
CBE ID

0384

Title

Oncology: Medical and Radiation - Pain Intensity Quantified

Project

Advanced Illness and Post-Acute Care

Endorsement Status

Endorsed with Conditions

E&M Committee Rationale/Justification

- Explore, with the developer's TEP, adding mention of other specific measurement tools that can be used to support the measure.
- Include additional guidance for caregivers, namely for patients with cognitive impairment. For instance, adding additional guidance to note alternative methods of assessment, such as observations, behavioral cues, or care plans may be employed.

Is Under Review

No

Next Maintenance Cycle

Spring 2029

Previous Endorsement Cycle

Fall 2023

Initial Endorsement

Fri, 11/20/2020 - 12:17

Steward

American Society of Clinical Oncology

1.0 New or Maintenance

Maintenance

1.3 Electronic Clinical Quality Measure (eCQM)

No

1.6 Measure Description

This measure looks at the 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. This measure is to be submitted at each denominator eligible visit occurring during the performance period for patients with a diagnosis of cancer who are

seen during the performance period / measurement period. The time period for data collection is intended to be 12 consecutive months.

There are two submission criteria for this measure:

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 measure is comprised of two populations but is intended to result in one reporting rate. This is a proportion measure and better quality is associated with a higher score.

1.7 Composite Measure

No

1.7 Measure Type

Process

1.8 Level of Analysis

Clinician: Group/Practice, Clinician: Individual

1.9 Care Setting

Clinician Office/Clinic

1.10 Measure Rationale

This measure, CBE 0384, is paired with CBE 0383 *Percentage of visits for patients, regardless of age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy who report having pain with a documented plan of care to address pain*. This measure evaluates if pain intensity is quantified at each visit among cancer patients undergoing chemotherapy or radiation, and CBE 0383 evaluates if each patient visit includes a documented plan of care, amongst cancer patients who reported having pain.

1.11 Measure Webpage

https://qpp.cms.gov/docs/QPP_quality_measure_specifications/CQM-Measures/2023_M...

1.13 Data Dictionary

Attached

1.13a Attach Data Dictionary

[0384_CancerDiagnosisCodes.zip](#)

1.14 Numerator

Submission Criteria 1 Patient visits in which pain intensity is quantified
Submission Criteria 2 Patient visits in which pain intensity is quantified
Numerator Instructions: Pain intensity should be quantified using a standard instrument, such as a 0-10 numerical rating scale, visual analog scale, a categorical scale, or pictorial scale. Examples include the Faces Pain Rating Scale and the Brief Pain Inventory (BPI).

1.14a Numerator Details

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 numerical rating scale, visual analog scale, a categorical scale, or pictorial scale. Examples include the Faces Pain Rating Scale and the Brief Pain Inventory (BPI).

The measure has two submission criteria to capture 1) visits for patients undergoing chemotherapy and 2) visits for patients undergoing radiation therapy.

For the Submission Criteria 1 and Submission Criteria 2 numerators, report one of the following CPT Category II codes to submit the numerator option for patient visits in which pain intensity was quantified:

1125F: Pain severity quantified; pain present

OR

1126F: Pain severity quantified; no pain present

1.15 Denominator

Submission Criteria 1 All patient visits, regardless of patient age, with a diagnosis of cancer currently receiving chemotherapy
Denominator Instructions: The two chemotherapy administrations must occur on different days within the timeframe of on or within 30 days before the denominator eligible encounter and on or within 30 days after the denominator eligible encounter. Two chemotherapy administrations performed on the same day will not meet the patient procedure requirement.
Submission Criteria 2 All patient visits, regardless of patient age,

with a diagnosis of cancer currently receiving radiation therapy DENOMINATOR NOTE: For the reporting purposes for this measure, in instances where CPT code 77427 is reported, the billing date, which may or may not be the same date as the face-to-face or telehealth encounter with the physician, should be used to pull the appropriate patient population into the denominator. It is expected, though, that the numerator criteria would be performed at the time of the actual face-to-face or telehealth encounter during the series of treatments. A lookback (retrospective) period of 7 days, including the billing date, may be used to identify the actual face-to-face or telehealth encounter, which is required to assess the numerator. Therefore, pain intensity should be quantified during the face-to-face or telehealth encounter occurring on the actual billing date or within the 6 days prior to the billing date.

1.15a Denominator Details

Time period for data collection: 12 consecutive months

The measure has two submission criteria to capture 1) visits for patients undergoing chemotherapy and 2) visits for patients undergoing radiation therapy.

Guidance: For patients receiving radiation therapy, pain intensity should be quantified at each radiation treatment management encounter where the patient and physician have a face-to-face interaction. Due to the nature of some applicable coding related to the radiation therapy (eg, delivered in multiple fractions), the billing date for certain codes may or may not be the same as the face-to-face encounter date. 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.

Submission Criteria 1 Denominator: Visits for patients with a diagnosis of cancer currently receiving chemotherapy

Diagnosis for cancer (ICD-10-CM) - Due to character limitation, please see codes in the attached Excel file.

AND

Patient encounter during the performance period (CPT) - to be used to evaluate remaining denominator criteria and for numerator evaluation: 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

Note: Patient encounters for this measure conducted via telehealth (e.g., encounters coded with GQ, GT, 95, or POS 02 modifiers) are allowable.

AND

Patient procedure within 30 days before denominator eligible encounter: 51720, 96401, 96402, 96405, 96406, 96409, 96411, 96413, 96415, 96416, 96417, 96420, 96422, 96423, 96425, 96440, 96446, 96450, 96521, 96522, 96523, 96542, 96549

AND

Patient procedure within 30 days after denominator eligible encounter: 51720, 96401, 96402, 96405, 96406, 96409, 96411, 96413, 96415, 96416, 96417, 96420, 96422, 96423, 96425, 96440, 96446, 96450, 96521, 96522, 96523, 96542, 96549

Submission Criteria 2 Denominator: Visits for patients with a diagnosis of cancer currently receiving radiation therapy

Diagnosis for cancer (ICD-10-CM) - Due to character limitation, please see codes in the attached Excel file.

AND

Patient procedure during the performance period (CPT) - Procedure codes: 77427, 77431, 77432, 77435

DENOMINATOR NOTE: For the reporting purposes for this measure, in instances where CPT code 77427 is reported, the billing date, which may or may not be the same date as the face-to-face or telehealth encounter with the physician, should be used to pull the appropriate patient population into the denominator. It is expected, though, that the numerator criteria would be performed at the time of the actual face-to-face or telehealth encounter during the series of treatments. A lookback (retrospective) period of 7 days, including the billing date, may be used to identify the actual face-to-face or telehealth encounter, which is required to assess the numerator. Therefore, pain intensity should be quantified during the face-to-face or telehealth encounter occurring on the actual billing date or within the 6 days prior to the billing date.

1.15b Denominator Exclusions

None.

1.15c Denominator Exclusions Details

None

1.16 Type of Score

Rate/proportion

1.17 Measure Score Interpretation

Better performance = Higher score

1.18 Calculation of Measure Score

PY 2023 measure flow diagram is attached to this submission.

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

$$\text{Performance Rate} = (\text{Numerator 1} + \text{Numerator 2}) / (\text{Denominator 1} + \text{Denominator 2})$$

Calculation algorithm for Submission Criteria 1: Visits for patients with a diagnosis of cancer currently receiving chemotherapy

1. Find the patient visits that qualify for the denominator (i.e., the specific group of patient visits for inclusion in a specific performance measure based on defined criteria).
2. From the patient visits within the denominator, find the visits that meet the numerator criteria (i.e., the group of patient visits in the denominator for whom a process or outcome of care occurs). Validate that the number of patient visits in the numerator is less than or equal to the number of patient visits in the denominator.

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

Calculation algorithm for Submission Criteria 2: Visits for patients with a diagnosis of cancer currently receiving radiation therapy

1. Find the patient visits that qualify for the denominator (i.e., the specific group of patient visits for inclusion in a specific performance measure based on defined criteria).
2. From the patient visits within the denominator, find the visits that meet the numerator criteria (i.e., the group of patient visits in the denominator for whom a process or outcome of care occurs). Validate that the number of patient visits in the numerator is less than or equal to the number of patient visits in the denominator.

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

1.18a Attach measure score calculation diagram

[2023_0384_MeasureFlow \(1\).pdf](#)

1.19 Measure Stratification Details

Available CMS data do not include these supplemental data elements. However, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer, if feasible given this is an episode-based measure.

1.20 Types of Data Sources

Electronic Health Records, Registries

1.25 Data Source Details

N/A

1.26 Minimum Sample Size

It is recommended to adhere to the standard CMS guideline, which stipulates a minimum of 20 denominator counts to calculate the measure. In addition, it is advisable to incorporate data from patients with diverse attributes for optimal results.

2.1 Attach Logic Model

[0384_Logic Model_Gaps_Testing.pdf](#)

2.2 Evidence of Measure Importance

Cancer is the second leading cause of death in the US (1) and there is an estimated incidence rate of over 1.9 million cases in 2023. (2) Pain is one of the most common and debilitating symptoms reported amongst cancer patients and in fact ICD-11 contains a new classification for chronic cancer-related pain, defining it as chronic pain caused by the primary cancer itself, or metastases, or its treatment. A systematic review found that 55 percent of patients undergoing anticancer treatment reported pain (3) and chemotherapy and radiation specifically are associated with several distinct pain syndromes. (4) Each year, over a million cancer patients in the US receive chemotherapy or radiation. (5) Severe pain increases the risk of anxiety and depression (4) and a recent study showed that cancer patients who reported pain had worse employment and financial outcomes; the greater the pain, the worse the outcomes. (6) Cancer patients have also reported that pain interferes with their mood, work, relationships with other people, sleep, and overall enjoyment of life. (7)

Assessing pain and developing a plan of care (i.e., pain management) are critical for symptom

control, pain management, and the cancer patient's overall quality of life; it is an essential part of the oncologic management of a cancer patient (see below for specific clinical guideline recommendations). (8) However, many oncology patients report insufficient pain control. (9) A retrospective chart review analysis found an 84 percent adherence to the documentation of pain intensity and 43 percent adherence to pain re-assessment within an hour of medication administration. (10) An observational study found that over half of its cancer patients had a negative pain management index score, indicating that the prescribed pain treatments were not commensurate with the pain intensity reported by the patient. (11) Disparities exist as well, for example, a recent study evaluated opioid prescription fills and potency among cancer patients near end of life between 2007-2019. The study found that while all patients had a steady decline in opioid access, Black and Hispanic patients were less likely to receive opioids than White patients (Black, -4.3 percentage points, 95% CI; Hispanic, -3.6 percentage points, 95% CI) and received lower daily doses (Black, -10.5 MMED, 95% CI; Hispanic, -9.1 MMED, 95% CI). (12)

Although there have been some improvements, as evidenced by data obtained from the CMS Quality Payment Program, subpar pain management amongst cancer patients persists. The intent of the paired measures *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* and *Percentage of visits for patients, regardless of age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy who report having pain with a documented plan of care to address pain* is to improve pain management, thereby improving the function and quality of life of the cancer patient.

Specific clinical practice guideline recommendations that support this measure are: (8)

1. Screen all patients for pain at each contact.
2. Routinely quantify and document pain intensity and quality as characterized by the patient (whenever possible). Include patient reporting of breakthrough pain, treatments used and their impact on pain, satisfaction with pain relief, pain interference, provider assessment of impact on function, and any special issues for the patient relevant to pain treatment and access to care.
3. Perform comprehensive pain assessment if new or worsening pain is present and regularly for persisting pain.
4. Perform pain reassessment at specified intervals to ensure that analgesic therapy is providing maximum benefit with minimal adverse effects, and that the treatment plan is followed.
5. Pain intensity rating scales can be used as part of universal screening and comprehensive pain assessment.

All recommendations are Category 2A - Based upon lower-level evidence, there is uniform NCCN consensus that the intervention is appropriate.

References:

1. Centers for Disease Control and Prevention. (2023, January 18). Leading Causes of Death. *National Center for Health Statistics*. <https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>
2. National Cancer Institute. (2018). Cancer of Any Site - Cancer Stat Facts. *Surveillance, Epidemiology, and End Results Program*. <https://seer.cancer.gov/statfacts/html/all.html >
3. Van den Beuken-van Everdingen, M. H., Hochstenbach, L. M., Joosten, E. A., Tjan-Heijnen, V. C., & Janssen, D. J. (2016). Update on Prevalence of Pain in Patients With Cancer: Systematic Review and Meta-Analysis. *Journal of Pain and Symptom Management*, 51(6), 1070-1090.e9. <https://doi.org/10.1016/j.jpainsymman.2015.12.340>
4. National Cancer Institute. (2019, March 6). *Cancer Pain (PDQ®)-Patient Version*. [https://www.cancer.gov/about-cancer/treatment/side-effects/pain/pain-pd...;](https://www.cancer.gov/about-cancer/treatment/side-effects/pain/pain-pd...)
5. Centers for Disease Control and Prevention. (2022, November 2). Information for Health Care Providers on Infections During Chemotherapy. <https://www.cdc.gov/cancer/preventinfections/index.htm >
6. Halpern, M. T., de Moor, J. S., & Yabroff, K. R. (2022). Impact of Pain on Employment and Financial Outcomes Among Cancer Survivors. *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology*, 40(1), 24-31. <https://doi.org/10.1200/JCO.20.03746>
7. Moryl, N., Dave, V., Glare, P., Bokhari, A., Malhotra, V. T., Gulati, A., Hung, J., Puttanniah, V., Griffo, Y., Tickoo, R., Wiesenthal, A., Horn, S. D., & Inturrisi, C. E. (2018). Patient-Reported Outcomes and Opioid Use by Outpatient Cancer Patients. *The Journal of Pain*, 19(3), 278-290. <https://doi.org/10.1016/j.jpain.2017.11.001>
8. National Comprehensive Cancer Network® (NCCN). (July 31, 2023). NCCN Clinical Practice Guidelines in Oncology. Adult Cancer Pain Version 2.2023. <http://www.nccn.org>
9. Jacqueline C. Dela Pena, Vincent D. Marshall & Michael A. Smith. (2022). Impact of NCCN Guideline Adherence in Adult Cancer Pain on Length of Stay. *Journal of Pain & Palliative Care Pharmacotherapy*, 36:2, 95-102, DOI: 10.1080/15360288.2022.2066746
10. El Rahi, C., Murillo, JR., & Zaghloul, H. (September 2017). Pain Assessment Practices in Patients with Cancer Admitted to the Oncology Floor. *J Hematol Oncol Pharm*, 7(3):109-113. [https://jhonline.com/issue-archive/2017-issues/jhop-september-2017-vo...;](https://jhonline.com/issue-archive/2017-issues/jhop-september-2017-vo...)
11. Thronæs, M., Balstad, T. R., Brunelli, C., Løhre, E. T., Klepstad, P., Vagnildhaug, O. M., Kaasa, S., Knudsen, A. K., & Solheim, T. S. (2020). Pain management index (PMI)-does it reflect cancer patients' wish for focus on pain? *Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer*, 28(4), 1675-1684. <https://doi.org/10.1007/s00520-019-04981->
12. Enzinger, A. C., Ghosh, K., Keating, N. L., Cutler, D. M., Clark, C. R., Florez, N., Landrum, M. B., & Wright, A. A. (2023). Racial and Ethnic Disparities in Opioid Access and Urine Drug Screening Among Older Patients With Poor-Prognosis Cancer Near the End of Life. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*, 41(14), 2511-2522. <https://doi.org/10.1200/JCO.22.01413 >

Table 1. Performance Scores by Decile

Performance Gap

	Overall	Minimum	Decile_1	Decile_2	Decile_3	Decile_4	Decile_5	Decile_6	Decile_7	Decile_8	Decile_9	Decile_10	Maximum
Mean Performance Score	See logic model attachment												
N of Entities													
N of Persons / Encounters / Episodes													

2.6 Meaningfulness to Target Population

A 2022 study evaluated patient and caregiver perspectives on cancer-related quality measures, to inform priorities for health system implementation. Measure concepts related to pain management plans and improvement in pain were nominated as part of the top five concepts. The study notes that the patient and caregiver panel put much emphasis on the important of routine pain screening, management, and follow-up. (1)

References:

1. O'Hanlon, C. E., Giannitrapani, K. F., Lindvall, C., Gamboa, R. C., Canning, M., Asch, S. M., Garrido, M. M., ImpACS Patient and Caregiver Panel, Walling, A. M., & Lorenz, K. A. (2022). Patient and Caregiver Prioritization of Palliative and End-of-Life Cancer Care Quality Measures. *Journal of general internal medicine*, 37(6), 1429-1435. <https://doi.org/10.1007/s11606-021-07041-8>

3.1 Contributions Towards Closing Care Gaps

See measure rationale section.

4.1 Feasibility Assessment

Not applicable during the Fall 2023 cycle.

4.3 Feasibility Informed Final Measure

Feedback from EHRs, cancer registries, and oncology practices provides compelling evidence that this measure is easy to implement and presents minimal feasibility challenges. The necessary data elements required for the denominator (active cancer diagnosis, office visit, chemotherapy administration and/or radiation treatment) can be found within structured fields and are recorded using commonly accepted coding standards. The same applies to the numerator data element, which requires documentation of the pain assessment result.

The measure's data capture can be seamlessly integrated into existing physician workflows and

data collection tools without requiring any significant modifications. Numerous healthcare practices have already set up their workflows to gather this information, highlighting its easy adoption. This is evident from the considerable number of practices that report this measure to the Centers for Medicare and Medicaid Services (CMS) via the Merit-based Incentive Payment System (MIPS) program.

This measure has been widely adopted and proven to be effective. It has been implemented without any issues or feasibility concerns. Therefore, no adjustments to the measure specifications are needed.

4.4 Proprietary Information

Proprietary measure or components with fees

4.4a Fees, Licensing, or Other Requirements

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- Keep users informed about measure updates and/or changes
- Learn from measure users about any implementation challenges to inform future measure updates and/or changes
- Track measure utilization (outside of federal reporting programs) and performance rates

ASCO has adopted the Council of Medical Specialty Society's *Code for Interactions with Companies* (<chrome-extension://efaidnbnmnnibpcajpcglcfindmkaj/https://cmss.org/wp-content/uploads/2016/02/CMSS-Code-for-Interactions-...>), which provides guidance on interactions with for-profit entities that develop produce, market or distribute drugs, devices, services or therapies

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Oncology, CancerLinQ LLC, QOPI Certification Program, LLC, and all other affiliates of the American Society of Clinical Oncology, Inc.

5.1.1 Data Used for Testing

Five datasets provided by CMS' MIPS program and publicly reported were used to test the measure's reliability:

- A data set of 75 practices that reported on the measure in the calendar year 2019 with 282,919 qualifying patient encounters.
- A data set of 77 individual clinicians who reported on the measure in the calendar year 2020 with 63,513 qualifying patient encounters.
- A data set of 61 practices that reported on the measure in the calendar year 2020 with

183,936 qualifying patient encounters.

- A data set of 76 individual clinicians who reported on the measure in the calendar year 2021 with 57,709 qualifying patient encounters.
- A data set of 51 practices that reported on the measure in the calendar year 2021 with 156,913 qualifying patient encounters.

The data source used to test the measure's validity is 2022 patient data from the McKesson Practice Insights QCDR. McKesson's Practice Insights QCDR is an oncology-specific reporting and analytics platform that supports a variety of practice value-based care initiatives. The web-based reporting system is fully integrated with the oncology-specific iKnowMed Generation 2 technology, leveraging the clinical data contained within the EHR system and enabling the automated calculation of quality measures and analytics to support improved patient care. Through Practice Insights QCDR, which provides continuous data monitoring and feedback, practices are enabled to exceed the simple task of participating in quality programs with the goal to achieve optimized patient care and reduced costs. Practice Insights not only supports successful participation in the MIPS program, but it also serves as a powerful reporting platform for practices pursuing other value-based care initiatives and alternative payment models (APMs), including the Enhancing Oncology Model (EOM).

For the purpose of conducting validity testing, 10 community-based oncology practices were randomly selected from the full list of Practice Insights QCDR participants, representing 3% of all 2022 MIPS program participants. From these, a randomized sample of 50 patients per practice, for a total of 500 patients, were selected for full medical record chart audits.

5.1.2 Differences in Data

To conduct data element testing with greater granularity, we acquired an additional data set from the McKesson Practice Insights QCDR as the CMS-provided MIPS individual clinician and practice performance data sets were not detailed enough. The CMS-provided data sets were utilized for accountable entity-level testing, while the Practice Insights QCDR-provided data set was used to carry out encounter/patient-level testing.

5.1.3 Characteristics of Measured Entities

The clinicians and practices included in the reliability analysis represented all 49 states of the continental United States and ranged from very small single proprietorships to large academic institutions according to the information they provided to the CMS. For validity analysis, McKesson's Practice Insights QCDR randomly selected 10 community-based practices across the United States.

5.1.4 Characteristics of Units of the Eligible Population

CMS did not capture nor provide any patient-level socio-demographic variables and therefore no patient demographic data is available. McKesson's Practice Insights QCDR masked patients' demographic data to protect privacy during medical chart audits and did not provide patient demographics.

5.2.1 Level(s) of Reliability Testing Conducted

Accountable entity level (i.e., measure score) (e.g., signal-to-noise analysis)

5.2.2 Method(s) of Reliability Testing

An assessment of the measure's reliability was performed through the utilization of signal-to-noise analysis, a method that determines the precision of the actual construct in comparison to the random variation. The signal-to-noise ratio is determined by calculating the ratio of between unit variance to total variance. This analysis provides valuable insight into the measure's reliability and its ability to produce consistent results.

5.2.3 Reliability Testing Results

Among the average of 77 individual clinicians over 2 calendar years and 62 practices over 3 calendar years, the reliability of the measure scores ranged from 0.859 to 1.00. The average reliability score was an almost perfect 0.997.

Overall, 100% of clinicians and practices had measure scores with reliabilities of 0.70 or higher, a commonly accepted reliability threshold (Adams 2010). The reliability values were consistently close to the ideal, indicating that the clinician performance rates were highly reliable, and any measurement error was minimal.

Adams, J. L., Mehrotra, A., Thomas, J. W., & McGlynn, E. A. (2010). Physician cost profiling—reliability and risk of misclassification. *New England Journal of Medicine*, 362(11), 1014-1021.

5.2.4 Interpretation of Reliability Results

Based on the available data, it is evident that individual clinicians and practices, even those with a minimal sample size, display reliability coefficients that exceed 0.80. This result indicates that the measure is highly reliable, both at individual clinician and practice levels. Therefore, the performance scores provide a true reflection of the quality of care.

Table 2. Accountable Entity Level Reliability Testing Results by Denominator,

Target Population Size

Accountable Entity-Level Reliability Testing Results

	Overall	Minimum Decile_1	Decile_2
Reliability	SEE LOGIC MODEL ATTACHMENT		
Mean Performance Score			
N of Entities			

5.3.1 Level(s) of Validity Testing Conducted

Person or encounter level (i.e., data element) (e.g., sensitivity and specificity)

5.3.3 Method(s) of Validity Testing

For the purpose of checking the validity of the data elements in this measure, a random sample of 500 patients from 10 different test sites was selected. Both a measure abstractor and an automated algorithm were used to score patients on each data element of the measure. The agreement between the two scoring methods was evaluated using the Kappa statistic. Denominator and numerator data elements were assessed for all 500 patients. Since this measure does not have any denominator exclusion or exception data element, these data elements were not tested.

5.3.4 Validity Testing Results

Measure Data Element	Measure Component	Kappa Estimate	Standard Error	95% Confidence Limits
Denominator	Cancer Diagnosis That's Active	1.0000	0.0000	1.0000 1.0000
Denominator	Office Visit	1.0000	0.0000	1.0000 1.0000
Denominator	Chemotherapy Administration	0.9509	0.0218	0.9081 0.9937
Denominator	Radiation Treatment Management	0.9081	0.0914	0.7289 1.0000
Numerator	Pain Assessment Documented	1.0000	0.0000	1.0000 1.0000

The Kappa coefficients were interpreted using the benchmarks for Cohen's Kappa established by Landis and Koch in 1977, which are widely recognized in the field of psychometrics:

- 0.8 to 1.0 - almost perfect agreement;
- 0.6 to 0.8 - substantial agreement;
- 0.4 to 0.6 - moderate agreement;
- 0.2 to 0.4 - fair agreement;
- Zero to 0.2 - slight agreement; and
- Zero or lower - poor agreement.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 159-174.

5.3.5 Interpretation of Validity Results

The calculated Kappa coefficient was 0.96 (with a 95% confidence interval of 0.91 to 1.00) for the denominator data element and 1.00 (with a 95% confidence interval of 1.00 to 1.00) for the numerator data element.

The evaluation benchmarks suggest that the measure accurately distinguishes between good and poor quality, with nearly perfect validity for both the measure's denominator and numerator.

5.3.2 Type of Accountable Entity Level Validity Testing Conducted (derived)

Empirical validity testing at the accountable entity-level (e.g., criterion validity, construct validity, known groups analysis)

5.4.1 Methods Used to Address Risk Factors

No risk adjustment or stratification

5.4.1b Rationale For No Adjustment or Stratification

N/A

6.1.3 Current Use(s)

Payment Program, Professional Certification or Recognition Program, Quality Improvement with Benchmarking (external benchmarking to multiple organizations)

6.1.3 Program Details

Name of the program and sponsor

Merit-based Incentive Payment System (MIPS) reporting program, Center for Medicare and Medicaid Services (CMS). This measure has been in the MIPS program (formerly PQRS) since its inception and is QPP #143.

URL of the program

<https://qpp.cms.gov/mips/explore-measures>

Purpose of the program

MIPS encourages improvement in clinical practice and supporting advances in technology that allow for easy exchange of information.

Geographic area and percentage of accountable entities and patients included

MIPS eligible providers may earn performance-based payment adjustments for the services provided to Medicare patients in the USA.

Applicable level of analysis and care setting

Clinician/Group Level; Registry Data Source; Outpatient Services/Ambulatory Care Setting

Eligible providers include: Physicians (including doctors of medicine, osteopathy, dental surgery, dental medicine, podiatric medicine, and optometry), Osteopathic practitioners, Chiropractors, Physician assistants, Nurse practitioners, Clinical nurse specialists, Certified registered nurse

anesthetists, Physical therapists, Occupational therapists, Clinical psychologists, Qualified speech-language pathologists, Qualified audiologists, Registered dietitians or nutrition professionals.

Name of the program and sponsor

Enhancing Oncology Model, Center for Medicare and Medicaid Services (CMS). This measure is listed as EOM-4.

URL of the program

<https://www.cms.gov/priorities/innovation/innovation-models/enhancing-oncology-...>

Purpose of the program

Under EOM, participating oncology practices will take on financial and performance accountability for episodes of care surrounding systemic chemotherapy administration to patients with common cancer types.

Geographic area and percentage of accountable entities and patients included

There are 44 practices and three payers participating, nationwide. EOM includes two risk arrangements with differing levels of downside risk.

Applicable level of analysis and care setting

Level of measurement and setting: Oncology practices; the measure source is EOM participant reported and measure is reported in aggregate across all patients.

Purpose: Enhancing Oncology Model (EOM), as part of the “management of symptoms toxicity” domain. The EOM is part of CMS’ Innovation Center and is a 5-year voluntary model, beginning on July 1, 2023 that aims to improve quality and reduce costs through payment incentives and required participant redesign activities. Under EOM, participating oncology practices will take on financial and performance accountability for episodes of care surrounding systemic chemotherapy administration to patients with common cancer types. EOM supports President Biden’s Unity Agenda and Cancer Moonshot initiative to improve the experience of people and their families living with and surviving cancer. Seven cancer types are included in the model:

1. breast cancer
2. chronic leukemia
3. lung cancer
4. lymphoma
5. multiple myeloma
6. prostate cancer
7. small intestine / colorectal

Name of the program and sponsor

Practice Insights by McKesson in Collaboration with The US Oncology Network – QCDR. The measure is listed as QID 143

URL of the program

<https://www.mckesson.com/Specialty/Oncology-Clinical-Management-Technology/>

Purpose of the program

Practice Insights seamlessly pulls data from multiple sources to create a holistic roadmap that

supports the clinical, financial and operational needs of oncology practices.
Geographic area and percentage of accountable entities and patients included
Over 10,000 oncology physicians, nurses, clinicians, and cancer care specialists nationwide, treating more than 1.2 million cancer patients annually in more than 450 locations across 25 states.
Applicable level of analysis and care setting

Level of measurement and setting: Oncology practices.

Purpose: Practice Insights by McKesson in Collaboration with The US Oncology Network – QCDR. Practice Insights is a performance analytics tool that helps analyze data generated throughout the patient journey to gain proactive, actionable insights into quality initiatives, value-based care programs, performance metrics, productivity measures and peer/industry benchmarks. Practice Insights seamlessly pulls data from multiple sources to create a holistic roadmap that supports the clinical, financial and operational needs of oncology practices.

Geographic area and number and percentage of accountable entities and patients

included: The US Oncology Network (“The Network”) represents over 10,000 oncology physicians, nurses, clinicians, and cancer care specialists nationwide and is one of the nation’s largest and most innovative networks of community-based oncology physicians, treating more than 1.2 million cancer patients annually in more than 450 locations across 25 states. The Network unites over 1,400 like-minded physicians around a common vision of expanding patient access to the highest quality, state-of-the-art care close to home and at lower costs for patients and the health care system.

Name of the program and sponsor

ASCO Certified: Patient-Centered Cancer Care Standards

URL of the program

<https://practice.asco.org/quality-improvement/quality-programs/asco-certified>

Purpose of the program

The new program certifies oncology group practices and health systems that meet a single set of comprehensive, evidence-based oncology medical home standards from ASCO and the Community Oncology Alliance.

Geographic area and percentage of accountable entities and patients included

ASCO Certified was informed by a pilot of 12 practice groups and health systems across 95 service sites and 500 oncologists. The cohort comprised a variety of settings, including community, hospital, academic and rural.

Applicable level of analysis and care setting

Level of measurement and setting: Oncology group practices and health systems.

Purpose: The new program certifies oncology group practices and health systems that meet a single set of comprehensive, evidence-based oncology medical home standards from ASCO and the Community Oncology Alliance. Benefits include recognition through ASCO, as a preferred quality provider to payers and all cancer care delivery stakeholders, single set of evidence-based standards, participation in a learning collaborative, and ongoing assessment and improvement support.

6.2.1 Actions of Measured Entities to Improve Performance

Providers are evaluated on if pain intensity is quantified among cancer patients undergoing chemotherapy or radiation; this is an every-visit measure. ASCO has not received feedback that the measure negatively impacts the provider's workflow. Per the *NQF Cancer CDP Fall 2018 Report*, the panel agreed that data for this measure are routinely collected, and the measure is feasible.

6.2.2 Feedback on Measure Performance

ASCO's measure development team allows for feedback and measure inquiries from implementers and reporters via email (measurement@asco.org). In addition, we receive questions and feedback from the CMS Helpdesk. To date, questions related to coding guidance and the intent of the measure have come through. Otherwise, ASCO has not received feedback on these measures through those avenues.

6.2.3 Consideration of Measure Feedback

N/A

6.2.4 Progress on Improvement

In evaluating the QPP data, the average performance rate on this measure increased three percentage points between performance periods 2019 and 2021, indicating some improvement. However, a gap remains, particularly at the practice level.

6.2.5 Unexpected Findings

At this time, we are not aware of any unintended consequences related to this measure. We take unintended consequences very seriously and therefore continuously monitor to identify actions that can be taken to mitigate them.

Developer POC email

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Measure Developer POC

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Alexandria, VA 22314
United States

Measured/accountable entity (reliability and/or validity) methodology and results (if available)

Measured entity (reliability and validity) methodology and results (if available), Person or encounter-level (reliability and validity) methodology and results (if available)

The measure developer is different from the measure steward

No

Steward Address

United States

Steward Organization

American Society of Clinical Oncology