

eCQM Title	Oncology: Treatment Summary Communication - Radiation Oncology		
eCQM Identifier (Measure Authoring Tool)	990	eCQM Version Number	1.0.000
NQF Number	Not Applicable	GUID	4f6e7552-2ea7-4291-98ee-8955efa80e42
Measurement Period	January 1, 20XX through December 31, 20XX		
Measure Steward	American Society of Radiation Oncology		
Measure Developer	American Society of Radiation Oncology		
Endorsed By	None		
Description	Percentage of patients, regardless of age, with a diagnosis of cancer who have undergone brachytherapy, external beam radiation therapy, or radionuclide therapy who have a treatment summary report in the chart that was communicated to the physician(s) providing continuing care and to the patient within one month of completing treatment		
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Measure Scoring	Proportion
Measure Type	Process
Stratification	None
Risk Adjustment	None
Rate Aggregation	None
Rationale	<p>Radiation therapy is one of the primary treatments for cancer and approximately 67% of cancer treatments in Western countries include radiation therapy (Chen & Kuo, 2017). This figure is projected to increase over the next decade (Byrant, Banegas, Martinez, Mell, & Murphy, 2017). Timely, medically appropriate, and informative communication between the radiation oncologist, patients, and other health care professionals is a primary goal of the radiation oncologist (ASTRO, 2019). A treatment summary, which may include the treatment specifics, doses delivered to the target/tumor and other key organs, assessment of tolerance and progress to treatment goals, follow-up care plans, and other images and technical details, must be kept in the radiation oncology permanent record and communicated to the patient and his/her other health care providers, as well as available to others upon request (ASTRO, 2019). The radiation oncology treatment summary is critical because it informs the clinician(s) providing ongoing patient care on what follow-up care and treatments are needed, as well as informs radiation oncologists and clinicians of the details of a patient's radiation therapy history, particularly if a patient relapses and requires additional radiation in the future. However, recent data from ASTRO's practice accreditation program, APEx (Accreditation Program for Excellence)(R) showed that during the initial self-assessment phase and facility visit, which is the final step of accreditation, 69% and 79% of patients respectively had a treatment summary report in their chart that was communicated to the referring provider. This measure assesses care coordination and communication between providers and patients during transitions of cancer care treatment and recovery.</p> <p>Due to technical limitations, registered trademarks are indicated by (R).</p>
Clinical Recommendation Statement	<p>After a course of treatment is completed, the radiation oncologist should document a summary of the treatment delivered including site treated, modality used, dose per fraction, total dose, elapsed time, dates of treatment, concurrent therapy, treatment response (if applicable), relevant side effects (if applicable), and other observations. This should be communicated to the referring physician and</p>

any other physicians involved in the care of the patient in a timely fashion. Radiation treatment records should be retained for at least 5 years after the death of the patient or according to state law(s) (ACR/ASTRO, 2018).

A completed and detailed internal document (containing all the necessary elements of evaluation and management) should be generated and maintained in the patient's permanent radiation therapy record (ACR/ASTRO, 2019).

The technical details and images related to actual clinical management and radiation therapy delivery must be retained in the radiation oncology permanent record and must be made available to others upon request if authorized by the patient or the patient's power of attorney. A summary that accurately describes the treatment process, the doses delivered to the target/tumor volume and other key organs, relevant assessment of tolerance to and progress toward the treatment goals, and subsequent care plans should be generated and distributed to the patient's other pertinent health care providers (ACR/ASTRO, 2019).

The treatment (completion) summary's key elements should include the following:

- a. Components for the summary of radiation therapy delivery
 - Patient identification and report date
 - Diagnosis and stage of disease and/or other clinically appropriate classification
 - Treatment dates (start and end dates)
 - Treatment status (e.g., treatment course completed as planned, changed, suspended)
 - Assessment of tolerance to treatment and, as appropriate, subjective and objective assessments of disease response to treatment
 - Clinical course, including side effects and management thereof, and use of ancillary services (nutritional, psychosocial, etc.)
 - Side effects and management thereof
 - Interruptions or unplanned breaks in treatment
 - Pain management plan as appropriate
 - Follow-up plans, including referrals to other health care providers, instructions, and/or diagnostic studies
 - Discharge instructions regarding aftercare following radiation therapy
 - Treatment summary should be completed and signed by the physician in a timely fashion following completion of radiation therapy and made available (ACR/ASTRO, 2019).

In addition, the treatment summary should include the following elements:

- External beam: treatment technique, 3-D conformal therapy, intensity-modulated radiation therapy, stereotactic radiation therapy, etc.), modality (x-rays, electrons, protons, etc.), the anatomical site, total dose, treatment fractionation, and dose to tumor/target volumes.

	<ul style="list-style-type: none"> - Concomitant/concurrent chemotherapy or other systemic treatment. - Brachytherapy: Radionuclide, specification of treatment target and target dose; dose rate (high-dose rate, pulsed-dose rate, or low-dose rate), permanent versus temporary, and type of applicator or procedure (e.g., intracavitary versus interstitial); administration dates of temporary brachytherapy or date of insertion for permanent implants (ACR/ASTRO, 2019).
Improvement Notation	Higher score indicates better quality
Reference	American College of Radiology/American Society for Radiation Oncology. (2018). ACR-ASTRO Practice Parameter for Radiation Oncology. Retrieved from https://www.astro.org/Patient-Care-and-Research/Clinical-Practice-Statements/Consensus-Documents
Reference	American College of Radiology/American Society for Radiation Oncology. (2019). ACR-ASTRO Practice Parameter for Communication: Radiation Oncology. Retrieved from https://www.astro.org/Patient-Care-and-Research/Clinical-Practice-Statements/Consensus-Documents
Reference	Bryant, A. K., Banegas, M. P., Martinez, M. E., Mell, L. K., & Murphy, J. D. (2017). Trends in Radiation Therapy among Cancer Survivors in the United States, 2000-2030. <i>Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research</i> , cosponsored by the American Society of Preventive Oncology, 26(6), 963-970. https://doi.org/10.1158/1055-9965.EPI-16-1023
Reference	Chen, H., & Kuo, M. T. (2017). Improving radiotherapy in cancer treatment: Promises and challenges. <i>Oncotarget</i> , 8(37), 62742-62758. https://doi.org/10.18632/oncotarget.18409
Definition	<p>Communication – For the purposes of the measure, communication to the treating physician(s) AND to the patient is required to satisfy the numerator, and may be completed by making the treatment summary report available on a secure portal, sending a message to the provider and/or patient via the secure portal notifying of the availability of the treatment summary report, or direct communication (e.g., verbal discussion or printed treatment summary report) to the provider and/or patient.</p> <p>Treatment Summary: a report may include the following:</p> <ul style="list-style-type: none"> - Patient identification and report date - Diagnosis, stage, and grade of disease and/or other clinically appropriate classification - Treatment dates (start and end dates) - Treatment status (e.g., treatment course completed as planned, changed, suspended) - Anatomic site of treatment - Images, as available - Concomitant/concurrent chemotherapy or other systemic treatments - Assessment of tolerance to treatment and, as appropriate, subjective and objective assessments of disease response to treatment

	<ul style="list-style-type: none"> - Use of ancillary services (nutritional, psychosocial, etc.) - Clinical course <ul style="list-style-type: none"> - Side effects and management thereof - Interruptions or unplanned breaks in treatment - Pain management plan as appropriate - Follow-up plans, including referrals to other health care providers, instructions, and/or diagnostic studies - Discharge instructions regarding aftercare following radiation therapy - Treating physician signature. <p>The treatment summary could also detail the specific type of treatment the patient is receiving. The following elements should be included, as appropriate, if the patient is receiving:</p> <ul style="list-style-type: none"> - External beam radiation therapy: treatment technique (3-D conformal therapy, intensity-modulated radiation therapy, stereotactic radiation therapy, etc.), modality (x-rays, electrons, protons, etc.), the anatomical site, total dose, treatment fractionation, and dose to tumor/target volumes. - Brachytherapy: Radionuclide, specification of treatment target and target dose; dose rate (high-dose rate, pulsed-dose rate, or low-dose rate), permanent versus temporary, and type of applicator or procedure (e.g., intracavitary versus interstitial); administration dates of temporary brachytherapy or date of insertion for permanent implants. - Radionuclide therapy: the administered radionuclide (chemical form [colloidal, tagged to antibody, etc.] and name), route of administration, total activity, and date administered.
Guidance	<p>This measure should be reported once per course of radiation treatment. A course of treatment will be established by determining a gap in treatment of 15 days or more within the measure logic.</p> <p>The treatment summary report should be communicated to the physician providing continuing care and to the patient within 30 days after the end of each course of radiation treatment.</p> <p>The denominator exception may be applied to not communicating the treatment summary to the physician providing continuing care; there are no allowable exceptions for not communicating the treatment summary to the patient.</p>
Transmission Format	TBD
Initial Population	All patients, regardless of age, with a diagnosis of cancer who have undergone brachytherapy, external beam radiation therapy, or radionuclide therapy
Denominator	Equals Initial Population
Denominator Exclusions	None

Numerator	Patients who have a treatment summary report in the chart that was communicated to the physician(s) providing continuing care and to the patient within one month of completing treatment
Numerator Exclusions	Not Applicable
Denominator Exceptions	Documentation of a non-medical reason(s) for not communicating the treatment summary report to the physician(s) providing continuing care (e.g., patient requests that report not be sent, patient does not have any physician responsible for providing continuing care)
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

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Population Criteria

- • **Initial Population**
 - - "Radiation Treatment Course Ends During Measurement Period"

- • **Denominator**
 - - "Initial Population"

- • **Denominator Exclusions**
 - - None

- • **Numerator**
 - - "Radiation Treatment Summary Provided to the Patient"
 - intersect "Radiation Treatment Summary Communicated to the Clinician"

- • **Numerator Exclusions**
 - - None

- • **Denominator Exceptions**
 - - "Radiation Treatment Course Ends During Measurement Period" EndOfTreatmentCourse
 - with ["Communication, Not Performed": "Summary report (record artifact)"] TreatmentSummaryNotCommunicated
 - such that TreatmentSummaryNotCommunicated.authorDatetime 30 days or less after end of EndOfTreatmentCourse.relevantPeriod
 - and (TreatmentSummaryNotCommunicated.negationRationale in "Patient Reason"
 - or TreatmentSummaryNotCommunicated.negationRationale ~ "Patient refuses to release medical information (situation)"
 -)

- • **Stratification**
 - - None

Definitions

- - **Denominator**
 - "Initial Population"

 - **Denominator Exception**
 - "Radiation Treatment Course Ends During Measurement Period" EndOfTreatmentCourse
 - with ["Communication, Not Performed": "Summary report (record artifact)"] TreatmentSummaryNotCommunicated
 - such that TreatmentSummaryNotCommunicated.authorDatetime 30 days or less after end of EndOfTreatmentCourse.relevantPeriod

- and (TreatmentSummaryNotCommunicated.negativeRationale in "Patient Reason"
- or TreatmentSummaryNotCommunicated.negativeRationale ~ "Patient refuses to release medical information (situation)"
-)

- **Initial Population**
 - "Radiation Treatment Course Ends During Measurement Period"

- **Numerator**
 - "Radiation Treatment Summary Provided to the Patient"
 - intersect "Radiation Treatment Summary Communicated to the Clinician"

- **Radiation Treatment Course Ends During Measurement Period**
 - "Radiation Treatment Management During Measurement Period with Cancer Diagnosis" RadiationTreatment
 - without "Radiation Treatment Management During Measurement Period with Cancer Diagnosis" SubsequentRadiationTreatment
 - such that RadiationTreatment !~ SubsequentRadiationTreatment
 - and SubsequentRadiationTreatment.relevantPeriod starts 15 days or less after day of end of RadiationTreatment.relevantPeriod
 - and RadiationTreatment.relevantPeriod ends during "Measurement Period"

- **Radiation Treatment Management During Measurement Period with Cancer Diagnosis**
 - ["Procedure, Performed": "Radiation Treatment Management Including Intraoperative"] RadiationTreatmentManagement
 - with ["Diagnosis": "Cancer"] Cancer

- such that
RadiationTreatmentManagement.relevantPeriod during Cancer.prevalencePeriod
- and
RadiationTreatmentManagement.relevantPeriod during "Measurement Period"

- **Radiation Treatment Summary Communicated to the Clinician**

-
- "Radiation Treatment Course Ends During Measurement Period" EndOfTreatmentCourse
- with ["Communication, Performed": "Summary report (record artifact)"]
TreatmentSummaryClinician
- such that
TreatmentSummaryClinician.sentDatetime 30 days or less after
- end of EndOfTreatmentCourse.relevantPeriod

- **Radiation Treatment Summary Provided to the Patient**

-
- "Radiation Treatment Course Ends During Measurement Period" EndOfTreatmentCourse
- with ["Intervention, Performed": "Summary report (record artifact)"]
TreatmentSummaryPatient
- such that
TreatmentSummaryPatient.relevantDatetime 30 days or less after
- end of EndOfTreatmentCourse.relevantPeriod

- **SDE Ethnicity**

-
- ["Patient Characteristic Ethnicity": "Ethnicity"]

- **SDE Payer**

-
- ["Patient Characteristic Payer": "Payer"]

- **SDE Race**

-
- ["Patient Characteristic Race": "Race"]

- **SDE Sex**
 - ["Patient Characteristic Sex": "ONC Administrative Sex"]

Functions

- None

Terminology

- code "Patient refuses to release medical information (situation)" ("SNOMEDCT Code (5811000175107)")
- code "Summary report (record artifact)" ("SNOMEDCT Code (371534008)")
- valueset "Cancer" (2.16.840.1.113883.3.526.3.1010)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "ONC Administrative Sex" (2.16.840.1.113762.1.4.1)
- valueset "Patient Reason" (2.16.840.1.113883.3.526.3.1008)
- valueset "Payer" (2.16.840.1.114222.4.11.3591)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Radiation Treatment Management Including Intraoperative" (2.16.840.1.113883.3.526.3.1339)

Data Criteria (QDM Data Elements)

- "Communication, Not Performed: Summary report (record artifact)" using "Summary report (record artifact) (SNOMEDCT Code 371534008)"
- "Communication, Performed: Summary report (record artifact)" using "Summary report (record artifact) (SNOMEDCT Code 371534008)"
- "Diagnosis: Cancer" using "Cancer (2.16.840.1.113883.3.526.3.1010)"
- "Intervention, Performed: Summary report (record artifact)" using "Summary report (record artifact) (SNOMEDCT Code 371534008)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer" using "Payer (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: ONC Administrative Sex" using "ONC Administrative Sex (2.16.840.1.113762.1.4.1)"
- "Procedure, Performed: Radiation Treatment Management Including Intraoperative" using "Radiation Treatment Management Including Intraoperative (2.16.840.1.113883.3.526.3.1339)"

Supplemental Data Elements

- **SDE Ethnicity**
 - - ["Patient Characteristic Ethnicity": "Ethnicity"]

- **SDE Payer**
 - - ["Patient Characteristic Payer": "Payer"]

- **SDE Race**
 - - ["Patient Characteristic Race": "Race"]

- **SDE Sex**
 - - ["Patient Characteristic Sex": "ONC Administrative Sex"]

Risk Adjustment Variables

- None

Measure Set	
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