JRCNMT Accreditation Manual 2010-2011

Joint Review Committee on Educational Programs in Nuclear Medicine Technology

2000 W. Danforth Rd, Ste. 130, #203
Edmond, OK 73003
Phone (405) 285-0546 / Fax (405) 285-0579
jrcnmt@coxinet.net www.jrcnmt.org

The Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT) is a not-for-profit corporation organized exclusively for educational accreditation purposes.

JRCNMT Accreditation Manual

Table of Contents

Table of Contents (Cont.)

History

The Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT) was formed by the American College of Radiology, the American Society for Medical Technology*, the American Society of Clinical Pathologists, the American Society of Radiologic Technologists, the Society of Nuclear Medicine, and the Society of Nuclear Medicine Technologists. The Society of Nuclear Medicine Technologists, one of the original sponsors, terminated its corporate status as a professional organization and relinquished its sponsorship to the Society of Nuclear Medicine (Technologists Section) in l975. The American Society of Clinical Pathologists and the American Society for Clinical Laboratory Science withdrew from sponsorship in 1994.

The *Essentials and Guidelines for an Accredited Educational Program for the Nuclear Medicine Technologist* was originally adopted by the collaborating organizations in 1969. Substantial revisions occurred in 1976, 1984, 1991, 1997 and 2003. In 2010 a new version was published under the title *Accreditation Standards for Nuclear Medicine Technologist Education.*

The JRCNMT, in collaboration with the AMA Council of Medical Education (CME), began accrediting educational programs for nuclear medicine technologists in 1970. In 1976, the CME delegated its collaborative responsibility and authority for allied health education accreditation to the newly formed Committee on Allied Health Education and Accreditation (CAHEA). Following the dissolution of CAHEA in l994, the JRCNMT became an independent accrediting agency responsible for the accreditation of nuclear medicine technology programs.

Recognition by the United States Secretary of Education was granted upon initial application in 1974. The Secretary continues to recognize the JRCNMT as the authority on the accreditation of nuclear medicine technology programs. Recognition of the JRCNMT by a voluntary nongovernmental agency was initiated in 1983 and continues today through the Council for Higher Education Accreditation (CHEA). Recognition was granted that same year and is ongoing.

*The official name of this organization was changed to the American Society for Clinical Laboratory Science in 1992.

Structure and Function

The JRCNMT is a programmatic, postsecondary accrediting agency recognized by the US Secretary of Education and CHEA. The following professional societies serve as sponsors to the JRCNMT:

The American College of Radiology (ACR)
The American Society of Radiologic Technologists (ASRT)
The Society of Nuclear Medicine (SNM)
The Society of Nuclear Medicine Technologist Section (SNMTS)

The Review Committee is comprised of 14 members. Each sponsoring organization nominates three candidates for board membership plus there are two public members selected by the Review Committee to provide a broad, societal perspective to committee deliberations.

The Review Committee is responsible to the public, professional communities of interest, educational program sponsors, and students for ensuring that accredited educational programs comply with nationally accepted standards. The JRCNMT is the final deliberating body for the assessment of compliance with established standards for accreditation of educational programs in nuclear medicine technology.

In addition to programmatic accreditation, JRCNMT responsibilities include:

- Developing, adopting, and revising policies and procedures that facilitate the accreditation process.

- Establishing and maintaining liaison with institutions that sponsor nuclear medicine technology programs and with other related educational and health organizations to provide assurance that JRCNMT policies and procedures promote sound education.

The Review Committee functions as an autonomous agency. As such, accreditation decisions, bylaws, and operational policies are not subject to review by the sponsoring organizations. Revision of the *Standards* is subject to review by the sponsoring organizations and approval by a majority of them.

Cooperative Relationships

The JRCNMT participates in collaborative activities with healthcare organizations, other programmatic and institutional accrediting agencies, and state education and licensing agencies. Such collaboration includes participation in coordinated site visits when requested and notification to agencies of impending program reviews and accreditation decisions. Comments on proposed JRCNMT policy and procedure statements are solicited from the communities of interest.

Quality Assurance Program

The Review Committee has ongoing processes to assess its performance. Internally, accreditation decisions are routinely reviewed for consistency, uniformity and compliance with policies and procedures. Externally, Review Committee performance is critiqued through:

- Annual workshops where accredited programs are invited to discuss issues and provide comments on general and specific issues.

- The use of Post-Site Visit Questionnaires to assess performance of agency staff and the site team, as well as elements of the self-study and site visit process.

- Participation in recognition processes of the US Department of Education and CHEA, which evaluate compliance with published criteria for accrediting agencies.

Accreditation Policies

The JRCNMT **Manual of Accreditation Policies and Procedures** contains the elements that guide the Review Committee accreditation process. The manual is divided into sections on:

- Operating Provisions
- Standards
- Evaluative Practices and Procedures
- Administrative Practices and Procedures
- Public Responsibility

The **Manual of Accreditation Policies and Procedures** is currently available by calling the JRCNMT office. It will be available on the JRCNMT website in 2010.

JRCNMT Accreditation

Definition, Purpose, Benefits

Accreditation is a process of external peer review in which a private, nongovernmental agency grants public recognition to an institution or specialized program of study that meets certain established qualifications and educational standards, as determined through initial and subsequent periodic evaluations.

The purpose of the programmatic accreditation process is to provide a professional judgment of the quality of an educational program in its institutional setting and to encourage its continued improvement.

By stating that an institution has met established standards, accreditation provides benefits to:

Students and Parents

Accreditation enables prospective students and parents to identify programs that meet national standards established by and for educational programs in nuclear medicine technology. Accreditation may also assist students wishing to transfer from one program to another.

Institutions

Accreditation protects against internal and external pressures to modify programs for reasons that are not educationally valid. It involves faculty and staff in comprehensive program and institutional evaluation and planning. The process stimulates self-improvement by providing nationally acceptable standards against which an institution can evaluate its program to ensure it is meeting the needs of the student and profession. Accreditation provides a frame of reference for the institution to identify resources that may be needed to maintain or enhance the program and it allows the institution to receive feedback on possible areas of concern as well as where and when excellence has been achieved.

Society

Accreditation provides evidence of peer review assessment of quality and content of the educational experience and its applicability to the expectations of the profession and potential employers. It assists the process of professional certification, registration and licensure by providing reasonable assurance of quality educational preparation. Accreditation is one of several factors used to determine eligibility for some types of federal assistance and may help identify institutions and programs for the investment of public and private funds.

Employers

Accreditation provides assurance that graduates of an accredited program have received an education based on national standards.

The JRCNMT publishes a list of accredited programs on its website for prospective students, employers and the public.

Accreditation Process Timeline

The accreditation process follows rigid time lines, some of which are stipulated by the US Department of Education in its criteria for accrediting agency recognition and others that are set by the JRCNMT to permit volunteer reviewers and site visitors adequate time to complete tasks in a thorough manner.

Programs renewing their accreditation follow the steps listed below. A complete application requires the submission of application, fees and the self-study by the designated deadlines.

Note: Programs applying for initial accreditation follow steps 2 – 9, though the time line will vary since applications for initial accreditation are accepted throughout the year.

Timeline	Steps
July 1	**Step 1: JRCNMT** • Sends notification of reaccreditation to applicable programs
September 1	**Step 2: PROGRAM** • Submits Application and Fees to JRCNMT
February 1	**Step 3: PROGRAM** • Submits self-study to JRCNMT
Spring	**Step 4: JRCNMT & Review Committee** • Reviews self-study and schedules site visit
Summer	**Step 5: JRCNMT & Program** • Site visit occurs
45 days after visit	**Step 6: JRCNMT** • Sends Report of Site Visit to program
Within 30 days of report	**Step 7: PROGRAM** • Responds to Report of Site Visit (optional)
Fall Meeting	**Step 8: JRCNMT Board** • Reviews and decides accreditation status
Within 30 days of the meeting	**Step 9: JRCNMT** • Accreditation notification letter is sent to the program

Components of the Accreditation Process

Application for Accreditation
The accreditation process begins with the submission of the application for accreditation and fees, and is followed by submission of a complete self-study. Only applications signed by the chief executive officer of the program sponsor are accepted by the JRCNMT. Application and self-study forms are available from the JRCNMT office and website.

Self-study: The Process
Internal review, analysis, and assessment of the entire range of didactic and clinical educational operations should be an ongoing process conducted by faculty and other appropriate members of the academic community. This self-study or self-assessment process is required of programs requesting consideration for accreditation by the JRCNMT. The Review Committee provides materials based upon the *Standards* to guide the program evaluation process. The Review Committee conducts annual workshops on the self-study process and report.

Self-study: The Report
The self-study requirements of the JRCNMT contain specific instructions for preparing the report. Programs are advised that the report need contain only enough representative documentation to substantiate compliance with the *Standards*. The report contains a qualitative self assessment based on application of the *Standards* and concludes with a description of program strengths, weaknesses and plans for improvement.

The institution/program may conduct a self-study that exceeds the requirements of the accreditation process. In this case, the JRCNMT requirements should be singled out and presented in the Self-study Report.

JRCNMT Procedure 3.109A requires new programs submit their self-study no later than one year after submission of the application for initial accreditation and fees. A program has six months from the date of notification to provide the necessary materials if the self-study review has found the document incomplete.

Site Visit
After the Self-Study Report has been evaluated, an on-site assessment is conducted. The site visit process provides the opportunity for the Review Committee to validate and clarify the contents of the Self-Study Report and determine the extent to which the program complies with the *Standards*.

The Review Committee cooperates with those programs wishing to conduct coordinated or concurrent visits with other accrediting agencies. Such participation requires submission of an adequate Self-Study Report by the stated deadline.

JRCNMT staff will contact the program to select a mutually satisfactory date for the visit. Staff will then assign the site visit team. The team leader will contact the program director to discuss the agenda for the visit. Visits vary in length from one to three days depending upon the size and complexity of the program.

Site Visit Report
The office provides site visitors with the forms necessary to conduct the site visit and compile their report. The Site Visit Report is not complete and provided to the program until it has been evaluated by members of the Review Committee. When this review is completed, JRCNMT staff sends a copy of the Report of Site Visit to the program director to provide an opportunity for correction of factual errors. The report identifies program strengths, suggestions for improvement and areas of possible non-compliance with the *Standards*. Specific *Standards* are cited for each item of noncompliance identified.

The site evaluation is a fact-finding visit, with the site evaluation team reporting their observations to the Review Committee. The site evaluation team is instructed not to make recommendations or to comment on whether a program should receive accreditation.

Accreditation Action by the Review Committee
After the program has had adequate time to respond to the factual content of the Site Visit Report, the program is placed on the agenda for the next semiannual Review Committee meeting. During these meetings, the committee considers each current application for initial or continuing accreditation. Within thirty (30 business days of the meeting, written notification of the committee's decision is sent to the chief executive officer of the sponsoring institution, the program director, the institution's accreditor, appropriate state licensing and accrediting agencies and the U.S. Department of Education.

Evaluation of the Accreditation Process
The JRCNMT is responsible for evaluating the effectiveness of the accreditation process. To assist in these evaluation efforts, a Post-Site Visit Questionnaire (PSQ) is sent to program directors and institutional administrators shortly after the site visit. The purpose of the PSQ is to solicit information on (1) the arrangements for the site visit, (2) the performance of the site visit team, (3) the accreditation process, and (4) suggestions for improving the overall program review process. The qualitative and quantitative PSQ data is provided to the Review Committee as part of the agency's broader quality assurance program after final action on the program has been taken.

Confidentiality in the Accreditation Process
Meticulous efforts are made within all components of the peer review process to maintain the confidentiality of information collected throughout the accreditation process and to avoid conflicts of interest. Materials such as self-study and site visit reports are read and discussed only by members of the visiting team, the Review Committee and JRCNMT staff, or as required by regulation and law. It is further recognized that these materials are the property of the sponsoring institution, which may share or distribute them as it chooses.

Complaints
Recommendations to withhold or withdraw accreditation or to place a program on probation can emanate from a complaint as well as from the regular accreditation process. Complaints indicating that accredited programs or programs seeking accreditation are not in substantial compliance with the *Standards,* are not fulfilling administrative requirements for maintaining accreditation, or are not following established accreditation policies, may be directed to the JRCNMT. The complaints must be submitted in writing and must be signed. Upon receipt of the written complaint JRCNMT Policy 5.300, Complaints Regarding Accredited Programs, is followed.

Ensuring Due Process
To ensure due process for all parties involved in the accreditation and operation of nuclear medicine technology programs, the Review Committee disseminates policies containing descriptions of the rights of all parties involved and of their recourse should they feel that those rights have been denied.

The JRCNMT makes available to the public its standards for accreditation, reports of its operations, lists of accredited educational programs and of programs no longer accredited.

Annual Reports
All accredited programs are required to file an annual report with the JRCNMT. The annual report process is electronic and overseen by the AMA's Department of Information and Publications. The survey obtains current information for the AMA's published listing of accredited programs, updates the accreditation program archives, and identifies any major changes in the program during the year. Specific Review Committee reports must also be completed as requested.

Fees and Cost Benefits
The accreditation process provided by the JRCNMT is a valuable service offered at a reasonable cost. Benefits of the process include:

- Professional evaluation by competent faculty and practitioners
- Assurance that the institution's program compares favorably with others nationwide
- Assurance that students should qualify for entry into the profession upon graduation
- Assurance that faculty routinely analyze the program for continuous improvement
- Infusion of fresh perspectives from other professionals to enhance faculty creativity

A current schedule of accreditation fees is published on the JRCNMT website.

Accreditation Standards

The Standards

The requirements for the accreditation of educational programs that prepare individuals to become nuclear medicine technologists are located in the *Standards for Accreditation of Nuclear Medicine Technologist Education*, hereafter referred to as the *Standards*.

Any requirement for which an accredited program is held accountable must be documented in the *Standards*. These requirements are carefully reviewed to ensure that they do not conflict with or encourage violation of federal, state or local law. In addition, all *Standards* have the following characteristics:

Qualitative: The *Standards* are qualitative rather than quantitative, with arbitrary numerical descriptors avoided whenever possible.

Broad Application: The *Standards* are stated in broad rather than in specific terms; they must apply to programs across the nation which are located in various kinds of institutions.

Nonrestrictive: The *Standards* are expected to acknowledge and respect the basic right of educational institutions to be self-determining. Statements in the *Standards* complement the rights and responsibilities of institutional sponsors of applicant and accredited programs, as well as the rights and responsibilities of the Review Committee.

Broad Consensus: The *Standards* emphasize prescriptive rather than proscriptive standards that are acceptable to the communities of interest that use or are affected by the *Standards*.

Quality, Continuity and Flexibility: The *Standards* are designed to promote educational quality and program stability and to accommodate reasonable program variations and special characteristics, such as those using nontraditional or innovative educational methodologies.

Using the *Standards*

The Standards are used by all constituents of the accreditation process.

- Potential sponsor applicants use the *Standards* to determine whether or not they have the resources and commitment to develop a program capable of being accredited.

- Programs involved in the accreditation process use the *Standards* for guidance in conducting their self-study and in writing the Self-study Report.

- Site visitors compare program practices against the *Standards* when determining the degree to which an educational program complies with minimum standards; specific *Standards* are cited in cases of noncompliance.

- The Review Committee uses the *Standards* in evaluating programs to determine the appropriate accreditation award.

Standards are intentionally general to allow for flexibility in educational programs designed to meet the diverse needs of a profession affected by continuous technological change. The *Standards* are assessed every five years and changes are made based on input from various communities of interest. When the revised document is completed, endorsed by the sponsoring agencies and ratified by the Review Committee it is published and disseminated to programs. The changes become effective one year after publication.

The *Standards* provide a framework for accredited programs to follow so that graduates can accomplish commonly accepted technical competencies of the entry-level nuclear medicine technologist. These competencies, as defined by the JRCNMT, are located in Appendix I beginning on page 21 of this manual.

Self-study Process and Report

The JRCNMT:

- Recognizes an institution's right to define its own means of conducting ongoing self-evaluation.

- Requires that the accreditation review process, including programmatic self-study and site visit, take into consideration the mission and goals of the institution and the program.

- Requires, as an integral part of the accreditation process, a Self-study Report followed by a site visit of the program, to assess a program's relative compliance with the *Standards*.

- Requires that the self-study process and report include an analysis of program strengths, weaknesses, and plans for improvement.

- Encourages a consistent means of analyzing self-study reports to determine a program's readiness for a site visit.

- Informs programs of the desirability of sponsor-wide involvement in ongoing program evaluation, in conducting the self-study, and in preparing the Self-study Report.

- Requires that the Self-Study Report be prepared in a format mutually acceptable to the accreditor and to the accredited institution.

- Encourages programs to develop a self-study process that analyzes both outcomes and process and which results in an appropriately brief and cost-effective Self-Study Report.

Programmatic Self-study

Self-study is:

- A self-assessment activity done for the benefit of the program, its sponsor, students and faculty.
- An ongoing process focusing on quantifiable outcomes and qualitative dimensions.
- A comprehensive review and assessment of the purpose, goals, objectives, and operation of the program as a whole. It includes a critical assessment of curriculum content and design; teaching assignments and methods; policies and procedures that relate to faculty, student, applicant and graduate evaluation; and numerous other dimensions that affect program quality.

Variables Affecting Self-Study

Education for the allied health professions in general and specifically nuclear medicine technology manifests itself in diversity. That diversity is found in institutional sponsorship, organization and size of the program, and other factors. Programs exist for as few as two students per class to as many as 100. They are staffed by as few as one instructor to as many as 20 or more. These and other variables illustrate the merits of accommodating a diversity of approaches to programmatic self-study.

Prerogatives of the Institutional Sponsor and Its Programs

A program and its sponsoring institution should determine the scope and process of their self-study in keeping with the relative complexity of the program and its sponsorship. They should also determine the resources and time necessary to devote to the effort. These prerogatives allow for a unified and uniform approach of self-study for those programs within institutions that choose to have coordinated or concurrent evaluations of two or more of their allied health programs.

Participants in the Self-study Process

The Self-Study Report is usually compiled and written over several months under the coordination of the program director. Contributors include program officials and faculty, administrative officials and resource persons, clinical supervisors, advisory committee members, current students, alumni and other appropriate individuals.

Documentation of Self-study

The self study process used must be described in the Self-Study Report along with the self-analysis of program strengths, weaknesses, and plans for improvement.

Content and Sequence of the Self-study Report

The JRCNMT provides the necessary documents and forms for completing the Self-Study Report to encourage consistency, brevity, and pertinent scope.

Through manuals, emails and telephone support JRCNMT staff provides guidance on how to conduct the self study process and how to prepare the Self-Study Report. This assistance is also available through scheduled workshops.

The narrative and documentation of the Self-Study Report should follow the sequence of the *Standards*. The documentation substantiating the narrative should be representative rather than comprehensive and should not exceed what is required to demonstrate compliance with the *Standards*. Supplementary exhibits dealing with major divisions of the *Standards* may be integrated with the narrative, or appear in appendices. The report should culminate in a qualitative analysis of the program's strengths and weaknesses including a statement of actions planned to correct the latter.

Presentation and Use of the Self-Study Report

The Self-study Report is used in the accreditation process by members of the Review Committee, accreditation staff and site visitors. It should contain only pertinent and necessary materials, all of which are legible, and should be bound or presented so that it may be conveniently reviewed. Keeping cost in mind, the Review Committee requests the minimum number of copies necessary and encourages brevity.

The Site Visit

Conducting the Site Visit

After the Review Committee has evaluated the Self-study Report, the program is visited by a team assembled by the Review Committee staff. The visit, which varies in length depending upon the size and complexity of the program, is scheduled for a mutually convenient time. The Self-Study Report and Review Committee analysis of it are supplied to the team members.

Team Composition and Charge: The composition of a site visit team varies based upon the size, complexity and geographical distribution of the program. Site visits are routinely conducted by a two-member team though the number may be increased for programs with numerous clinical affiliates. No more than one member of the team may be a member of the JRCNMT Board. Site visits for programs that have completed two (2) consecutive accreditation cycles with no significant findings may be conducted by one person. (NOTE: In the remainder of this document, the word "team" connotes one or more site evaluators.)

The sponsoring institution and each major clinical affiliate will be visited by at least one member of the site evaluation team. For programs that have completed two (2) consecutive accreditation cycles with no significant findings, visits will be conducted to a sample of approximately 25% of the program's major clinical affiliates. The selection of affiliates to be visited will be made on a random basis with no prior notification to the program. Any clinical affiliate added at the time of the self-study will be visited.

Site visitors representing the JRCNMT are charged with gathering data on which the Review Committee can evaluate the compliance of the program with the *Standards*.

Site Visitor Training: The JRCNMT prepares candidates as site evaluators through observation and formal workshops. Each candidate is assigned as an observer for one or more site visits prior to an independent assignment. Formal workshops are conducted periodically. Objectivity and impartiality are stressed throughout the training process.

Team Activities: When participating in a site visit, team members are involved in the following activities:

- Preparing for the site visit by studying the Self-study Report in conjunction with the *Standards* and Review Committee analysis.
- Participating in a preliminary meeting of site visitors, typically the evening before the visit, to discuss and distribute the work contained within the site visit agenda.
- Interviewing individuals and groups, such as the chief executive officer of the sponsoring institution, the administrator(s) of the educational program, instructors, students, and members of the admissions and advisory committees.
- Performing other assigned functions.
- Analyzing the results of the site visit.

- Presenting findings, accompanied by reference to specific *Standards*, during an exit conference with the chief executive officer, program administrator, and others as deemed appropriate by the institution.

- Writing a Site Visit Report in accordance with the recommended format.

The accreditation cycle repeats at five (5) year intervals, except upon initial accreditation, which is for 3 years. Progress reports will be requested if deficiencies are cited. Programs completing three full accreditation cycles without significant deficiencies may receive a 7-year accreditation award at the fourth and subsequent cycles.

A sample site visit agenda is located in the appendix of this manual. The agenda assigns approximate times to all major functions of the site team and identifies interviewees by title. The sample provides a framework for programs to utilize. The agenda may vary from the sample due to the organization and geographic distribution of a program.

The site visit agenda should be arranged by the program director in consultation with the site team leader well before the visit is to take place. Program officials take part in the preparation of the agenda so that it accommodates the characteristics of local facilities, geographic distribution of clinical affiliates and allows for scheduled interviews with appropriate faculty, students, and administrators.

Following the opening conference with institutional and program officials to state the purpose of the visit and site team expectations and needs, it is acceptable for the individual site team members to separate and perform interviews and visits within the program and the institution simultaneously for optimal use of time. Plans for working lunches and other conferences and interviews are implemented as necessary.

Student interviews may be conducted individually, in groups or with the entire class. The site visit team will make this determination based on input from the program director. Interviews with students are private and not conducted in the presence of program personnel or instructors. It is not deemed productive to observe a routine didactic class in session.

The Review Committee provides guidance as to which clinical affiliates the site visit team should visit. In all cases, efforts are made to restrain site visit costs while determining the relative compliance of the affiliates with the standards.

Exit Conference & Site Visit Report

At the conclusion of the on-site evaluation, the site visitors hold an exit conference to review program strengths, potential deficiencies and suggestions for improvement they intend to include in their report. A hard copy of this information is not left with the program at the conclusion of the conference since it is not finalized until the original program reviewers assess it for accuracy and appropriateness.

Approximately 45 days after the on-site evaluation, the finalized Site Visit Report is sent to the program director. The program director is given 30 days to respond to any factual inaccuracies pertaining to areas of possible noncompliance cited in the report. If a citation of noncompliance is accurate, the program should not address it until after the final accreditation decision is made. The accreditation letter will indicate how long the program has to correct deficiencies and when documentation of the

corrective measures must be submitted. Programs are typically given six months to one year to correct deficiencies, with the length of time depending upon the complexity of them.

Review Committee Evaluation

After the program has had adequate time to respond to the factual content of the Report of Site Visit, the program is placed on the agenda for the next Review Committee meeting. The Review Committee reviews (1) a program's application for accreditation, (2) its Self-study Report, (3) the Report of Site Visit, (4) the applicant's response to that report, and (5) any related documentation. This review is performed by two members of the Review Committee. The substance of the review is then presented to the whole committee for an assessment of the program's relative compliance with the *Standards*.

Once the Review Committee members have reached consensus regarding a program's merits for accreditation, an accreditation decision is formulated for transmittal.

Accreditation Decisions

A program's initial accreditation award is for a maximum of three (3) years, which can be extended an additional two (2) years with submission of a satisfactory Follow-up Report. Reaccreditation awards are for a period of five (5) years. Programs completing three full accreditation cycles without significant deficiencies may be awarded a 7-year duration of accreditation at the fourth and subsequent cycles. When warranted, a site visit may be conducted before the end of the period for which accreditation was awarded.

Policy Statements*

The JRCNMT:

- Maintains clearly written definitions of each accreditation category and limits accreditation decisions to these categories.
- Provides the sponsoring institution with an opportunity to request reconsideration of recommendations for Probationary Accreditation, Accreditation Withheld, and Accreditation Withdrawn.
- Permits an institution sponsoring a program to withdraw from the accreditation process at any time.
- Provides clearly written procedures for appeals of Accreditation Withheld and Accreditation Withdrawn.
- Maintains the accreditation status of a program pending disposition of an appeal.
- Regards as graduates of an accredited program all students who have successfully completed a program granted any accreditation status at any time during their enrollment.
- Considers a program that has been inactive for two years and not reactivated to be discontinued. Accreditation is subsequently withdrawn from the program.

Awarding Accreditation

Accreditation

Accreditation is granted to an existing or a new program when the accreditation review process confirms that the program is or will be in substantial compliance with the *Standards*.
For programs in substantial compliance but with one or more deficiencies that do not appear to threaten the capability of the program to provide acceptable education, the Review Committee may recommend the maximum duration of accreditation or a reduced duration of accreditation.

Maximum Duration

When the Review Committee recommends the maximum duration of accreditation for programs with one or more deficiencies, it will require progress reports addressing such deficiencies. The JRCNMT notification letter provides a clear statement of each deficiency and a due date for a progress report or for a scheduled plan of correction, if required.

The JRCNMT may inform appropriate officials of the sponsoring institution that failure to submit a satisfactory progress report or plan to correct the deficiencies may result in an early accreditation review or other appropriate action.

Reduced Duration

When the Review Committee recommends a reduced duration of accreditation for programs with one or more deficiencies, it will require a progress report. The JRCNMT notification letter provides a clear statement of each deficiency and a due date for a progress report or for a scheduled plan of correction, if required.

Based on documented correction of the deficiencies, the JRCNMT may extend the accreditation award to the approved maximum duration without requiring a new Self-Study Report and site visit. The Review Committee may also inform the sponsoring institution that failure to document correction of deficiencies may result in an early accreditation review or other appropriate action.

Extended Accreditation

Programs which have received initial accreditation may have the accreditation award extended based upon submission of a follow-up report satisfactorily addressing program outcomes.

Probationary Accreditation

Probationary Accreditation is granted when a program is not in substantial compliance with the *Standards* and the deficiencies are deemed serious enough that the capability of the program to provide acceptable education is threatened.

Most assignments of Probationary Accreditation are based on evidence substantiated by a site visit. However, if the cited deficiencies are not in dispute, the Review Committee may recommend Probationary Accreditation without conducting a site visit. Probationary Accreditation is usually limited to one year. It may not extend beyond two years.

Before transmitting an accrediting decision for Probationary Accreditation to authorities and the general public, the JRCNMT provides programs with an opportunity to request reconsideration of the decision.

The JRCNMT accreditation letter provides a clear statement of each deficiency contributing to a failure in substantial compliance with a particular *Standard* or with the requirements for maintaining or administering accreditation. The letter also indicates that 1) a progress report, Self-Study Report, or other action is required by a specific date; 2) failure to come into substantial compliance will result in the withdrawal of accreditation; and 3) currently enrolled students and those seeking admission should be advised that the program is on probation.

JRCNMT awards of Probationary Accreditation are final and are not subject to appeal. During a period of Probationary Accreditation, programs are recognized and listed as being accredited. The probationary status of a program is disclosed in response to telephone or written inquiries.

Administrative Probationary Accreditation

Administrative Probation may be granted when the program does not comply with one or more of the following administrative requirements for maintaining accreditation:

- Submitting the Self-Study Report or a required progress report within a reasonable period of time, as determined by the Review Committee.
- Agreeing to a reasonable site visit date at or near the time established for re-evaluation of the program.
- Paying accreditation fees and related costs within a reasonable period of time, as determined by the Review Committee.

Prior to the JRCNMT placing a program on Administrative Probationary Accreditation, the Review Committee informs the sponsoring institution of the relevant requirements and of its recommendation for Administrative Probationary Accreditation.

The JRCNMT is not required to provide opportunity for reconsideration of recommendations of Administrative Probationary Accreditation. JRCNMT determinations of Administrative Probationary Accreditation are not subject to appeal. During a period of Administrative Probationary Accreditation, programs are recognized and listed as being accredited.

Withholding or Withdrawing Accreditation

Before transmitting an accreditation decision to withhold or withdraw accreditation, the JRCNMT informs the institution sponsoring a program that it may request reconsideration or that it may decide to voluntarily withdraw from the accreditation process. Institutions sponsoring programs from which accreditation is withheld or withdrawn may appeal the decision only after first seeking reconsideration. Accreditation, if currently held, is maintained pending disposition of the appeal.

Accreditation Withheld

Accreditation may be withheld from a program seeking initial accreditation if the program is not in substantial compliance with the *Standards*. The JRCNMT letter notifying the appropriate officials that accreditation has been withheld includes a clear statement of each deficiency and indicates that the institution may seek reconsideration of the decision. A copy of Policy 5.500, Reconsideration of Accreditation Decisions is enclosed. Appeal of the decision may only occur after the reconsideration process is completed and the program is not satisfied with the outcome. The JRCNMT letter also informs the sponsoring institution that it may apply for accreditation in the future when the program is believed to be in substantial compliance with the *Standards* and with administrative requirements for maintaining accreditation.

Accreditation Withdrawn

Accreditation may be withdrawn from a program previously awarded Probationary Accreditation or Administrative Probationary Accreditation if, at the conclusion of the specified period, the review process confirms that the program is not in substantial compliance with the *Standards* or with the requirements for maintaining or administering accreditation.

In unusual circumstances, such as evidence of critical deficiencies that appear to be irremediable within a reasonable length of time or a documented threat to the welfare of current and potential students, the JRCNMT may withdraw accreditation without first providing a period of probation. Programs from which accreditation is withdrawn without a probationary period are ensured due process, as described in Policy 5.500 Reconsideration of Accreditation Recommendations.

The JRCNMT letter notifying the appropriate officials that accreditation has been withdrawn from the program includes a clear statement of each deficiency and indicates that the institution may request reconsideration of the decision. A copy of policy 5.500 Reconsideration of Accreditation Decisions, is enclosed. Appeal of the decision may only occur after the reconsideration process is completed and the program is not satisfied with the outcome. The JRCNMT letter also informs the sponsoring institution that it may apply for accreditation in the future when the program is believed to be in substantial compliance with the *Standards* and with administrative requirements for maintaining accreditation.

Students who have completed 75% of the published curriculum at the time the sponsoring institution is notified that accreditation has been withdrawn may complete the requirements for graduation and will be considered graduates of a JRCNMT-accredited program.

Voluntary Withdrawal of Accreditation

An institution sponsoring a program may voluntarily withdraw from the JRCNMT accreditation process at any time. In the event of program closure, the effective date of voluntary withdrawal must be established to assure that program accreditation continues until the date of graduation of the last class. In the event of voluntary program closure the JRCNMT regards as graduates only those students who have successfully completed the program prior to the effective date of closure.

Inactive Programs

The sponsoring institution may request inactive status for a program that does not enroll students for up to two years. The program and its sponsoring institution must continue to pay required annual fees. Should a program be inactive for two years and not be reactivated, it will be considered discontinued and accreditation will be withdrawn.

*Originated August 1992; Revised November 1993; November 1994, June 1996, January 1998, January 1999, January 2003; Format and editorial changes June 2009.

Appendices

I. Technical Competency List

II. Sample Site Visit Agenda

Technical Competency List

After completing the program, each student should have attained a level of knowledge and skill to be capable of performing the tasks detailed below.

I. Patient Care

A. A nuclear medicine technologist provides patient care by:

1. applying ethical principles and meeting legal standards in the performance of all activities
1. acquiring pertinent knowledge of the patient's medical history and any contraindications to understand and correlate the patient's illness to the pending diagnostic or therapeutic procedure(s)
2. providing for proper comfort and care of the patient before, during and after a procedure including, but not limited to, the monitoring of intravenous lines, oxygen supplies, drains and the status of patients who are under sedation
3. establishing and maintaining communication with each patient (e.g., making introductions, explaining the procedures, answering questions)
4. applying culturally sensitive and age-appropriate care and communication techniques
5. providing safe and sanitary conditions for the patient in compliance with standard precaution policies
6. recognizing and responding to an emergency condition by:
    a. initiating a call for assistance
    b. monitoring and recording physiologic data (e.g., ECG, pulse rate, respiratory rate)
    c. administering cardiopulmonary resuscitation when necessary, and maintaining intravenous fluids, oxygen, and other life-support assistance until an emergency code team arrives

B. A nuclear medicine technologist prepares the patient for an examination by:

1. reviewing written orders for the procedure, evaluating procedure appropriateness, verifying patient identification and determining pregnancy status as well as breast feeding status, if applicable
2. analyzing patient information to determine contraindications, interfering medications and potential adverse reactions prior to administration of radiopharmaceuticals, pharmaceuticals and contrast media
3. evaluating pertinent blood work and lab test results prior to imaging
4. ensuring that informed consent has been obtained when necessary
5. explaining the procedure to the patient, family, parents and/or legal guardian including, but not limited to: the procedure, patient involvement, length of study, and basic radiation safety
6. ensuring that any preprocedural preparation has been completed including, but not limited to, fasting, hydration, taking of thyroid blocking compounds, voiding, bowel cleansing, and suspension of interfering medications
7. waiting an appropriate length of time after the administration of a radiopharmaceutical, pharmaceutical or contrast agent to begin the procedure
8. recognizing patient factors and the presence of objects that may create artifacts or normal variants on nuclear medicine images or measurements, and thus require modifications in the data acquisition or data processing protocol

C. A nuclear medicine technologist performs administrative procedures by:

1. maintaining an appropriate inventory of medical/surgical supplies, radiopharmaceuticals, storage media, and other items to ensure that a patient procedure can be performed whenever necessary
2. scheduling patient procedures
3. determining the appropriate sequence for executing multiple procedures
4. maintaining appropriate records of administered radioactivity, quality control procedures, patient reports, and other required records
5. recording and reporting incidents as required by regulatory agencies
6. revising and developing policies and procedures in accordance with applicable regulations and administrative requirements
7. participating in quality control and quality assurance activities in the department

II. Professionalism

A. A nuclear medicine technologist recognizes the value and responsibilities inherent in being a professional healthcare provider.

B. A nuclear medicine technologist applies critical thinking and problem solving strategies to ensure best practices.

C. A nuclear medicine technologist practices in accordance with ethical standards, legal statutes and published standards of practice for the profession.

D. A nuclear medicine technologist assesses the quality of published research studies and applies sound principles from them to the clinical setting to improve evidence-based practice.

III. Radiation Safety

A. A nuclear medicine technologist, under supervision of an authorized user or radiation safety officer, maintains compliance with local, state and federal regulations in radiation safety practices by:
   1. using personnel monitoring devices (e.g., dosimeters, film badges, TLD's, etc.)
      a. reviewing, on at least a quarterly basis, personnel exposure records
      b. taking appropriate measures to follow the ALARA (as low as reasonably achievable) principle
      c. recognizing regulatory limits for radiation exposure
   2. notifying appropriate authorities when changes occur in the radiation safety program
   3. demonstrating knowledge of the content of a radioactive materials license and the processes for submitting license amendments
   4. maintaining required radiation safety records
   5. posting appropriate signs in designated areas
   6. following federal, state, local and institutional regulations regarding receipt, packaging and disposal of all radionuclides
   7. following regulations regarding diagnostic and therapeutic dosages administrations and therapeutic follow-up procedures
   8. recommending purchase of protective equipment to meet regulations

B. A nuclear medicine technologist follows ALARA radiation protection principles thereby limiting the radiation exposure of the patient, public, fellow workers, and self by:
   1. selecting and using proper shielding to reduce radiation exposure
   2. using proper methods for storage and disposal of radioactive materials
   3. identifying and using proper procedures for those radionuclides that pose special hazards (e.g., Sr-89, I-131, PET radiotracers)
   4. performing a bioassay per state and/or federal regulations

C. A nuclear medicine technologist performs radiation surveys by:
   1. ensuring that instruments are calibrated at regular intervals, after a repair, and as required by regulations
   2. following frequency and location schedules when conducting surveys
   3. using appropriate survey instruments and techniques for each type and level of activity
   4. following regulations regarding personnel surveys and reporting to the radiation safety officer
   5. performing wipe tests where applicable
   6. performing leak tests on sealed sources, when so authorized
   7. maintaining required radiation survey records

D. A nuclear medicine technologist performs decontamination procedures.

E. A nuclear medicine technologist disposes of radioactive waste and maintains appropriate records according to license conditions.

F. A nuclear medicine technologist participates in a hospital's in-service education program to instruct other personnel regarding radiation and principles of radiation protection.

G. A nuclear medicine technologist is prepared to participate in the medical management of radiation emergencies.

IV. Instrumentation Utilization and Quality Control

A. A nuclear medicine technologist evaluates the performance of various imaging systems by conducting the tests identified for each of the following:
   1. Planar and SPECT imaging systems
      a. energy peaking
      b. intrinsic/extrinsic uniformity
      c. resolution and linearity
      d. high count uniformity correction
   2. SPECT imaging systems
      a. center of rotation and/or multi-head detector registration
      b. pixel calibration
   3. Dedicated PET or PET component of PET/CT imaging systems
      a. blank scan
      b. normalization
      c. absolute activity calibration
   4. CT component of PET/CT imaging systems
      a. calibration
      b. field uniformity
      c. water phantom
      d. tube warm-up
      e. air calibration
      f. water phantom checks of slice thickness, accuracy and positioning
   5. Complete fusion imaging system
      a. registration
      b. attenuation correction accuracy

B. A nuclear medicine technologist recognizes artifacts on quality control and patient images and implements appropriate corrective actions to produce acceptable images.

C. A nuclear medicine technologist evaluates the performance of dose calibrators by performing and assessing the results of the following tests:
   1. Test measurement of battery voltage
   2. Zero adjustment
   3. Background adjustment
   4. Constancy
   5. Linearity
   6. Accuracy with NIST traceable standards
   7. Geometry

D. A nuclear medicine technologist evaluates the performance of survey meters by performing and assessing the results of the following tests:
   1. Battery check
   2. Constancy

E. A nuclear medicine technologist evaluates the performance of NaI(Tl) counting and/or uptake systems by performing and assessing the results of the following tests:
   1. Calibration checking using I-123 or a long-lived standard
   2. Count of background
   3. High voltage / gain checks
   4. Energy resolution
   5. Chi-square test
   6. Sensitivity
   7. Energy linearity

F. A nuclear medicine technologist documents performance and results of all quality control testing according to specified quality control program procedures.

G. A nuclear medicine technologist views, processes and archives acquired data on picture archival communicating systems (PACS).

H. The nuclear medicine technologist utilizes radiology and hospital information systems, managing patient information in these systems according to facility policies, state and federal statues and accreditation standards.

V. Radiopharmaceuticals* and Pharmaceuticals

A. A nuclear medicine technologist initiates purchases of radiopharmaceutical products and adjunct supplies by:
   1. anticipating and procuring a sufficient supply of radioactive drugs for an appropriate time period in accordance with anticipated need and license possession limits
   2. storing drugs and supplies in a manner consistent with labeled product safeguards and with radiation safety considerations
   3. performing and documenting radiation wipe tests and surveys upon receipt of radioactive materials
   4. following Department of Transportation (DOT) and radiation safety guidelines in the transport, receipt and shipment of radioactivity

B. A nuclear medicine technologist prepares and verifies quality and quantity of radiopharmaceuticals under the direction of an authorized user by:
   1. employing aseptic technique for manipulation of injectable products
   2. eluting radionuclide generators according to manufacturer's specification
   3. verifying radionuclide purity of generator eluates
   4. selecting and preparing radiopharmaceuticals in accordance with manufacturer's specification
   5. calculating and measuring activity of the radionuclide with a dose calibrator
   6. confirming the quality of a radiopharmaceutical in accordance with accepted techniques and official guidelines
   7. preparing labeled blood cells, if applicable, in accordance with established protocols
   8. recording use and/or disposition of all radioactive materials

C. A nuclear medicine technologist is responsible for the identification and labeling of all radiopharmaceutical preparations by:
   1. labeling the container with the radiopharmaceutical, hour, date, expiration time, and radiation symbol
   2. recording radiopharmaceutical and medication information on a patient's administration form and preparation records
   3. labeling and segregating radioactive waste and recording this information

D. A nuclear medicine technologist prepares individual dosages under the direction of an authorized user by:
   1. applying radioactive decay calculations to determine required volume or unit form necessary to deliver the prescribed radioactive dosage
   2. applying weight and age-based calculations as appropriate to determine the prescribed dosage of pharmaceuticals and contrast media
   3. selecting and preparing prescribed dosages and entering this information on a patient's administration form and other records
   4. labeling the dosage for administration;
   5. checking radiopharmaceutical dosage activity prior to administration in a dose calibrator and comparing this measurement against the identification label of the dose's immediate container

**Educational competencies in radiopharmacy may be completed in a laboratory situation when such hands-on work is not permitted at radiopharmacy clinical affiliates.*

VI. Diagnostic Procedures

A. A nuclear medicine technologist performs imaging procedures by:
   1. selecting imaging parameters
      a. selecting and preparing the instrument for the procedure
      b. selecting appropriate parameters for image data acquisition
      c. recognizing artifacts on static, dynamic, gated, SPECT and PET images that are due to instrumentation malfunction and initiating appropriate action
   2. administering radiopharmaceuticals and/or pharmaceuticals using standard precaution techniques as authorized by the institution
      a. verifying radiopharmaceutical and dose activity prior to dose administration
      b. verifying patient identity prior to the administration of medication or radiopharmaceuticals
      c. determining route of administration according to established protocol (e.g., subcutaneous, intramuscular, intravenous, inhalant, oral and intravesical)
      d. establishing and/or verifying venipuncture access using aseptic techniques,
      e. using and maintaining established venous access routes
      f. establishing patterned breathing when introducing radiopharmaceuticals by inhalation
      g. administering oral radiopharmaceuticals
      h. documenting medication and/or radiopharmaceutical administrations on a patient's permanent record, as appropriate
      i. preparing, determining dosage, and administering non-radioactive pharmaceuticals under medical direction, where permitted
   3. positioning the patient and obtaining images
      a. recording image data according to established protocols and acquiring additional views when needed to optimize information content
      b. placing the patient in correct position using supportive materials and immobilizers as necessary
      c. exercising independent judgment in positioning a patient or detector unit to best demonstrate pathology
      d. indicating appropriate anatomic landmarks for each view of the procedure, and
      e. reviewing images to assure that correct information is supplied
   4. assisting the physician or practitioner in cardiac stress testing when performed in conjunction with nuclear medicine procedures
      a. preparing patient's skin and placing ECG leads appropriately
      b. recognizing and being responsive to any changes that may occur on either a resting or stress ECG
      c. recognizing the parameters that should terminate a cardiac stress study
   5. performing data collection, processing and analysis following established protocols

B. A nuclear medicine technologist performs non-imaging in-vivo studies (e.g., thyroid uptake) by:
   1. operating and performing necessary quality control checks on laboratory equipment
   2. preparing and counting standards when applicable
   3. performing calculations and recording results according to protocols
   4. managing bio-hazardous, chemical, and radioactive waste in accordance with applicable regulations and specific facility policies.

VII. Radionuclide Therapy

A. The nuclear medicine technologist assists an authorized user in the preparation and application of therapeutic radionuclides by:
   1. inspecting all paperwork including informed consent and written directive
   2. reviewing pertinent lab reports such as pregnancy test results
   3. assuring the correct radiopharmaceutical and dosage are prepared through technologist and authorized user verification of the dosage
   4. assuring the patient is correctly identified by the technologist and authorized user according to the quality management program in effect at the particular institution

5. preparing and/or coordinating environmental preparations (i.e., decontamination supplies)
6. observing prescribed radiation safety procedures during the preparation and the administration of such treatment
7. assisting the authorized user in supplying proper patient care instructions to hospital staff, patient, and/or caregivers
8. conducting and documenting radiation surveys of designated patient areas, when indicated
9. supplying hospital staff, patient, and/or caregivers with proper instructions on handling and disposal of all contaminated supplies when necessary

Appendix II: Sample Site Visit Agenda

Evening Prior to Visit	
The site visit team holds an initial meeting to: allow site team members to become acquainted, review the site visit schedule, discuss their perspectives of the program based upon the Self-study Report, and identify those areas they believe merit more thorough review. The team also determines if and how specific activities will be pursued by each member.	
Day 1	
8:00 am	**Preliminary Conference** This is a meeting between the site visitors and institution officers, the program director, the medical director, and others as available. At this meeting the site visitors briefly review the purpose of the visit, the accreditation process, and their role within that process. They also ask specific questions of institutional leaders.
8:30 am	**Meeting with Program Director & Clinical Coordinator** This session provides the visitors with an opportunity to obtain a more complete understanding of the curriculum and the program objectives, philosophies, course objectives, operational procedures, student selection criteria, student evaluation protocols, enrollment, student attrition rates, processes for monitoring progress in development of student knowledge and skills, success of program graduates, etc.
10:30 am	**Records Review** During this period visitors review student academic and clinical records, radiation badge reading files and other records maintained by the program.
12:00 pm	**Working Lunch (site visit team only)**
1:00 pm	**Faculty & Student Interviews** **Faculty**: Discuss course selection and content, instructional methods and objectives, evaluation mechanisms. **Students:** Obtain input on all phases of the program through a group meeting or private interviews without faculty or others being present.
3:00 pm	**Tour of Sponsor Facilities** The tour permits site visitors to see classrooms, laboratories and other facilities used by students during didactic and laboratory components of the program.
4:00 pm	**Interview with Program Director & Clinical Coordinator** Obtain additional information, clarify points of information acquired during the day, and review the schedule for the second day of the visit.
	Evening The program is requested not to schedule activities for the evening. The site team uses dinner and evening hours to: discuss information acquired throughout the day, identify areas requiring further inquiry the following day and to draft as much of their report as possible.

Day 2	
8:00 am	**Visits to Major Clinical Affiliates** Visits to clinical affiliates assess the quality of the clinical teaching environment and vary in duration based upon the number of affiliates being visited and their geographic distribution. The typical visit to an average nuclear medicine department takes approximately 30 minutes. Whenever possible, for time efficiency the site visitors may separate and visit clinical affiliates independently. **Clinical Affiliate Interviews** The Clinical Supervisor, Medical Director and instructional personnel are interviewed to provide the site team with an opportunity to assess faculty involvement in the program, communication with program administration, clinical teaching methods, and the type of supervision, instruction and evaluation afforded students in the setting. Students assigned to a clinical affiliate may be interviewed at this time if not interviewed previously at the school. Program graduates employed at a clinical affiliate may be interviewed to provide the site team with an opportunity to evaluate graduate satisfaction with the educational process and the degree to which to the program prepares graduates to perform entry-level functions.
2:30 pm	**Preparation of Site Visit Summary Report** The program provides private meeting space for ½ to 1 hour. During this session team members reach consensus on findings, complete their written report, and prepare for the exit conference.
3:30 pm	**Concluding Meeting with Program Director** The team shares the findings and conclusions in the draft of the site visit report with the program director privately, prior to the exit conference. This meeting requires no more than 15 minutes.
3:45 pm	**Exit Conference** The preliminary findings of the site visitors are shared with the program director, medical director and other institutional officials.