



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

Brief Measure Information

NQF #: 0384e

Corresponding Measures: 0384

De.2. Measure Title: Oncology: Medical and Radiation - Pain Intensity Quantified

Co.1.1. Measure Steward: American Society of Clinical Oncology

De.3. Brief Description of Measure: Percentage of patient visits, regardless of patient age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy in which pain intensity is quantified

1b.1. Developer Rationale: An estimated 1.7 million new cases of cancer are diagnosed in the US each year. (1) Pain is a commonly occurring symptom for cancer patients as 30% to 50% (510,000 to 850,000 each year based on current statistics) will experience moderate to severe pain.(2) Initial and ongoing pain assessments are essential to determine the pathophysiology of pain and ensure proper pain management. According to the National Comprehensive Cancer Network, there is increasing evidence in oncology that survival is linked to symptom reporting and control and that pain management contributes to broad quality-of-life improvement.(3) Evidence has shown a positive association between higher symptom scores and higher rates of documentation and clinical actions taken. (4) A study published this year (2019) provides further evidence that symptom monitoring following treatment for cancer is associated with increased survival. (5) Cancer patients have reported that pain interferes with their mood, work, relationships with other people, sleep and overall enjoyment of life.(6) To maximize patient outcomes, pain management is an essential part of oncologic management.(3)

(1) National Cancer Institute. Cancer statistics. National Institutes of Health. 2017. <https://www.cancer.gov/about-cancer/understanding/statistics>

(2) Wiffen PJ, Wee B, Derry S, Bell RF, Moore RA. Opioids for cancer pain – an overview of Cochrane reviews. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD012592. DOI: 10.1002/14651858.CD012592.pub2.

(3) National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology. Adult cancer pain Version 1.2020. April 8, 2020. <http://www.nccn.org>

(4) Seow H, Sussman J, Martelli-Reid L, Pond G, Bainbridge D. Do high symptom scores trigger clinical actions? An audit after implementing electronic symptom screening. J Oncol Pract. 2012 Nov;8(6):e142-8. doi: 10.1200/JOP.2011.000525.

(5) Denis F, Basch E, Septans AL, Bennouna J, Urban T, Dueck AC, Letellier C. Two-Year Survival Comparing Web-Based Symptom Monitoring vs Routine Surveillance Following Treatment for Lung Cancer. JAMA. 2019 Jan 22;321(3):306-307. doi: 10.1001/jama.2018.18085.

(6) Moryl N, Dave V, Glare P, Bokhari A, Malhotra VT, Gulati A, et al. Patient-reported outcomes and opioid use by outpatient cancer patients. J Pain. 2018. Mar;19(3):278-290.

S.4. Numerator Statement: Patient visits in which pain intensity is quantified

S.6. Denominator Statement: All patient visits, regardless of patient age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy

S.8. Denominator Exclusions: None

De.1. Measure Type: Process

S.17. Data Source: Electronic Health Records

S.20. Level of Analysis: Clinician : Group/Practice, Clinician : Individual

IF Endorsement Maintenance – Original Endorsement Date: Jul 31, 2008 **Most Recent Endorsement Date:** Aug 09, 2012

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

2100:Paired Measure 0383 and 0384

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? This measure is paired with registry measure NQF #0383 Oncology: Plan of Care for Pain, which assesses whether patients who report pain have a documented plan of care. These measures together represent a stepwise approach to attenuating pain that commonly results from cancer therapy. This measure requires the initial and ongoing assessment and quantification of pain which are required to formulate the most appropriate plan with the intent of improving patient outcomes.

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.**

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form

[NQF_evidence_attachment_0384e_1.4.21-637546829516338629.docx](#)

1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

No

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.

An estimated 1.7 million new cases of cancer are diagnosed in the US each year. (1) Pain is a commonly occurring symptom for cancer patients as 30% to 50% (510,000 to 850,000 each year based on current statistics) will experience moderate to severe pain.(2) Initial and ongoing pain assessments are essential to determine the pathophysiology of pain and ensure proper pain management. According to the National Comprehensive Cancer Network, there is increasing evidence in oncology that survival is linked to symptom reporting and control and that pain management contributes to broad quality-of-life improvement.(3) Evidence has shown a positive association between higher symptom scores and higher rates of documentation and clinical actions taken. (4) A study published this year (2019) provides further evidence that symptom monitoring following treatment for cancer is associated with increased survival. (5) Cancer patients have reported that pain interferes with their mood, work, relationships with other people, sleep and overall enjoyment of life.(6) To maximize patient outcomes, pain management is an essential part of oncologic management.(3)

(1) National Cancer Institute. Cancer statistics. National Institutes of Health. 2017. <https://www.cancer.gov/about-cancer/understanding/statistics>

(2) Wiffen PJ, Wee B, Derry S, Bell RF, Moore RA. Opioids for cancer pain – an overview of Cochrane reviews. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD012592. DOI: 10.1002/14651858.CD012592.pub2.

(3) National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology. Adult cancer pain Version 1.2020. April 8, 2020. <http://www.nccn.org>

(4) Seow H, Sussman J, Martelli-Reid L, Pond G, Bainbridge D. Do high symptom scores trigger clinical actions? An audit after implementing electronic symptom screening. J Oncol Pract. 2012 Nov;8(6):e142-8. doi: 10.1200/JOP.2011.000525.

(5) Denis F, Basch E, Septans AL, Bannouna J, Urban T, Dueck AC, Letellier C. Two-Year Survival Comparing Web-Based Symptom Monitoring vs Routine Surveillance Following Treatment for Lung Cancer. JAMA. 2019 Jan 22;321(3):306-307. doi: 10.1001/jama.2018.18085.

(6) Moryl N, Dave V, Glare P, Bokhari A, Malhotra VT, Gulati A, et al. Patient-reported outcomes and opioid use by outpatient cancer

patients. J Pain. 2018. Mar;19(3):278-290.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. *(This is required for maintenance of endorsement. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

The 2021 MIPS Historical Quality Benchmarks report for the eCQM of Pain Intensity Quantified state the average performance rate is 56.33. The range of performance rate is 98.36, with a minimum rate of 0.44 and a maximum rate of 98.8. The decile 5 range is 85.32 – 91.88.

CMS provided 2016 PQRS reporting data for analysis. Based on the 93 included physicians from 2016 PQRS eMeasure reporting, the mean performance rate is 0.68 the median performance rate is 0.79 and the mode is 1.0. The standard deviation is 0.31. The range of the performance rate is 0.96, with a minimum rate of 0.04 and a maximum rate of 1.0. The interquartile range is 0.53 (0.96–0.44).

The CMS PQRS Experience report provides these additional average performance rates for previous years:

Average performance rate:

2015: 75.9%

2014: 84.8%

2013: 82.7%

It is important to note that both PQRS and now the Merit-based Incentive Payment System (MIPS), have been and remain a voluntary reporting program. Participants are allowed to self-select measures and may choose those that will result in high performance rates. As a result, performance rates may not be nationally representative.

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

Despite the availability of clinical guidelines and increased attention on its assessment and management, pain continues to be a commonly occurring symptom in patients with cancer and may not be appropriately assessed.

One retrospective analysis sought to evaluate compliance with pain assessment recommendations from the NCCN guidelines. The study found an 84% compliance with pain intensity documentation at hospital admission (1). Furthermore, the study found that pain characteristics were documented in 69% of patients at pain onset and pain reassessed only 43% of the time after opioids were administered.(1) These results suggest that pain is not assessed appropriately and therefore not optimally managed. Based on the current prevalence of cancer-related pain, assessment is essential to decrease the impact of pain and its sequelae.

Two meta-analyses confirmed that the prevalence of cancer pain has not changed significantly in the past decades.

The meta-analysis published in 2007 reported significant rates of pain in cancer patients:

- 64% in advanced, metastatic or terminal disease
- 59% during anticancer treatment
- 33% after curative cancer treatment

The analysis found that 1/3 of patients graded their pain as moderate or severe. Patients with head/neck cancer had the highest prevalence of pain (70%), followed by gastrointestinal cancer (59%), gynecological (60%), lung/bronchus (55%), breast (54%), and urogenital (52%).(2)

An updated systematic review and meta-analysis was published in 2016 and reported prevalence of pain:

- 66% in advanced, metastatic or terminal disease
- 55% during anticancer treatment
- 39% after curative cancer treatment

This analysis found that 38% or all patients graded their pain as moderate to severe. A higher pain prevalence was associated with lung, gastrointestinal, head and neck, and breast cancer.(3)

A recent analysis of registry data for chronic pain cancer patients found average pain intensity reported as mild (24.6% of patients), moderate (41.5%), and severe (33.9%). The study also indicated that patient report of pain relief is inversely related to the average pain intensity reported.(4) These data suggest that assessing and managing a cancer patient's pain is critical and there remains significant room for improvement in assessing and mitigating cancer-related pain.

A prospective study of changes in pain severity of cancer patients found that, at initial assessment, 47% of patients reported pain. At follow-up, the patients with pain at initial assessment reported reduced pain (32.2%), stable pain (48.2%) and worse pain (19.6%). Of the 53% of patients reporting no pain at initial assessment, 82.6% reported stable pain and 17.4% reported worse pain at follow-up assessment.(4) This study highlights the importance of initial and ongoing assessments of pain to identify gaps and ensure proper pain management.

The Eastern Cooperative Oncology Group (ECOG) trial E2702 of 2,761 patients with invasive cancer noted one fifth experienced pain deterioration within 1 month after initial assessment. The analysis indicated inadequate pain management, baseline pain severity, and certain patient demographic and disease characteristics are associated with pain deterioration.

(1) El Rahi C, Murillo JR, Zaghoul H. Pain assessment practices in patients with cancer admitted to the oncology floor. J Hematol Oncol Pharm. 2017;7(3):109-113.

(2) van den Beuken-van Everdingen MH, de Rijke JM, Kessels AG, Schouten HC, van Kleef M, Patijn J. Prevalence of pain in patients with cancer: a systematic review of the past 40 years. Ann Oncol. 2007 Sep;18(9):1437-49.

(3) van den Beuken-van Everdingen MH, Hochstenbach LM, Joosten EA, Tjan-Heijnen VC, Janssen DJ. Update on prevalence of pain in patients With cancer: systematic review and meta-analysis. J Pain Symptom Manage. 2016 Jun;51(6):1070-1090.

(4) Moryl N, Dave V, Glare P, Bokhari A, Malhotra VT, Gulati A, et al. Patient-reported outcomes and opioid use by outpatient cancer patients. J Pain. 2018. Mar;19(3):278-290.

(5) Zhao F, Chang VT, Cleeland C, Cleary JF, Mitchell EP, Wagner LI, Fisch MJ. Determinants of pain severity changes in ambulatory patients with cancer: an analysis from Eastern Cooperative Oncology Group trial E2702. J Clin Oncol. 2014.Feb 1;32(4):312-9.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. *(This is required for maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.) For measures that show high levels of performance, i.e., "topped out", disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

While this measure is included in federal reporting programs, those programs have not yet made disparities data available for us to analyze and report.

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4

A number of studies have documented disparities in cancer treatment and in the management of cancer-related pain.(1-3). One prospective observational study of patients with breast, prostate, colon/rectum, or lung cancer found that 67% reported pain upon initial assessment. An estimated 33% of patients did not receive adequate analgesic treatment. Furthermore, the study results estimate that the odds of inadequate pain treatment for non-Hispanic whites were half those of minorities.(4)

Another study highlights the importance of ongoing pain assessments in cancer patients, and particularly in minorities, to determine pain intensity at follow up. Despite analgesic use at initial assessment, Hispanics had 3.4 times higher odds of moderate to severe pain at follow-up as compared to Whites. The study also reports that as compared to Whites, Blacks had 2 times higher odds of moderate to severe pain at follow-up.(5)

(1) Gorin SS, Heck JE, Cheng B, Smith SJ. Delays in breast cancer diagnosis and treatment by racial/ethnic group. Arch Intern Med. 2006 Nov 13;166(20):2244-52.

(2) Payne R, Medina E, Hampton JW. Quality of life concerns in patients with breast cancer: evidence for disparity of outcomes and experiences in pain management and palliative care among African-American women. Cancer. 2003 Jan 1;97(1 Suppl):311-7.

(3) Anderson KO, Green CR, Payne R. Racial and ethnic disparities in pain: causes and consequences of unequal care. J Pain. 2009 Dec;10(12):1187-204.

(4) Fisch MJ, Lee JW, Weiss M, Wagner LI, Chang VT, Cella D, Manola JB, Minasian LM, McCaskill-Stevens W, Mendoza TR, Cleeland

CS. Prospective, observational study of pain and analgesic prescribing in medical oncology outpatients with breast, colorectal, lung, or prostate cancer. J Clin Oncol. 2012 Jun 1;30(16):1980-8.
(5) Zhao F, Chang VT, Cleeland C, Cleary JF, Mitchell EP, Wagner LI, Fisch MJ. Determinants of pain severity changes in ambulatory patients with cancer: an analysis from Eastern Cooperative Oncology Group trial E2Z02. J Clin Oncol. 2014.Feb 1;32(4):312-9.

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):
Cancer

De.6. Non-Condition Specific(check all the areas that apply):
Person-and Family-Centered Care

De.7. Target Population Category (Check all the populations for which the measure is specified and tested if any):
Elderly

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

The measure specifications are included as an attachment with this submission. Additional measure details may be found at: <https://ecqi.healthit.gov/eligible-professional-eligible-clinician-ecqms>. Value set details at: <https://vsac.nlm.nih.gov/>.

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is an eMeasure Attachment: EP_EC_CMS157v6_NQF0384_ONC_PainQuantified-637546829513995435.zip

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

Attachment Attachment: 0384_OncologyPainIntensity_ValueSets_2017September29-637546829511339593.xlsx

S.2c. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

No, this is not an instrument-based measure Attachment:

S.2d. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Not an instrument-based measure

S.3.1. For maintenance of endorsement: Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

No

S.3.2. For maintenance of endorsement, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

0384e was submitted in Fall 2019 cycle and did not pass testing. Since then, measure stewardship was transitioned from PCPI to ASCO. ASCO conducted testing of the measure and this submission only updates the measure testing. The information provided

below was from PCPI for their Fall 2019 submission:

Beginning with 2019 implementation, the measure was revised to have two populations: 1.) All patient visits for patients with a diagnosis of cancer currently receiving chemotherapy OR 2.) All patient visits for patients with a diagnosis of cancer currently receiving radiation therapy. This change was made to more clearly delineate the denominator requirements to promote accurate implementation. Based on feedback we heard regarding how vendors have implemented the measure, there was an inconsistent approach to applying the measure criteria. Therefore, we decided to split this measure out into two populations, based on the type of treatment the patient is receiving, which can be implemented in both the eCQM and registry versions of this measure. Though the measure is split into two, the measure still requires only one performance rate for reporting.

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Patient visits in which pain intensity is quantified

S.5. Numerator Details (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Time Period for Data Collection: At each visit within the measurement period

Guidance: Pain intensity should be quantified using a standard instrument, such as a 0-10 numeric rating scale, visual analog scale, a categorical scale, or a pictorial scale. Examples include the Faces Pain Rating Scale and the Brief Pain Inventory (BPI).

HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.

S.6. Denominator Statement (Brief, narrative description of the target population being measured)

All patient visits, regardless of patient age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy

S.7. Denominator Details (All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Time Period for Data Collection: 12 consecutive months

Guidance:

This measure is an episode-of-care measure; the level of analysis for this measure is every visit for patients with a diagnosis of cancer who are also currently receiving chemotherapy or radiation therapy during the measurement period. For patients receiving radiation therapy, pain intensity should be quantified at each radiation treatment management encounter. For patients receiving chemotherapy, pain intensity should be quantified at each face-to-face encounter with the physician while the patient is currently receiving chemotherapy. For purposes of identifying eligible encounters, patients "currently receiving chemotherapy" refers to patients administered chemotherapy within 30 days prior to the encounter AND administered chemotherapy within 30 days after the date of the encounter.

HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.

S.8. Denominator Exclusions (Brief narrative description of exclusions from the target population)

None

S.9. Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes

with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

Not applicable

S.10. Stratification Information (Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)

Consistent with the CMS Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer, and have included these variables as recommended data elements to be collected.

S.11. Risk Adjustment Type (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

S.12. Type of score:

Rate/proportion

If other:

S.13. Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Higher score

S.14. Calculation Algorithm/Measure Logic (Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)

This measure is comprised of two populations but is intended to result in one reporting rate. The reporting rate is the aggregate of Population 1 and Population 2, resulting in a single performance rate. For the purposes of this measure, the single performance rate can be calculated as follows:

Performance Rate = (Numerator 1 + Numerator 2)/ (Denominator 1 + Denominator 2)

Calculation algorithm for Population 1: Patient visits for patients with a diagnosis of cancer currently receiving chemotherapy

1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator

If the patient does not meet the numerator, this case represents a quality failure.

Calculation algorithm for Population 2: Patient visits for patients with a diagnosis of cancer currently receiving radiation therapy

1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator

If the patient does not meet the numerator, this case represents a quality failure.

S.15. Sampling (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample

size.)

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

Not applicable. The measure does not require sampling or a survey.

S.16. Survey/Patient-reported data (If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)

Specify calculation of response rates to be reported with performance measure results.

Not applicable

S.17. Data Source (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.18.

Electronic Health Records

S.18. Data Source or Collection Instrument (Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)

IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

EHR data was pulled from ASCO's CancerLinQ real-world data platform and summarized at the physician level. CancerLinQ collects, organizes, cleans, structures, and analyzes real-world cancer care data from multiple EHR/healthcare IT systems and practices across the United States.

S.19. Data Source or Collection Instrument (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

No data collection instrument provided

S.20. Level of Analysis (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Clinician : Group/Practice, Clinician : Individual

S.21. Care Setting (Check ONLY the settings for which the measure is SPECIFIED AND TESTED)

Other:Oncology/Outpatient Clinic; Radiation Oncology Dept/Clinic, Outpatient Services

If other:

S.22. COMPOSITE Performance Measure - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

Not applicable. The measure is not a composite.

2. Validity – See attached Measure Testing Submission Form

NQF_documents_0384e_nqf_testing_attachment_EHR_1.4.21-637546829518682447.docx

2.1 For maintenance of endorsement

Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

Yes

2.2 For maintenance of endorsement

Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

Yes

2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1,2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required

questions.

No - This measure is not risk-adjusted

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields) Update this field for **maintenance of endorsement**.

ALL data elements are in defined fields in electronic health records (EHRs)

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources. For **maintenance of endorsement**, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

Not applicable

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Required for maintenance of endorsement. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

Please reference the Feasibility Score Card submitted by PCPI for the Fall 2019 cycle.

We have not identified any areas of concern or made any modifications as a result of feasibility testing and operational use of the measure in relation to data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, and other feasibility issues unless otherwise noted.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

The Measure, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measure for commercial gain, or incorporation of the Measure into a product or service that is sold, licensed or distributed for commercial gain.

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ASCO encourages the use of the Measure by other health care professionals, where appropriate.

THE MEASURE AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Specific Plan for Use	Current Use (for current use provide URL)

4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

Merit-based Incentive Payment System (MIPS)-Sponsored by the Centers for Medicare and Medicaid Services (CMS)

Prior to 2016, this measure was used for Eligible Providers (EPs) in the Physician Quality Reporting System (PQRS). As of 2017, PQRS has been replaced by the MIPS program. MIPS is a national performance-based payment program that uses performance scores across several categories to determine payment rates for EPs. MIPS takes a comprehensive approach to payment by basing consideration of quality on a set of evidence-based measures that were primarily developed by clinicians, thus encouraging improvement in clinical practice and supporting advances in technology that allow for easy exchange of information.

4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

According to the CY 2019 Quality Payment Program final rule, Physician Compare has continued to pursue a phased approach to public reporting under MACRA. CMS intends to make all measures under MIPS quality performance category available for public reporting on Physician Compare. These measures include those reported via all available submission methods for MIPS-eligible clinicians and groups. Because this measure has been in use for at least one year and meets the minimum sample size requirement for reliability, this measure meets criteria for public reporting but has not yet been included in Physician Compare.

4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

Because this measure has been in use for at least one year and meets the minimum sample size requirement for reliability, this

measure meets criteria for public reporting. 2018 data will be available for public reporting on Physician Compare in late 2019.

4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.

Note: This measure was developed by the PCPI and ASCO acquired stewardship in July 2020. The information in section 4a was provided by PCPI.

The PCPI measure development process is a rigorous, evidence-based process that has been refined and standardized over the past fifteen years, since the PCPI's inception. Throughout its tenure, several key principles have guided the development of performance measures by the PCPI, including the following which underscore the role those being measured have played in the development process and later through implementation feedback:

Collaborative Approach to Measure Development

PCPI measures have been developed through cross-specialty, multi-disciplinary technical expert panels. Representatives of all relevant disciplines of medicine and other health care professionals are invited to participate as equal contributors to the measure development process. In addition, the PCPI strives to include on its panels, individuals representing the perspectives of patients, consumers, private health plans, and employers. Liaisons from key measure development organizations, including The Joint Commission and NCQA participate in the PCPI's measure development process to ensure harmonization of measures; measure methodologists, coding and informatics experts also are considered important members of the expert panel. This broad-based approach to measure development maximizes measure buy-in from stakeholders and minimizes bias toward any individual specialty or stakeholder group.

Conduct Public Comment Period

Input from multiple stakeholders is integral to the measure development process. In particular, feedback is critical from those clinicians who will implement these measures. To that end, all measures are released for a 30-day public and PCPI member comment period. All comments are reviewed by the technical expert panel to determine whether measure modifications are needed based on comments received.

Feedback Mechanism

The PCPI has a dedicated process set up to receive comments and questions from implementers. As comments and questions are received, they are shared with appropriate staff for follow up. If comments or questions require expert input, these are shared with the PCPI's technical expert panels to determine if measure modifications may be warranted. Additionally, for PCPI measures included in federal reporting programs, there is a system that has been set up to elicit timely feedback and responses from PCPI staff in consultation with technical expert panel members, as appropriate.

4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

See description in 4a2.1.1 above.

4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.

Describe how feedback was obtained.

In addition to the feedback obtained from a cross-specialty, multi-disciplinary technical expert panel during the measure development and maintenance process, the PCPI obtains feedback via a public comment period and an email-based process set up to receive measure inquiries from implementers. The public comment period feedback is provided via an online survey tool.

4a2.2.2. Summarize the feedback obtained from those being measured.

We received feedback stating that Joint Commission standards already require accredited hospitals to establish policies and procedures that address comprehensive clinical assessment of pain.

We also received recommendations to consider potential denominator exclusions.

4a2.2.3. Summarize the feedback obtained from other users

See summary in 4a2.2.2 above.

4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

While pain assessment has been adopted by the Joint Commission as a requirement for hospital accreditation, at least one-third of radiation therapy services are provided at free-standing centers and the majority of chemotherapy administration is provided in non-hospital settings. This measure is assessed at the physician level rather than the hospital level. Existing evidence suggests that cancer pain is not being optimally assessed or managed. This gap in care is likely to be more pronounced in private practices where Joint Commission standards do not apply.

The Oncology expert panel specifically designed this measure without denominator exclusions since addressing pain is such a critical aspect of care for all cancer patients.

Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included.)

If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

While the PCPI creates measures with an ultimate goal of improving the quality of care, measurement is a mechanism to drive improvement but does not equate with improvement. Measurement can help identify opportunities for improvement with actual improvement requiring making changes to health care processes and structure. In order to promote improvement, quality measurement systems need to provide feedback to front-line clinical staff in as close to real time as possible and at the point of care whenever possible. (1)

1. Conway PH, Mostashari F, Clancy C. The future of quality measurement for improvement and accountability. JAMA. 2013 Jun 5;309(21):2215-6.

4b2. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.

We are not aware of any unintended consequences related to this measurement.

4b2.2. Please explain any unexpected benefits from implementation of this measure.

We are not aware of any unexpected benefits from implementation of this measure.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

Yes

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

0177 : Improvement in pain interfering with activity
0192 : Residents who experience moderate to severe pain during the 7-day assessment period (risk-adjusted)
0420 : Pain Assessment and Follow-Up
0523 : Pain Assessment Conducted
0676 : Percent of Residents Who Self-Report Moderate to Severe Pain (Short Stay)
0677 : Percent of Residents Who Self-Report Moderate to Severe Pain (Long Stay)
1628 : Patients with Advanced Cancer Screened for Pain at Outpatient Visits
1637 : Hospice and Palliative Care -- Pain Assessment

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization of Related Measures

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications harmonized to the extent possible?

Yes

5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

There are several NQF-endorsed measures related to measure # 0384e Oncology: Medical and Radiation – Pain Intensity Quantified. Most related measures are assessed within different settings and at distinct levels of analysis. NQF measure #177 assesses the percentage of home health episodes with improvements in the frequency of a patient's pain. The measure is assessed at the facility level and within the home care setting. NQF measure #192 assesses the percentage of nursing home residents or patients within skilled nursing facilities who experience moderate to severe pain. In contrast to the PCPI measure, measure #192 is assessed at the facility level. NQF measure #523 is also assessed at the facility level and focuses on whether home health patients are assessed for pain. NQF measures #676 and 677 are facility-based measures and assess whether patients report moderate or severe pain while in post-acute care as short-stay or long stay patients, respectively. Measure #1628 is limited to patients with Stage IV diagnosis and is identified as a measure to be assessed at the facility, health plan or integrated delivery system level of analysis. NQF measure #1637 is also a facility level measure and assesses whether hospice or palliative care patients are assessed for pain. NQF measure #420 is also related to the PCPI measure but is a claims-based measure. Measure #420 generally assesses pain whereas the PCPI measure assesses cancer treatment-related pain which represents a current gap in care.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

Not applicable.

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

No appendix Attachment:
Contact Information
Co.1 Measure Steward (Intellectual Property Owner): American Society of Clinical Oncology Co.2 Point of Contact: Angela, Kennedy, angela.kennedy@asco.org , 571-483-1656- Co.3 Measure Developer if different from Measure Steward: American Society of Clinical Oncology Co.4 Point of Contact: Angela, Kennedy, angela.kennedy@asco.org , 571-483-1656-
Additional Information
Ad.1 Workgroup/Expert Panel involved in measure development Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development. <p>Note: This measure was developed by PCPI and ASCO acquired stewardship in July 2020. The following information was provided by PCPI.</p> <p>PCPI measures are developed through cross-specialty, multi-disciplinary technical expert panels (TEPs). Representatives of all relevant disciplines of medicine and other health care professionals are invited to participate. In addition, the PCPI strives to include on its TEPs individuals representing the perspectives of patients, consumers, private health plans, and employers. Measure methodologists, and coding and informatics experts also are considered important members of the TEP. All TEP members participate as equal contributors to the measure development process. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. The Oncology measures were developed in 2007 and are maintained and updated by the TEP which was last reconvened in December 2017 to review the measure and ensure its currency.</p> <p>The Cancer TEP members include:</p> <p>Paul Wallner, DO (Chair) Kerin Adelson, MD Peter Albertsen, MD Nancy Baxter, MD, PhD Joel Brill, MD David Cella, PhD Andrea Cheville, MD Charles Cleeland, PhD John Gore, MD, MS James Hayman, MD, MBA Jerry Hussong, MD, DDS, MS Arif Kamal, MD, MBA, MHS W. Robert Lee, MD, MEd, MS David Penson, MD, MPH Louis Potters, MD Howard Sandler, MD, MS Eric Wisotsky, MD</p>
Measure Developer/Steward Updates and Ongoing Maintenance Ad.2 Year the measure was first released: 2007 Ad.3 Month and Year of most recent revision: 12, 2018 Ad.4 What is your frequency for review/update of this measure? Supporting guidelines, specifications, and coding for this measure are reviewed annually Ad.5 When is the next scheduled review/update for this measure? 12, 2021
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The PCPI's and AMA's significant past efforts and contributions to the development and updating of the Measures are acknowledged.

ASCO is solely responsible for the review and enhancement ("Maintenance") of the Measure as of July 2020.

ASCO encourages the use of the Measure by other health care professionals, where appropriate.

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Ad.8 Additional Information/Comments: Coding/Specifications updates occur annually. ASCO has a formal measurement review process that stipulates regular (usually on a three-year cycle, when feasible) review of the full measure set. The process can also be activated if there is a major change in scientific evidence, results from testing or other issues are noted that materially affect the integrity of the measure.