

ACR–ARS PRACTICE PARAMETER FOR COMMUNICATION: RADIATION ONCOLOGY

The American College of Radiology, with more than 40,000 members, is the principal organization of radiologists, radiation oncologists, and clinical medical physicists in the United States. The College is a nonprofit professional society whose primary purposes are to advance the science of radiology, improve radiologic services to the patient, study the socioeconomic aspects of the practice of radiology, and encourage continuing education for radiologists, radiation oncologists, medical physicists, and persons practicing in allied professional fields.

The American College of Radiology will periodically define new practice parameters and technical standards for radiologic practice to help advance the science of radiology and to improve the quality of service to patients throughout the United States. Existing practice parameters and technical standards will be reviewed for revision or renewal, as appropriate, on their fifth anniversary or sooner, if indicated.

Each practice parameter and technical standard, representing a policy statement by the College, has undergone a thorough consensus process in which it has been subjected to extensive review and approval. The practice parameters and technical standards recognize that the safe and effective use of diagnostic and therapeutic radiology requires specific training, skills, and techniques, as described in each document. Reproduction or modification of the published practice parameter and technical standard by those entities not providing these services is not authorized.

This document is an educational tool designed to assist practitioners in providing appropriate radiologic care for patients. Practice Parameters and Technical Standards are not inflexible rules or requirements of practice and are not intended, nor should they be used, to establish a legal standard of care¹. For these reasons and those set forth below, the American College of Radiology and our collaborating medical specialty societies caution against the use of these documents in litigation in which the clinical decisions of a practitioner are called into question. The ultimate judgment regarding the propriety of any specific procedure or course of action must be made by the practitioner considering all the circumstances presented. Thus, an approach that differs from the guidance in this document, standing alone, does not necessarily imply that the approach was below the standard of care. To the contrary, a conscientious practitioner may responsibly adopt a course of action different from that set forth in this document when, in the reasonable judgment of the practitioner, such course of action is indicated by variables such as the condition of the patient, limitations of available resources, or advances in knowledge or technology after publication of this document. However, a practitioner who employs an approach substantially different from the guidance in this document may consider documenting in the patient record information sufficient to explain the approach taken.

The practice of medicine involves the science, and the art of dealing with the prevention, diagnosis, alleviation, and treatment of disease. The variety and complexity of human conditions make it impossible to always reach the most appropriate diagnosis or to predict with certainty a particular response to treatment. Therefore, it should be recognized that adherence to the guidance in this document will not assure an accurate diagnosis or a successful outcome. All that should be expected is that the practitioner will follow a reasonable course of action based on current knowledge, available resources, and the needs of the patient to deliver effective and safe medical care. The purpose of this document is to assist practitioners in achieving this objective.

¹ *Iowa Medical Society and Iowa Society of Anesthesiologists v. Iowa Board of Nursing*, 831 N.W.2d 826 (Iowa 2013) Iowa Supreme Court refuses to find that the "ACR Technical Standard for Management of the Use of Radiation in Fluoroscopic Procedures (Revised 2008)" sets a national standard for who may perform fluoroscopic procedures in light of the standard's stated purpose that ACR standards are educational tools and not intended to establish a legal standard of care. See also, *Stanley v. McCarver*, 63 P.3d 1076 (Ariz. App. 2003) where in a concurring opinion the Court stated that "published standards or guidelines of specialty medical organizations are useful in determining the duty owed or the standard of care applicable in a given situation" even though ACR standards themselves do not establish the standard of care.

I. INTRODUCTION

This practice parameter was revised collaboratively by the American College of Radiology (ACR) and the American Radium Society (ARS).

Timely, accurate, and effective communications are critical to quality and safety in contemporary medical practices. Radiation oncology incorporates the science and technology of complex, integrated treatment delivery and the art of providing care to individual patients. Through written and/or electronic reports and direct communication, radiation oncologists convey their knowledge and evaluation regarding patient care, clinical workup, and treatment provided to others involved in the management of the patient. This communication should involve all appropriate health care providers, including primary care physicians, as well as members of the radiation oncology treatment team (including but not limited to medical oncologists, surgeons, other radiation

oncologists, nurses, social workers, navigators, radiation therapists, dosimetrists, medical physicists), and other entities where appropriate (such as tumor registrars, clinical trial offices, quality assurance personnel, and patients) [1].

Radiation oncology activities must be clearly articulated for communication objectives to be met. Although not all technical aspects of treatment need to be included, certain basic information should be reflected in physician correspondence: an evaluation and assessment of the patient's relevant past medical history and current clinical problems; oncologic disease stage and status; a summary of any multidisciplinary cancer care; the plan and delivery of radiation therapy treatments; the monitoring of response, side effects, and outcome; and the plan for subsequent care (multidisciplinary conference, recommended surveillance, discussion, or clinic). These should be communicated, at a minimum, by an initial consultation, completion of treatment summary, and as appropriate, follow-up documentation. All visit notes and treatment summaries should be available in the patient's radiotherapy chart and, when possible, integrated in the facility's electronic medical record. HL7 interfaces can allow automated transfer of documentation between record and verify systems and other electronic medical records (EMRs).

There remains no substitute for direct, timely, personal communication on all clinically relevant matters with the patient, the patient's family or support system, and physicians or other health care professionals.

The communication of certain Protected Health Information (PHI) concerning patients is regulated under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the HIPAA Privacy Rule. Any use, disclosure, or creation of PHI must be in accordance with the Privacy Rule. Particular attention should be given to the use of electronic or digital means of communicating with both physicians and patients. Appropriate privacy, security, and technical safeguards should be established and consistent with the Health Information Technology for Economic and Clinical Health Act of 2009, and institutional or facility policies and procedures.

II. COMMUNICATIONS: GENERAL

A. Medical Record

Practice parameters are revised periodically regarding medical record documentation for professional and technical components of services provided. Criteria unique to radiation therapy services are also contained in the [ACR-ARS Practice Parameter for Radiation Oncology](#) [2].

The following general principles should be followed when preparing medical records:

1. Documents should be prepared legibly and in a timely, useful, and clinically appropriate manner. Institutions, medical staff bylaws, and third-party payers frequently have requirements regarding the timeliness of completing medical records. However, in general, consultation notes, progress notes, letters, follow-up notes, and treatment summaries should be in the medical record as quickly as reasonably possible. Template or standardized language may be used with review and inclusion of patient-specific data.
2. The material should be reviewed to minimize typographic errors and erroneous, confusing, or conflicting statements. Systems in which correspondence is disseminated without review in order "to expedite communication" are discouraged. Abbreviations and acronyms should be discouraged.
3. Proper mechanisms for signature (authentication) and policies for distribution of any correspondence should be in place, ensuring security and confidentiality. It is encouraged that all signatures indicate date and time.
4. The timely distribution of the final document should be verified by transmission via direct mail, fax, and/or electronic means as dictated by the nature and urgency of the clinical setting. The form of transmission of records should be indicated.
5. Record retention must be in compliance with institutional, state, and federal requirements. Retention of radiation treatment records is encouraged.

B. Electronic Communications

Electronic charting and treatment management (record-and-verify) systems are recommended. These systems must meet the federal government's HIPAA security standards for handling electronic media and PHI. These security standards address the protection, security, and integrity of electronically maintained patient information. Any reports from these systems, including voice recognition-generated documents,

should be reviewed by the radiation oncologist or designee for clarity, succinctness, content, accuracy, and ease of understanding by all intended recipients.

C. Doctor–Patient Communication (Open Notes)

Effective bidirectional communication between physicians and patients is a primary goal of the radiation oncologist in all clinical and treatment matters. Efforts should focus on establishing a supportive and interactive relationship with patients and collaborative working relationships with other caregivers to ensure sufficient information is provided to and understood by the patient. Alternative management options should be presented and discussed before the initiation of therapy, and changes in treatment plans should be addressed and communicated in a timely fashion with the patient and other concerned persons [3]. Such interactions help emphasize and promote a patient-oriented perspective. Direct dialogue is typically the primary form of communication between physician and patient, but it may be enhanced [4] through the use of pertinent printed materials, computer-accessible information, video presentations, and other aids [5-8]. Clinically important conversations with patients should be documented in the medical record, including in-person and remote visits. The use of medical interpreters should be documented when used. The attending physician is responsible for the accuracy of all documentation regardless of who has initiated the document.

Email communication and direct, secure communication through EMRs with collaborating and referring physicians, as well as with patients, occur frequently. With other physicians engaged in the management of the patient, electronic communication is effective and efficient; however, risks of unintended sharing of PHI do exist. All parties must establish reasonable safeguards to minimize the risk of inappropriate distribution of information through policies, procedures, and secure services. This includes policies for the release of imaging, anatomic or clinical laboratory results to the patients.

The HIPAA Privacy Rule allows covered health care providers to communicate electronically with their patients, such as through email or the EMR, provided they apply reasonable safeguards when doing so. See 45 C.F.R. § 164.530(c). For example, certain precautions may need to be taken when using email to avoid unintentional disclosures, such as checking the email address for accuracy before sending or sending an email alert to the patient for address confirmation before sending the message. Health care providers must also be aware that although the Privacy Rule allows the communication of unencrypted PHI by email, the disclosure of such information may require notification of such a "breach" in accordance with the Breach Notification Rules of HIPAA.¹ Patient verification of current providers is encouraged.

Use of social media to communicate with patients is discouraged because these methods do not have the appropriate safeguards to protect patients and providers from unintended dissemination of information.

A radiation oncologist should never use unencrypted short message service texts to transmit identifiable patient data or other medical information. Even HIPAA compliant instant messaging services and applications should be used with caution.

Department or institutional policy governing the transmission of PHI by personal communication devices should be followed, and any such communication should be appropriately saved. For further information see the Consensus, Frameworks, and Best Practices in A Review of Cybersecurity and Privacy Standards in Medical Imaging [9].

¹ 45 CFR Parts 160 and 164, Breach Notification for Unsecured Protected Health Information, August 24, 2009.

III. RADIATION ONCOLOGY REPORTS

A. Nonphysicians and Interpretation

Rendering interpretations of medical imaging studies (preliminary, final, or otherwise) is beyond the scope

of practice and is not the intended role of nonphysician members of the healthcare team, including nonphysician radiology providers (NPRPs), radiologic technologists, nurses, and others, but excluding physicians in training. Nonphysicians should not be permitted to render interpretations of medical imaging studies, whether under physician supervision or as an independent nonphysician healthcare provider. (ACR Resolution 16, adopted 2021)

An interpretation of an imaging procedure is the action of an individual and not defined by the location of their contributions in the report. Interpretations may appear anywhere in a radiology report or elsewhere in the medical record (eg, findings, impression, or otherwise). Nonphysician members of the healthcare team, including radiologic technologists, nurses and others, should not be involved in the interpretation of an imaging examination regardless of where their observations are located in the report or medical record.

An interpretation is not defined by the availability of a report to other healthcare providers, but rather by its content and the nature of intellectual activity which produced it. Specifically, reports and/or notes in the medical record in any stage of completion by a nonphysician when that nonphysician was not directly involved in the acquisition of the medical images being interpreted or procedure which was performed, may all be considered interpretations, depending on their content. Such a report or note is considered an interpretation whether it is a draft (available only to a radiologist), a preliminary report, a final report, or any other written form.

Nonphysicians such as NPRPs and radiologic technologists may provide observations to the radiologist regarding targeted real-time image acquisitions or invasive procedures in which they were involved. Examples include a technologist providing observations from real-time targeted ultrasound or fluoroscopic image acquisitions and an NPRP describing a needle procedure they performed. Observations from a nonphysician who acquired medical images should be provided to the radiologist in a draft form only and should be limited to observations made during the acquisition of images (such as a sonographer worksheet). Observations from a nonphysician who performed or assisted in an invasive procedure may be provided to the radiologist in any portion of the radiology report and/ or medical record and may be in any stage of completion as permitted by local institutional policy. It is not appropriate for nonphysicians to routinely provide observations on imaging studies and/ or procedures when they were not directly involved in the performance of the procedure or acquisition of the images (eg, radiographs, mammography, CT scans, MRI scans, and nuclear imaging). (ACR Resolution 17, Adopted 2021)

B. Consultation

1. Specifics

a. The consultation report should include the following:

- Chief complaint
- History of present illness
- Past medical history including any prior radiation or other cancer therapies
- Current medications and pertinent allergies (eg, prescribed and nonprescribed medications, supplements, contrast agents, foods, latex)
- Family medical and patient social history, including smoking, drug abuse, and alcohol consumption
- Review of systems with pertinent findings
- Vital signs
- Pain assessment and planned management
- Nutritional assessments, as appropriate. Current weight should be recorded, as should indication of recent weight gain or loss.
- Performance status (eg, Karnofsky or Zubrod)
- Physical examination pertinent to the clinical situation
- Diagnostic test results, particularly anatomic and clinical , laboratory, imaging, molecular, and genetic studies
- Diagnosis and stage of disease and/or other clinically appropriate classification
- Impression or clinical assessment

- Discussion of treatment options, including intent of treatment (curative, adjuvant, palliative)
- Plan of care or management
- Length of encounter (optional)
- Accompanying individual(s) (optional)
- Participation of an interpreter (optional)

The consultation should include statements about the decision-making process and recommendations for subsequent care. Particular attention should be given to documenting oncology aspects and any comorbid diseases and risk factors that may affect radiation therapy and overall patient care. The specific details of the radiation therapy plan should be reserved for the radiation treatment prescription.

2. Medical decision making

The clinical impression and management recommendations should clearly explain and address the following:

- a. Diagnosis and stage of disease and/or other clinically appropriate classification [10]
- b. The differential diagnosis and natural history of disease (prognosis), as appropriate
- c. Identification of comorbid conditions that may influence treatment decisions
- d. Diagnostic tests to be reviewed or suggested
- e. Treatment options, (eg, observation, surgery, radiation, chemotherapy, multimodality therapy, palliative care, etc)
- f. Intent of therapy (eg, curative, palliative, control)
- f. The plan of care, including any additional recommended diagnostic studies, combined modality approaches, and plans coordinated with other disciplines. Pain management plan, if applicable.
- g. The risks/benefits of the recommended therapy that were discussed with the patient, including the expected outcome as well as possible acute and late side effects and toxicities that may occur (for more details regarding informed consent, see the [ACR-ARS Practice Parameter on Informed Consent Radiation Oncology](#) [11]).
- h. The anticipated treatment region(s); a description of protocols, guidelines, or references being followed can be noted.

Radiation oncologists may prefer to create a summary communication for the referring physician and other providers, noting the pertinent aspects of history, physical examination, clinical assessment, and treatment plan [12]. Regardless of the specifics of the external communication, 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.

C. Clinical Treatment Management/ On Treatment Visit Notes (Including Inpatient Communication)

Radiation oncologists should evaluate and document, at least weekly or every five fractions, the progress of patients who are under therapy. In addition, relevant verbal or written communications with other members of the health care team should be documented in the medical record. Verbal physician-to-physician communication is recommended for urgent issues but should still be documented in the medical record.

Documentation of clinical treatment management includes the following:

- a. Accumulated radiation dose, patient's tolerance to treatment, and progress toward the treatment goal, with analysis of any new pertinent data
- b. Clinically relevant interactions of radiation with other types of cancer-directed treatments
- c. Issues raised by the patient or treatment team (dietary, social service, etc)
- d. Clinically relevant change in status (including toxicities with use of standard criteria such as Common Terminology Criteria for Adverse Events (CTCAE), Version 4.0) or treatment plan (change in treatment intent, modification of treatment plan, need for treatment break or discontinuing treatment, etc)
- e. Pain assessment and, if applicable, management plan

- f. Review of treatment localization (portal images, films, localization images or data) should be documented in the treatment management note or as a separate note of the patient's technical treatment parameters.

It is appropriate for hospitalized patients receiving radiation therapy to have their daily and/or a summary of their weekly treatment documented in their inpatient medical records.

D. Treatment (Completion) Summary

1. Introduction

The technical details and images related to actual clinical management and radiation therapy delivery must be retained in the permanent radiation oncology record and must be made available to others upon request if authorized by the patient or the patient's authorized representative. 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.

The style will reflect the radiation oncologist's individual practice convention and the referring provider's needs. Some may use a standardized reporting format, and others a more descriptive personal letter. Narrative explanations of highly technical aspects of the treatment may be included in the treatment summary when considered to be informative, but these, at a minimum, should be included in the patient's permanent record. Inclusion of relevant images and associated dose distribution in the treatment summary is encouraged. Details color dosimetry records (including DICOM data), details on doses to organs at risk, images and other documentation regarding the site of radiation therapy and the radiation dose distribution must be available on request when medically required or indicated.

2. Specifics

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

a. Components for the summary of radiation therapy delivery

- Patient identification, including date of birth
- Diagnosis and stage of disease and/or other clinically appropriate classification.
- Treatment dates (start and end dates).
- Treatment status (eg, treatment course completed as planned, changed, suspended). The reason for altering the course should be included if applicable.
- 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)
 - Treatment response with details deemed clinically useful, including activity/performance status
 - Side effects and management thereof
 - Planned or unplanned breaks in treatment, with explanations
 - Pain management plan as appropriate
- In addition, the treatment summary should include:
 - External beam: Treatment technique (fluoroscopic simulated, 3-D conformal therapy, intensity-modulated radiation therapy, stereotactic radiation therapy, etc), modality (x-rays, electrons, protons, etc), energy, beam arrangement, the anatomical site, total dose, treatment fractionation, dose to tumor/target volumes, and if applicable, information about boost (sequential versus simultaneous).
 - Noncomitant/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 (eg, intracavitary, interstitial, or

- surface); administration dates of temporary brachytherapy or date of insertion for permanent implants, posttherapy precautions or other special instructions.
 - Systemic radionuclide therapy: The administered radionuclide (chemical form, [colloidal, ligand etc.] and name), route of administration, total activity, and date administered, posttherapy precautions or other special instructions, including for other individuals.
 - Follow-up plans, including time to next scheduled visit, referrals to other health care providers, instructions, and/or diagnostic studies.
 - Treatment summary should be completed and signed by the physician in a timely fashion following completion of radiation therapy and made available to the patient's providers and in the EMR
- b. Optional items of technical nature may include:
- Details of external beam radiation therapy (beam orientation, beam energy)
 - Organ localization techniques and methods of simulation
 - Organ motion management and image guidance
 - Treatment aids or devices (eg, wedges, bolus)
 - Pertinent quality assurance measures (eg, diodes, treatment images, etc)
 - Details of brachytherapy treatment planning

The style, content, and detail of this summary must be tailored to the clinical setting and prevailing practice standards. It should contain elements that accurately and succinctly reflect the program of care administered in a language understandable to physicians who are not radiation oncologists [13].

E. Follow-Up Visits

1. Introduction

The continuity of patient care after radiation delivery is reflected by the initial and subsequent clinical evaluations performed by the radiation oncologist. Although other physicians may participate in patient follow-up care, radiation oncologists with specific training and experience are familiar with the effects of radiation and can provide a uniquely qualified and important diagnostic and management perspective. Correct diagnosis and management of acute, subacute, and late effects from either radiation alone or combined modality programs, detection of recurrent disease, and advice on additional diagnostic and treatment strategies are examples of the posttreatment clinical care provided by the radiation oncologist. Posttreatment clinical assessments are integral to high-quality patient care and also form a vital component of postgraduate training.

2. Specifics

The form and content of a follow-up visit should remain consistent with the initial consultation and treatment summary.

a. Subjective

- Interval history since the last patient encounter
- Cancer-related symptoms and problems, including a general and oncologic review of systems
- Status of symptoms related to cancer/disease therapy
- Other clinical issues to be addressed, including quality of life, pain, psychological and nutritional assessments, sexual health, and the patient's psychosocial concerns

b. Objective

- Vital signs, measure of performance or functional activity status, and pain level assessment as appropriate
- Measurement of current weight and comparison to previous observations
- Pertinent clinical findings in any irradiated field(s)
- General or focused physical examination, as appropriate
- Treatment response based on exam findings, if applicable

- Statement reviewing any pertinent diagnostic data such as interval laboratory and/or imaging studies
 - When applicable, a description to allow assessment of radiation therapy’s late effects on tissues and organs; a comparison of current assessments to prior examinations to reflect continuity of care
- c. Impression or assessment statement
- General patient and cancer status
 - Time since diagnosis and/or completion of radiation therapy
 - Performance score if abnormal or changed from previous visit
 - Current cancer therapies being administered to the patient
 - Description of active radiation-related side effects; use of standard criteria such as the CTCAE, Version 5.0 is encouraged [14].
- d. Disposition and plan of care
- Pertinent recommendations to patient, referring physicians, and other health care providers
 - Recommendations for subsequent diagnostic studies and treatment strategies, as appropriate
 - Changes in medications and documentation of new prescriptions, as appropriate
 - Pain management plan as appropriate
 - Next follow-up visit, with radiation oncologist or other provider

IV. SUMMARY

The radiation oncologist’s participation in the multidisciplinary management of patients is reflected in timely, medically appropriate, and informative communication with the referring physician and other members of the health care team, and where appropriate, the patient or authorized patient representative. The timely generation, authentication, and dissemination of these reports significantly improves their utility and improves the quality and coordination of patient care. Written reports containing standardized components are a matter of course, and they should be in compliance with accepted professional standards. However, documentation must remain sufficiently specific to address the patient’s individual medical management needs and overall clinical environment in which the care is given. In short, the radiation oncologist must communicate effectively with patients, caregivers, other physicians, and the other members of the health care system.

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REFERENCES

1. Emanuel LL, Richter J. The consultant and the patient-physician relationship. A trilateral deliberative model. *Archives of internal medicine* 1994;154:1785-90.
2. American College of Radiology. ACR–ASTRO practice parameter for radiation oncology. Available at: <https://www.acr.org/-/media/ACR/Files/Practice-Parameters/radonc.pdf?la=en> Accessed December 20, 2017.
3. Bhatnagar AK, Land SR, Shogan A, Rodgers EE, Heron DE, Flickinger JC. What do patients want from their radiation oncologist? Initial results from a prospective trial. *International journal of radiation oncology, biology, physics* 2007;69:1527-33.
4. Emanuel EJ, Emanuel LL. Four models of the physician-patient relationship. *JAMA : the journal of the American Medical Association* 1992;267:2221-6.
5. Mazzini MJ, Glode LM. Internet oncology: increased benefit and risk for patients and oncologists. *Hematology/oncology clinics of North America* 2001;15:583-92.
6. Ong LM, Visser MR, Lammes FB, van Der Velden J, Kuenen BC, de Haes JC. Effect of providing cancer patients with the audiotaped initial consultation on satisfaction, recall, and quality of life: a randomized, double-blind study. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology* 2000;18:3052-60.
7. Reilly MO, Cahill M, Perry IJ. Writing to patients: 'putting the patient in the picture'. *Irish medical journal* 2005;98:58-60.
8. White P, Singleton A, Jones R. Copying referral letters to patients: the views of patients, patient representatives and doctors. *Patient education and counseling* 2004;55:94-8.
9. Chen PH, Wald C. Consensus, Frameworks, and Best Practices in A Review of Cybersecurity and Privacy Standards in Medical Imaging. *Journal of The American College of Radiology* 2025 Oct;22(10):1124-1131.
10. American Joint Committee on Cancer. *Cancer Staging Manual*. 6th ed. Philadelphia, Pa: Lippincott-Raven; 2002.
11. American College of Radiology. ACR–ARS practice parameter on informed consent radiation oncology.

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Accessed October 5, 2022.

12. Barnes EA, Chow E, Andersson L, et al. Communication with referring physicians in a palliative radiotherapy clinic. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer* 2004;12:669-73.
13. Barnes EA, Hanson J, Neumann CM, Nekolaichuk CL, Bruera E. Communication between primary care physicians and radiation oncologists regarding patients with cancer treated with palliative radiotherapy. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology* 2000;18:2902-7.
14. Services USDoHaH. Common Terminology Criteria for Adverse Events (CTCAE), Version 5.0. https://ctep.cancer.gov/protocoldevelopment/electronic_applications/docs/ctcae_v5_quick_reference_5x7.pdf. Accessed October 5, 2022.

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