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The American College of Radiology will periodically define new practice guidelines 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 guidelines and technical standards will be reviewed for revision or renewal, as appropriate, on their fifth anniversary or sooner, if indicated.

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, requiring the approval of the Commission on Quality and Safety as well as the ACR Board of Chancellors, the ACR Council Steering Committee, and the ACR Council. 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.

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ACR 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 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

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 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, and other members of the radiation oncology treatment team (such as radiation therapists, dosimetrists, 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 basic functions must be reflected in any correspondence: an evaluation and assessment of the patient's clinical problems from the radiation oncologist's perspective; the patient's participation in 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.

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.

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 inpatient settings, or in other facilities. Criteria unique to radiation therapy services are also contained in the [ACR Practice Guideline for Radiation Oncology](#) [2].

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 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.
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.

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, 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 collaborative relationships with patients and their caregivers to ensure that necessary information is provided and understood, management options are clarified, and patient needs are addressed in a timely fashion [3]. Such relationships maintain a patient-oriented perspective. Usually, a verbal dialogue is the primary form of communication between physician and patient, but it often may be [4] enhanced through pertinent printed materials, computer-accessible information, video presentations, and other aids [5,6].

III. RADIATION ONCOLOGY REPORTS

A. Consultation

1. Specifics

- a. The consultation report should include:
 - The chief complaint.
 - The TNM classification of the tumor(s) and the staging (if available).
 - Performance classification (e.g., Karnofsky or RTOG®).
 - Current medications and medication allergies.
 - The patient's history.
 - Family and social history.
 - Vital signs.
 - Results of physical examination.
 - 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 patient care.

2. Medical decision making

The clinical impression and accompanying management recommendations should be explained in clear, concise language, and should include:

- a. A statement concerning the pertinent diagnostic data reviewed in order to stage the tumor [7].
- b. The clinical impression, acknowledging any underlying conditions that may influence the treatment plan options.
- c. A discussion, as appropriate, of any differential diagnoses and the natural history of the underlying condition.
- d. Treatment options, including the intent of therapy (e.g., cure, adjuvant, palliation, local control). This section can also include other items such as risks/benefits and prognosis.
- e. The plan of care, including any additional recommended diagnostic studies, combined modality approaches, and plans coordinated with other disciplines. 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](#) [8].
- f. The anticipated treatment 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 physician noting only the pertinent aspects of history, physical examination, clinical assessment, and treatment plan [9]. An internal detailed report should be generated, which remains in the patient's radiation therapy permanent record to fulfill documentation requirements.

B. Treatment (Completion) Summary

1. Introduction

The technical details and images related to actual clinical management and radiation therapy delivery must be 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 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 in the permanent record. Images and other documentation regarding the site of radiation therapy and the radiation dose distribution must be available on request when 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 stage of disease.
 - 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, psychosocial, etc.).
 - In addition to the above, the treatment summary should include at least the following elements:
 - For external beam applications: beam description (type, energy, orientation, techniques, 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.
 - 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: the administered isotope (chemical

form [colloidal, tagged to antibody, etc.], and name), total activity, any dose to target/tumor volume, and time administered.

- Follow-up plans including referrals to other health care providers, instructions, and/or diagnostic studies.
- b. Items, especially those technical in nature, can also be included, such as:
- Organ localization techniques and methods of simulation.
 - Treatment aids or devices. -
 - Pertinent quality assurance measures (e.g., on board imaging, diodes, port films/images.)

The style, content, and detail of this summary must be tailored to the clinical setting and prevailing practice norms. It should contain elements that accurately and succinctly reflect the program of care administered in a language understandable to the nonradiation oncologist.

C. 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 specific training and experience that radiation oncologists possess, is important in subsequent follow-up. Discerning acute, subacute, and late effects from either single or combined modality programs, detecting recurrent disease, and advising on additional diagnostic and treatment strategies are examples of activities provided by the radiation oncologist. 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
- History in the interval since the last patient encounter.
 - Cancer-related symptoms, problems with general and oncologic system review.

- Status of symptoms related to radiation treatment.
- Other clinical issues, including quality of life.

b. Objective

- Pertinent clinical findings in any irradiated field(s).
- Multisystem examination to detect any evidence of active 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 designations are available using standard criteria such as the Common Toxicity Criteria v3 (ctep.cancer.gov/forms/CTCAEv3.pdf). A comparison of current assessments to prior examinations reflects continuity of care.

c. Impression or assessment statement

- General patient and cancer status.
- Time since diagnosis and/or completion of therapy.
- Performance or functional activity status.

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.
- Next follow-up visit.

If it is anticipated that the radiation oncologist will not follow up the patient, it is suggested 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.).
- 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.

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. Written reports contain standardized components as a matter of compliance with accepted professional norms. However, they must remain sufficiently individualized, both to address the patient's actual medical management and overall clinical environment 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 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. *Arch Intern Med* 1994; 154(16):1785-1790.
2. [ACR Practice Guideline for Radiation Oncology. Practice Guidelines and Technical Standards.](#) Reston, Va.: American College of Radiology; 2008:923-929.
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. *Int J Radiat Oncol Biol Phys* 2007; 69(5):1527-1533.
4. Emanuel EJ, Emanuel LL. Four models of the physician-patient relationship. *Jama* 1992; 267(16):2221-2226.
5. Mazzini MJ, Glode LM. Internet oncology: increased benefit and risk for patients and oncologists. *Hematol Oncol Clin North Am* 2001; 15(3):583-592.
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. *J Clin Oncol* 2000; 18(16):3052-3060.
7. *American Joint Committee on Cancer. Cancer Staging Manual.* 6th ed. Philadelphia, Pa.: Lippincott-Raven; 2002.
8. [ACR Practice Guideline on Informed Consent - Radiation Oncology. Practice Guidelines and Technical Standards.](#) Reston, Va.: American College of Radiology; 2008:937-941.
9. Barnes EA, Chow E, Andersson L, et al. Communication with referring physicians in a palliative radiotherapy clinic. *Support Care Cancer* 2004; 12(9):669-673.
10. ACR practice guideline for communication of diagnostic imaging findings. In: *Practice Guidelines and Technical Standards.* Reston, Va: American College of Radiology; 2008:3-8.

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