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Each practice guideline 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 guidelines 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 guideline and technical standard by those entities not providing these services is not authorized.

ACR–ASTRO PRACTICE GUIDELINE FOR COMMUNICATION: RADIATION ONCOLOGY

PREAMBLE

These guidelines are an educational tool designed to assist practitioners in providing appropriate radiation oncology care for patients. They are not inflexible rules or requirements of practice and are not intended, nor should they be used, to establish a legal standard of care. For these reasons and those set forth below, the American College of Radiology cautions against the use of these guidelines 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 physician or medical physicist in light of all the circumstances presented. Thus, an approach that differs from the guidelines, 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 the guidelines when, in the reasonable judgment of the practitioner, such course of action is indicated by the condition of the patient, limitations of available resources, or advances in knowledge or technology subsequent to publication of the guidelines. However, a practitioner who employs an approach substantially different from these guidelines is advised to document in the patient record information sufficient to explain the approach taken.

The practice of medicine involves not only the science, but also 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

1Iowa Medical Society and Iowa Society of Anesthesiologists v. Iowa Board of Nursing, ___ N.W.2d ___ (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.

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certainty a particular response to treatment. Therefore, it should be recognized that adherence to these guidelines 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 sole purpose of these guidelines is to assist practitioners in achieving this objective.

I. INTRODUCTION

This guideline was revised collaboratively by the American College of Radiology (ACR) and the American Society for Radiation Oncology (ASTRO).

Timely, accurate and effective communications are critical to quality in contemporary medical practices. Radiation oncology incorporates the science and technology of complex, integrated radiation treatment delivery and the art of managing individual patients. Through written physical (ie, hardcopy) and/or electronic (eg, digital) reports and direct communication, radiation oncologists convey their knowledge regarding patient care, services provided, and quality of care to others involved in the care of the patient. This communication should involve primary care physicians, medical oncologists, surgeons, other non-radiation oncology healthcare providers as well as and other members of the radiation oncology treatment team (such as other physicians, nurses, radiation therapists, dosimetrists, medical physicists, nurses, tumor registrars and quality assurance personnel) [1].

Radiation oncology activities must be clearly and simply articulated for communications objectives to be met. While not all the technical aspects of treatment have to be included, several certain basic functions information must be reflected in any physician correspondence: an evaluation and assessment of the patient’s clinical problems; from the radiation oncologist’s perspective the patient’s participation in a summary of any multi-disciplinary cancer care; the plan and delivery of radiation therapy treatments; the monitoring of response, side effects and outcome; and the plan for subsequent care (conference, discussion or clinic). These should be communicated, at a minimum, by an initial consultation, a treatment (completion) summary and a follow-up evaluation.

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 communication 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 (HITECH).

II. COMMUNICATIONS: GENERAL

A. Medical Record

Guidelines need to be revised periodically regarding medical record documentation for professional and technical components of services delivered. in outpatient clinics and offices in...
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The medical record should address the following:

1. Permanent 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 shortly within one to two weeks after the visit or the completion of treatment.

2. The material should be reviewed to minimize typographic errors and confusing or conflicting statements. Systems in which correspondence is disseminated without review “to expedite communication” are discouraged. Abbreviations and other notations should follow prevailing standards. Jargon, abbreviations and acronyms unique to radiation oncology should be avoided.

3. Proper mechanisms for signature (authentication) and policies for distribution of any correspondence should be in place, assuring security and confidentiality.

4. The timely distribution of the final document must be assured by transmission via direct mail, fax and/or electronic means as dictated by the nature and urgency of the clinical setting.

5. The communications are a part of the patient’s permanent medical record. Record retention should be in compliance with state and federal requirements.

B. Electronic Communications

Electronic charting and record-and-verify systems are becoming increasingly prevalent. 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

Effective communication between physicians and patients is a primary goal of the radiation oncologist in all clinical and treatment matters. Efforts should focus on encouraging establishing a supportive and interactive collaborative relationship with patients and collaborative working relationships with their other caregivers, to ensure that necessary and sufficient information is provided to and understood by the patient. Alternative management options should be presented and discussed prior to initiation of therapy and changes in treatment plans should be addressed and communicated are clarified, and patient needs are addressed in a timely fashion with the patient and other concerned persons [3]. Such relationships maintain interactions help emphasize and promote a patient-oriented perspective. Usually a verbal Direct dialogue is typically the primary form of communication between physician and patient, but it often may be [4] enhanced through the use of pertinent printed materials, computer-accessible information, video presentations and other aids [5-8]. Conversations with patients should be documented in the medical record.

Increasingly, direct electronic mail communication with collaborating and referring physicians, as well as with patients, is occurring. With other physicians engaged in the
management of the patient, this electronic communication can be both 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 policy, procedures and secure mail services.

The HIPAA Privacy Rule allows covered health care providers to communicate electronically with their patients, such as through e-mail, 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 e-mail to avoid unintentional disclosures, such as checking the e-mail address for accuracy before sending, or sending an e-mail alert to the patient for address confirmation prior to sending the message. Healthcare 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 “breach” in accordance with the Breach Notification Rules of HIPAA2.

Use of social media (eg, facebook®, twitter®) to communicate with patients should not be used as it does not have the appropriate safeguards to protect patients and providers from unintended dissemination of information. Similarly, the use of Short Message Service (SMS) text and Instant Messaging services must be used with caution as they may be inadvertently transmitted to unsecure Internet servers or devices. Department or institutional policy governing the transmission of PHI by personal communication devices should be strongly considered.

III. RADIATION ONCOLOGY REPORTS

A. Consultation

1. Specifics

   a. The consultation report should include:

      • The Chief complaint
      • History of present illness
      • Past medical illness including any prior radiation or other cancer therapies.
      • Current medications and pertinent allergies (eg, medications, contrast agents, foods, latex)
      • Family medical and patient social history
      • Review of systems
      • Vital signs, including pain and nutritional assessments
      • Performance classification (eg, Karnofsky or Zubrod)
      • Physical examination Results
      • Diagnostic test results, particularly pathology, imaging and staging studies.
      • TNM classification of the tumor(s) and the staging (if available.
      • Impression or clinical assessment
      • Plan of care or management

      • The TNM classification of the tumor(s) and the staging (if available)
      • Performance classification (eg, Karnofsky or RTOG®)
      • Current medications and medication allergies

      • The patient’s history

2 45 CFR Parts 160 and 164, Breach Notification for Unsecured Protected Health Information, August 24, 2009.
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- Pain assessment
- Results of diagnostic tests

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.

2. Medical decision making

The clinical impression and accompanying management recommendations (or plan) should be explained in clear concise language clearly explain and address: and should include

a. The clinical impression indicating the primary tumor site, histology, and TNM stage [9] A statement concerning the pertinent diagnostic data reviewed in order to stage the tumor
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 ordered The clinical impression, acknowledging any underlying conditions that may influence the treatment plan options
e. A discussion, as appropriate of any differential diagnoses and the natural history of the underlying condition
f. Treatment options, including the intent of therapy (eg, cure, adjuvant, palliation, local control) This section can also include other items such as risks/benefits and prognosis
g. The risks/benefits of the recommended therapy that were discussed with the patient including the expected outcome as well as possible side effects and toxicities that may occur; for more details regarding informed consent, see the ACR Practice Guideline on Informed Consent – Radiation Oncology [10]

It may also include a summary of the risks/benefits of radiation therapy that were discussed with the patient. For more details regarding informed consent, see the ACR Practice Guideline on Informed Consent – Radiation Oncology.
h. The anticipated treatment region(s); a description of area and dose estimate Any protocols, guidelines, or references being followed can be noted

Radiation oncologists may prefer to send a fax or letter to the referring and other physicians noting only the pertinent aspects of history, physical examination, clinical assessment and treatment plan [11]. Regardless of the specifics of the external communication, a completed and detailed internal detailed report document (containing all the necessary elements of evaluation and management) should be generated and maintained which remains in the patient's permanent radiation therapy permanent record.

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B. Clinical Treatment Management Notes (including inpatient communication)

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

Details of the clinical treatment management note include:

a. Accumulated radiation dose, patient’s tolerance to treatment, and progress towards the treatment goal, with analysis of any new pertinent data

b. Issues raised by the patient or treatment team (dietary, social service, etc)

c. Documentation of any clinically relevant change in status or treatment plan (change in treatment intent, need for treatment break, etc)

d. Documentation of review of the technical aspects of the radiation therapy treatment plan and patient setup

e. The review of treatment localization (portal images, films, localization images or data) should be documented in the treatment management note or as separate note of the patient’s technical treatment parameters

Hospitalized patients receiving radiation therapy should have their daily treatment documented in their inpatient medical records.

C. Treatment (Completion) Summary

1. Introduction

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 should be generated and distributed to the patient’s other pertinent healthcare providers 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 towards the treatment goals, and subsequent care plans.

The style will reflect the radiation oncologist’s individual practice convention and the referral provider’s needs. Some may use a standardized reporting format, 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. 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, authorized by the patient.

2. Specifics

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

a. Components for the summary of radiation therapy delivery include

- Patient identification and report date
- Recipients of report (including tumor registry, if appropriate).
- Diagnosis and TNM stage of disease
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- Treatment dates
- Treatment status (e.g., treatment course completed as planned, changed, suspended)
- Treatment response with details deemed clinically useful, including activity/performance status
- Clinical course, including side effects and management thereof and use of ancillary services (nutritional, psycho-social, etc)
  - Treatment response with details deemed clinically useful, including activity/performance status
  - Side effects and management thereof
  - Interruptions or unplanned breaks in treatment

- In addition to the above, the treatment summary should include at least the following elements:
  - For external beam applications: External beam: beam description (type energy, orientation, techniques, etc), treatment technique (3-D Conformal Therapy, Intensity Modulated Radiation Therapy, Stereotactic Radiation Therapy, etc), modality (X-rays, electrons, protons, etc) total dose, treatment fractions, dose to tumor/target volumes, and any key regions (including nodal areas and key organs), as appropriate
  - Concomitant/concurrent therapies such as 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 For brachytherapy applications: isotope, treatment type (e.g., high-dose/low-dose radiation [HDR/LDR] permanent/temporary), dates of delivery and dose to volumes of interest (described) as well as any dose specification points/regions
  - Radionuclide injections therapy: the administered isotope radionuclide (chemical form [colloidal, tagged to antibody, etc.], and name), route of administration, total activity, any dose to target/tumor volume and date time administered
- Follow-up plans including referrals to other health care providers, instructions, and/or diagnostic studies.
- Discharge instructions regarding aftercare following radiation therapy
  - Optional items of technical nature may include: Items especially those technical in nature can also be included such as
    - 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 (e.g., wedges, bolus)
    - Pertinent quality assurance measures (e.g., on-board imaging diodes, port treatment images, etc)

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 the nonradiation physicians who are not radiation oncologists [12].

D. 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 oncologists and general and specialty physicians participate in patient surveillance, the nature of the oncologic problem and treatments coupled with the follow-up care, radiation oncologists with specific training and experience that radiation oncologists possess is important in subsequent are familiar with the effects of radiation and can provide uniquely qualified and important diagnostic and management perspective. Follow-up Discerning Correct diagnosis and management of acute, subacute, and late effects from either single radiation alone or combined modality programs, detecting detection of recurrent disease, and advising advice on additional diagnostic and treatment strategies are examples of activities the special services provided by the radiation oncologist. Follow-up assessments are integral to high-quality patient care. This assessment is inherent to quality patient care. It is desirable that the radiation oncologist follow patients who have undergone courses of radiation therapy in the curative setting.

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 in the interval since the last patient encounter
- Cancer-related symptoms, problems with including a general and oncologic review of systems review
- Status of symptoms related to radiation cancer therapy treatment
- Other clinical issues to be addressed include including quality of life, pain and nutritional assessments, and the patient’s emotional concerns

b. Objective

- Pertinent clinical findings in any irradiated field(s)
- Multisystem examination to detect any evidence of active oncologic disease.
- General or focused physical examination, as appropriate
- Statement reviewing any pertinent diagnostic data
- When applicable, a description to allow assessment of radiation therapy’s late effects on tissues and organs; should be incorporated into the report. Several designsations are available using standard criteria such as the Common Toxicity Criteria v3 (cancer.gov/forms/CTCAEv3.pdf) 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 or functional activity status
- Current cancer therapies being administered to the patient
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- Description of radiation related side effects; several designations are available using standard criteria such as the Common Toxicity Criteria (ctep.cancer.gov/_forms/CTCAEv4.pdf)
  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
    - Next follow-up visit

If it is anticipated that the radiation oncologist will not follow up with the patient, it is suggested recommended that the report to the referring physician include a request for periodic updates on the patient’s progress. These updates will facilitate continuity of care should the patient require further radiation therapy.

D. Clinical Treatment Management Notes (including inpatient communication)
Radiation oncologists evaluate and document the progress of patients who are under routine therapy at least weekly. In addition relevant communication concerning the above with the patient’s referring physician(s) or caregivers which may be either in person or by phone should be documented. Verbal physician-to-physician communication is recommended for urgent issues.

Details of the clinical treatment management note may include
  a. Accumulated radiation dose, patient’s tolerance and progress towards the treatment goal with analysis of any new pertinent data
  b. Issues raised by the patient or treatment team (dietary social service etc)
  f. Documentation of any clinically relevant change in status or treatment plan (change in treatment intent need for treatment break etc)
  g. Documentation of review of the technical aspects of the radiation therapy treatment plan and patient setup

In patients receiving radiation therapy should have their daily treatment documented in their hospital medical records.

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. The timely generation, authentication and dissemination of these reports significantly improves their utility and improves the quality of patient care. Written reports containing standardized components as are a matter of course and they should be in compliance with accepted professional standards, norms. However, they documentation must remain sufficiently individualized both specific to address the patient’s actual individual medical management needs and overall clinical environment in which the care is given, and to reflect the local norms of medical practice. In short, the radiation oncologist must communicate effectively with patients, their caregivers, other managing physicians and the other elements members of the health care system.

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Members represent their societies in the initial and final revision of this guideline.

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REFERENCES

7. Reilly MO, Cahill M, Perry IJ. Writing to patients: 'putting the patient in the picture'.


**Suggested Reading** (Additional article that is not cited in the document but that the committee recommends for further reading on this topic)


*Guidelines and standards are published annually with an effective date of October 1 in the year in which amended, revised or approved by the ACR Council. For guidelines and standards published before 1999, the effective date was January 1 following the year in which the guideline or standard was amended, revised, or approved by the ACR Council.*

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