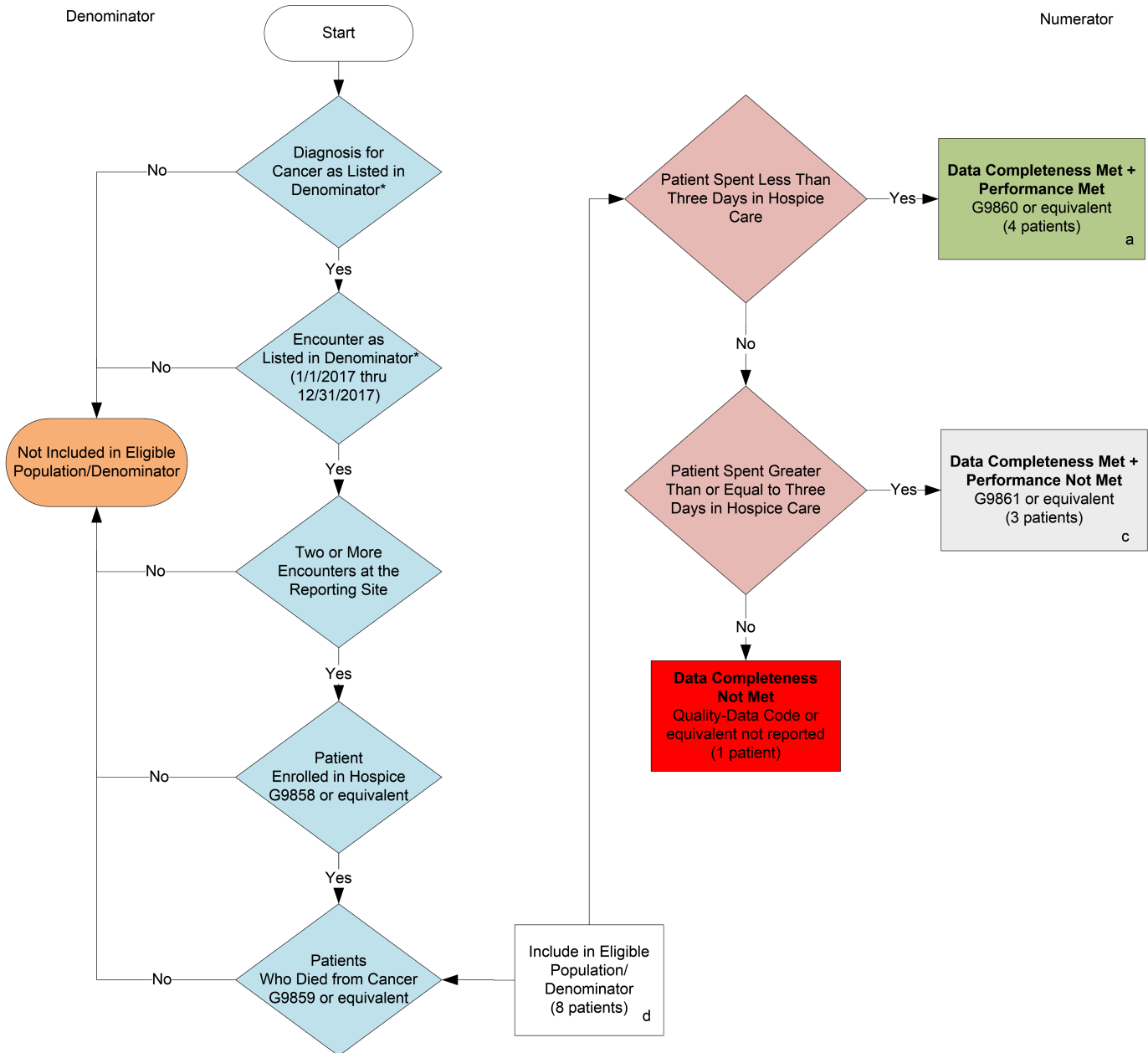
Seven published randomized trials demonstrate the feasibility of providing various components of PC alongside usual oncology care. There is, however, a dearth of data evaluating the integration of modern PC practices into standard oncology care, especially in concert with ongoing antitumor therapy. Overall, the addition of PC interventions to standard oncology care delivered via different models to patients with cancer provided evidence of benefit.

Citation: Smith TJ, Temin S, Alesi ER, et al. American Society of Clinical Oncology Provisional Clinical Opinion: The Integration of Palliative Care into Standard Oncology Care. *J Clin Oncol* 2012;30:880-887. Available at: [Institute for Quality Website](#)

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**2017 Registry Individual Measure Flow**  
**#457 NQF #0216: Proportion Admitted To Hospice for Less Than 3 Days**



**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=4 patients)} + \text{Performance Not Met (c=3 patients)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=4 patients)}}{\text{Data Completeness Numerator (7 patients)}} = \frac{4 \text{ patients}}{7 \text{ patients}} = 57.14\%$$

\*See the posted Measure Specification for specific coding and instructions to report this measure.

A lower calculated performance rate for this measure indicates better clinical control and care.

NOTE: Reporting Frequency: Patient-process

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 The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.

v1

**2017 Registry Individual Measure Flow**  
**#457 NQF #0216: Proportion Admitted To Hospice For Less Than 3 Days**

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator
2. Check Diagnosis for Cancer as Listed in the Denominator:
  - a. If Diagnosis for Cancer as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis for Cancer as Listed in the Denominator equals Yes, proceed to Encounter Performed.
3. Check Encounter Performed as Listed in the Denominator:
  - a. If Encounter Performed as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Encounter Performed as Listed in the Denominator equals Yes, proceed to Two or More Encounters at the Reporting Site.
4. Check Two or More Encounters at the Reporting Site:
  - a. If Two or More Encounters at the Reporting Site equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Two or More Encounters at the Reporting Site equals Yes, proceed to Patient Enrolled in Hospice.
5. Check Patient Enrolled in Hospice:
  - a. If Patient Enrolled in Hospice equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Patient Enrolled in Hospice equals Yes, include in Eligible Population.
6. Denominator Population:
  - a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation.
7. Start Numerator
8. Check Patient Spent Less Than Three Days in Hospice Care:
  - a. If Patient Spent Less Than Three Days in Hospice Care equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 patients in Sample Calculation.
  - c. If Patient Spent Less Than Three Days in Hospice Care equals No, proceed to Patient Spent Greater or Equal to Three Days in Hospice Care.

9. Check Patient Spent Greater or Equal to Three Days in Hospice Care:
  - a. If Patient Spent Greater or Equal to Three Days in Hospice Care equals Yes, include in Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 3 patients in the Sample Calculation.
  - c. If Patient Spent Greater or Equal to Three Days in Hospice Care equals No, proceed to Data Completeness Not Met.
10. Check Data Completeness Not Met:
  - a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the Data Completeness numerator in the sample calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=4 patients)} + \text{Performance Not Met (c=3 patients)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=4 patients)}}{\text{Data Completeness Numerator (7 patients)}} = \frac{4 \text{ patients}}{7 \text{ patients}} = 57.14\%$$