



Accreditation Standards for Advanced Practice Programs in Respiratory Care

**Standards initially adopted in 2014;
revised in 2016, 2018, and 2022**

**Approved by the
CoARC BOARD**

**Supported by the
AMERICAN THORACIC SOCIETY**

EFFECTIVE DATE JUNE 1, 2022

© 2022 Commission on Accreditation for Respiratory Care

264 Precision Blvd • Telford • TN • 37690

www.coarc.com

(817) 283-2835 Office

(817) 354-8519 Fax

Table of Contents

About CoARC	3
CoARC’s Mission	3
The Value of Programmatic Accreditation	3
INTRODUCTION	4
Background	4
Primary Role of the Advanced Practice Respiratory Therapist (APRT)	5
Description of the Advanced Practice Respiratory Therapist	5
Sponsor Eligibility	6
Student Eligibility	6
PROGRAM REVIEW	6
FORMAT OF STANDARDS	7
SECTION A - PROGRAM ADMINISTRATION AND SPONSORSHIP	8
Institutional Accreditation	8
Consortium	8
Sponsor Responsibilities	9
Substantive Changes	10
SECTION B - INSTITUTIONAL AND PERSONNEL RESOURCES	12
Institutional Resources	12
Key Program Personnel	12
Program Director	13
Director of Clinical Education	15
Medical Director	17
Instructional Faculty	18
Administrative Support Staff	19
Assessment of Program Resources	19
SECTION C - PROGRAM GOALS, OUTCOMES, AND ASSESSMENT	21
Statement of Program Goals	21
Program Professional Competencies	21
Advisory Committee	26
Assessment of Required Program Professional Competency (PPC) Domains	27
Student Evaluation	27
Assessment of Program Competencies	29
Reporting Program Competencies	29
Clinical Site Evaluation	31
SECTION D – CURRICULUM	33
Minimum Course Content	33
Curriculum Review & Revision to Meet Goal and Competencies	33
Length of Study	34
APPENDIX A – GLOSSARY	35

About CoARC

The Medical Society of the State of New York formed a Special Joint Committee in Inhalation Therapy on May 11, 1954. One of its purposes was "... to establish the essentials of acceptable schools of inhalation therapy (not to include administration of anesthetic agents) ..." In June 1956, the House of Delegates of the American Medical Association (AMA) adopted its Resolution No. 12, introduced by the Medical Society of the State of New York. The delegates "Resolved, that the Council on Medical Education and Hospitals is hereby requested to endorse such or similar 'Essentials' and to stimulate the creation of schools of inhalation therapy in various parts of these United States of America." A report entitled, "Essentials for an Approved School of Inhalation Therapy Technicians," was adopted by sponsor participants (American Association for Inhalation Therapy [AAIT], American College of Chest Physicians [ACCP], American Medical Association [AMA], and American Society of Anesthesiologists [ASA]) at an exploratory conference in October 1957. The AMA's House of Delegates granted formal approval in December 1962. The first official meeting of the Board of Schools of Inhalation Therapy Technicians was held at AMA's Chicago headquarters on October 8, 1963.

The Joint Review Committee for Respiratory Therapy Education (JRCRTE), the successor group to the Board of Schools came into being on January 15, 1970 as a recommending body to the Committee on Allied Health Education and Accreditation (CAHEA) of the AMA. The JRCRTE was dissolved in 1996 and the Committee on Accreditation for Respiratory Care became its successor organization, as a recommending body to the newly formed Commission on Accreditation for Allied Health Education Programs (CAAHEP). In 2008, the Committee on Accreditation for Respiratory Care began the process of becoming an independent accrediting body: the Commission on Accreditation for Respiratory Care (CoARC). The CoARC became a freestanding accreditor of respiratory care programs on November 12, 2009 and in September 2012, the Council for Higher Education Accreditation (CHEA) granted recognition to the CoARC.

CoARC's Mission

The mission of the CoARC is to ensure that high quality educational programs prepare competent respiratory therapists for practice, education, research, and service.

The Value of Programmatic Accreditation

Accreditation provides consumer protection, advances and enhances the profession of Respiratory Care, and protects against compromise of educational quality. Accreditation also supports continuous improvement of these educational programs by mandating continuing reassessment of resources, educational processes, and outcomes.

INTRODUCTION

The CoARC and its collaborating organizations wish to establish, maintain, and advance educational standards designed to constitute the minimum requirements to which an accredited advanced practice respiratory care program is held accountable, and to provide the basis on which the CoARC will confer or deny program accreditation. These Standards are to be used for the development, self-analysis, and external evaluation of advanced practice respiratory care programs.

For many years a number of universities in the United States have offered master's degrees in education or administration for individuals (including respiratory therapists) who have obtained a baccalaureate; obviously, such programs do not include a clinical component. More recently, however, two types of graduate education programs for respiratory therapists are emerging.

- 1) Entry into Respiratory Care Professional Practice Master's Degree Program:** Programs that offer individuals, who have baccalaureate degrees in disciplines other than respiratory therapy, the opportunity to enroll in an entry-level respiratory care educational program offering graduate credit, thereby providing them with the opportunity to enter practice with a master's degree. In addition to providing students with the clinical skills needed to function as respiratory therapists, these programs include course work in the areas of management, education, research, or enhanced clinical practice (which may include a clinical specialty).
- 2) Post-Professional Master's Degree Programs:** Programs that offer registered respiratory therapists (RRTs) with baccalaureate degrees the opportunity to enroll in a graduate program of study that prepares them for advanced practice in the respiratory therapy profession. Graduates of such programs have skills in education, research, management, and/or advanced clinical practice.

Background

The definition of the term "advanced practice" in respiratory therapy has evolved over time. For many years, the National Board for Respiratory Care (NBRC) defined advanced practice therapists as those who had earned the Registered Respiratory Therapist (RRT) credential in contrast to the entry-level Certified Respiratory Therapist (CRT) credential. The CoARC, which accredits respiratory therapy education programs, determined that, as of 2010, all entry-level accredited programs must prepare students at the registered respiratory therapist (RRT) credential level.

In 2002, the AARC, the NBRC, and CoARC issued statements in support of making education and credentialing beyond the level of the RRT available to respiratory therapists – a delineation of the 'Advanced Practice' concept. Over the last decade, leaders in both the respiratory therapy and medical professions have increasingly expressed the need for advanced practice respiratory therapists (APRTs) to facilitate patient care as physician extenders. Under

the leadership of a physician, The APRT would be trained to assess patients, develop care plans, order and provide this care and then evaluate and modify care based on each patient's response. Accordingly, advanced practice educational programs would be designed to:

- Prepare clinical practitioners with sufficient knowledge and skills in basic and clinical sciences to enable them to assess patients and to plan and deliver appropriate, high quality, cost-effective health care;
- Develop clinical specialists in the areas of adult, pediatric, and neonatal critical care, as well as in pulmonary function technology, cardiopulmonary diagnostics, polysomnography, and other clinical areas;
- Prepare individuals to perform research both in the laboratory and in clinical practice.

Primary Role of the Advanced Practice Respiratory Therapist (APRT)

Under the leadership of a physician, the APRT is expected to:

- Serve as a physician extender in the management of patients with cardiopulmonary disease;
- Provide cost-effective, high-quality care by:
 - a) Facilitating implementation of clinical respiratory treatment protocols
 - b) Facilitating management and weaning of patients from mechanical ventilation
 - c) Improving appropriateness and efficiency of respiratory care
- Ensure delivery of 'best practice' respiratory care which will:
 - a) Improve patient clinical outcomes
 - b) Improve patient safety
 - c) Optimize allocation of respiratory care
 - d) Reduce length of stay and hospital readmission

Description of the Advanced Practice Respiratory Therapist

The Advanced Practice Respiratory Therapist (APRT) is a credentialed, licensed respiratory care practitioner trained to provide a scope of practice that exceeds that of the registered respiratory therapist (RRT). After obtaining the NBRC RRT credential, the aspiring APRT student must successfully complete a CoARC-accredited graduate-level education and training program that prepares program graduates to provide advanced, evidence-based diagnostic and therapeutic clinical practice and disease management.

As part of a physician-led team, APRTs are trained to provide diagnostic, and therapeutic, respiratory care services in multiple settings across the health care spectrum, including critical care, acute (emergency department [ED] or urgent care) and sub-acute, in-patient care, as well as outpatient care such as preventative, ambulatory, and chronic care. APRTs obtain medical histories and record progress notes; examine, treat, and counsel patients; order and interpret laboratory tests, imaging studies, and diagnostics. The value and importance of maintaining the physician-therapist relationship that has benefitted patients with cardiopulmonary disease for many decades are preserved by having APRTs practice under the leadership of a physician.

Sponsor Eligibility

The CoARC accredits degree-granting programs in respiratory care that have undergone a rigorous process of voluntary peer review and have met or exceeded the minimum accreditation standards set by the CoARC.

To become accredited by the CoARC, the sponsor of an APRT program must be: a U.S. accredited postsecondary institution; or a consortium of which one member must be the U.S. accredited postsecondary institution; or in facilities sponsored by the U.S. military (as defined in Standard A1). In addition, students must be geographically located within the United States and its territories for their education.

Programs focused on advanced clinical education and which comply with CoARC's Accreditation Policies are eligible for accreditation by the CoARC. The program's sponsor must apply for program accreditation using the application forms provided by the CoARC, as outlined in CoARC's Accreditation Policies and Procedures Manual, available at www.coarc.com.

Student Eligibility

All APRT students must:

- Be a graduate of a CoARC-accredited program.
- Hold a baccalaureate degree.
- Hold a valid Registered Respiratory Therapist (RRT) credential
- Have at least one year of clinical practice as an RRT.

PROGRAM REVIEW

Accreditation of APRT programs is a voluntary process that requires a comprehensive review of the program relative to these Standards, thereby providing external validation of their educational offering. The process also gives prospective APRT students a tool they can use to assess the quality of the educational experience offered by the program.

Accreditation decisions are based on the CoARC's assessment of information from a number of sources, which vary with the program's accreditation status: an accreditation application, a self-study report, the report provided by the site visit evaluation team, the program's annual Report of Current Status, as well as the CoARC's review of any additional reports or documents submitted by the program during each accreditation cycle. To clarify submitted information, additional data may be requested at any time during the review process.

All CoARC accredited APRT Programs must provide instruction for their students regarding the Program Professional Competency (PPC) Domain to assure employers that graduates of all APRT Programs will have attained equivalent competencies. These PPC Domains are similar to those of graduate medical education programs.

FORMAT OF STANDARDS

The Standards are divided into five sections: **(A) Program Administration and Sponsorship; (B) Institutional and Personnel Resources; (C) Program Goals, Outcomes, and Assessment; (D) Curriculum; and (E) Fair Practices and Recordkeeping.** Within each section, specific Standards elucidate the CoARC's requirements for accreditation.

Following each Standard, there is a list of the documentation the program must supply to demonstrate compliance with the Standard. The evidence list is included to facilitate program submission of progress reports and other accreditation actions by the CoARC, to help programs complete self-study reports, in preparation for on-site visits, and to support review of the program by the on-site team and the Commission. These items are the minimum documentation a program must provide to confirm compliance with a Standard and each item must be addressed. Additional information that the program believes supports compliance may also be provided.

Where appropriate, the CoARC has added *Interpretive Guidelines* that explain the rationale, meaning, and significance of a Standard both for those responsible for educational programs and for those who evaluate these programs for the CoARC. These statements are not exclusive or exhaustive; they simply clarify the operational meaning of the Standards to which they refer and may be changed over time to reflect evolving educational or clinical practices. Expanded guidance in the form of examples to assist programs in better understanding and interpreting the "must" statements within the Standards are included. The CoARC will periodically review and revise the *Interpretive Guidelines* based on questions and comments it receives regarding their clarity and usefulness.

The program must demonstrate its compliance with all components of each of the Standards. If one component of a Standard is not in compliance, the entire Standard will be cited. In some cases, the CoARC is very prescriptive about what it needs to review to assess compliance, i.e., specific materials listed in the application for credentialing, in the Evidence of Compliance and appendices applicable to each Standard, and materials required for review during a site visit, when the site visitors can verify, validate, and clarify this information. However, the CoARC is not directive regarding many process issues, allowing programs and institutions to develop those that best suit their programs. Examples of such process issues include the number of credits or hours assigned; curriculum and course formats (i.e., traditional vs. problem-based); and curriculum delivery methods. However, it is the program's responsibility to address those process issues that are specified in the Standards. In addition, the CoARC reserves the right to request clarification of process issues that may impact accreditation.

SECTION A – PROGRAM ADMINISTRATION AND SPONSORSHIP

Institutional Accreditation

A1 An educational sponsor must be a post-secondary academic institution accredited by an Institutional accretor recognized by the U.S. Department of Education (USDE) and must be authorized under applicable law or other acceptable authority to award graduates of the program a master's or higher degree upon completion of the program.

Evidence of Compliance:

- Documentation of the sponsor's current accreditation status;
- Documentation of authorization by a state agency to provide a post-secondary education program (if applicable).

Interpretive Guideline:

A copy of an accreditation certificate or letter denoting the sponsor's current accreditation status must be submitted with the self-study or Letter of Intent Application. There are additional questions relating to accreditation status and authority under applicable state laws to provide postsecondary education in the Application for Accreditation Services. The sponsor is responsible for notifying the CoARC of any adverse change in its institutional accreditation status as per CoARC Accreditation Policy 1.07.

Consortium

A2 When more than one institution (a consortium) is sponsoring a program, at least one of the members of the consortium must meet the requirements in Standard A1. The consortium must be capable of providing all resources necessary for the program. The responsibilities of each member must be clearly documented in a formal affiliation agreement or memorandum of understanding, which delineates responsibility for all aspects of the program including instruction, supervision of students, resources, reporting, governance, and lines of authority.

Evidence of Compliance:

- Duly executed consortium agreement, contract or memorandum of understanding;
- One or more organizational charts clearly depicting the program's relationship to each member of the consortium.

Interpretive Guideline:

This Standard is applicable only to programs sponsored by a consortium (see definitions section of the Standards). A copy of a written agreement detailing the relationship between the institutions involved in the consortium and documenting the program responsibilities of each member must be provided. This evidence can be in the form of an affiliation agreement, a Memorandum of Understanding (MOU) or a Business Contract. Organizational chart templates and a sample consortium agreement can be found on the CoARC website (www.coarc.com).

Additional information used to determine compliance with this Standard is provided with the Application for Accreditation Services.

Sponsor Responsibilities

A3 The sponsor must be capable of providing the didactic and laboratory instruction, as well as the clinical experience, needed to complete programmatic and degree requirements. If applicable, the sponsor must have a process for accepting transfer credit from other accredited institutions for these courses.

Evidence of Compliance:

- Institutional academic catalog listing programs of study and course offerings;
- Transfer of credit policies, if applicable.

Interpretive Guideline:

A list of all courses in the curriculum (and which member of the consortium is responsible for each course, if applicable) must be provided.

A4 The sponsor is responsible for:
a) Supporting curriculum planning, course selection and coordination of instruction by program faculty;
b) Supporting continued professional growth of faculty.

Evidence of Compliance:

- Institutional policies and procedures related to curriculum planning, course selection and coordination of instruction by program faculty;
- Minutes of program faculty meetings for curriculum planning, course selection and instruction coordination;
- Institutional policies demonstrating support for continued professional growth of faculty and staff;
- Documentation of ongoing professional development activities of the faculty and institutional support of these activities.

Interpretive Guideline:

The sponsor should provide program faculty with the time and support needed to evaluate the curriculum based on the most recent program outcomes and to make any necessary changes. During the academic year, program faculty should meet at reasonable intervals to assess the results of such revisions, to discuss student course evaluations and to make any modifications necessary to ensure the curriculum is up to date and effective.

Professional development defines faculty efforts to remain current with clinical and academic skills and to develop new skills as needed for position responsibilities. The types of

professional development opportunities for faculty members supported by institutions vary. They may include, but are not limited to:

- *Funding for maintaining National Board for Respiratory Care (NBRC) credential status, attending professional organizational meetings and/or for continuing education conferences;*
- *Provision of non-vacation time for professional organizational activities, for clinical practice, for research/scholarly activities, for review and study related to maintaining credentials;*
- *Offering tuition remission or time off for faculty to pursue an advanced degree.*

Evidence of institutional support can include program policies, institutional policies, and listing of the continued professional development activities of the faculty along with documentation of institutional support of these activities.

A5 Program academic policies must apply to all students and faculty regardless of the location where instruction occurs.

Evidence of Compliance:

- Student handbooks;
- Published program policies.

Interpretive Guideline:

Program policies must be consistent for all venues of instruction (didactic, laboratory, and clinical). Programs with more than one main program site and programs using distance education must have academic policies that are consistent for all instructional locations. Clinical affiliation agreements or memoranda of understanding (MOUs) may specify that certain program policies will be superseded by those of the clinical site.

Substantive Changes

A6 The sponsor must report substantive change(s) (see Section 9 of the CoARC Accreditation Policies and Procedures Manual) to the CoARC within the time limits prescribed.

Substantive change(s) include:

- a) Change of Ownership/Sponsorship/Legal status or Change in Control
- b) Change in degree awarded
- c) Addition of an Entry into the Respiratory Care Professional Practice degree track
- d) Initiation of (an) Additional Degree Track Program(s)
- e) Change in program goal(s)
- f) Change in the curriculum or delivery method
- g) Addition of the Sleep Specialist Program Option
- h) Request for Inactive Accreditation Status
- i) Voluntary Withdrawal of Accreditation
- j) Addition of (a) Satellite location(s)
- k) Requests for increases in Maximum Enrollment
- l) Change in Program Location

- m) Vacancy in Key Personnel positions
- n) Change in Key Personnel
- o) Change in institutional accreditor
- p) Transition of a Program Option to a Base Program

Evidence of Compliance:

- Timely submission and subsequent approval of the CoARC Application for Substantive Change or related documentation required by CoARC Policies.

Interpretive Guideline:

The process for reporting substantive changes is defined in Section 9 of the CoARC Accreditation Policies and Procedures Manual (available at www.coarc.com). A program considering or planning a substantive change should notify CoARC early in the process. This will provide an opportunity for the program to consult CoARC Executive Office staff to determine whether or not the change is 'substantive' as well as the procedures to be followed and the potential effect of the change on its accreditation status.

If during any type of program review, substantive changes (CoARC Policy 9.0) that have already been implemented without the notification of CoARC are discovered, the CoARC Executive Office should be informed as soon as possible.

SECTION B – INSTITUTIONAL AND PERSONNEL RESOURCES

Institutional Resources

B1 The sponsor must ensure that fiscal, academic and physical resources are sufficient for the program to achieve its goals and objectives, as defined in Standard C1, at all program locations, regardless of the instructional methodology used.

Evidence of Compliance:

- Results of annual program resource assessment as documented in the CoARC Resource Assessment Matrix (RAM).

Interpretive Guideline:

The sponsor should have the financial and physical resources required to develop and sustain the program. The program should be able to employ sufficient faculty and to purchase and maintain sufficient and appropriate academic resources as reflected in annual budget appropriations. Financial allocations should ensure that the program will be in a position to recruit and retain qualified, competent faculty. Annual appropriations should provide for the innovations and changes, including technological advances, necessary to reflect current concepts of education in the profession. The budget should be such that adequate resources are assured for current students to complete the program, even in the event of program closure.

Academic resources include (but are not limited to) audio/visual equipment; instructional materials; laboratory equipment and supplies; and technological resources that provide access to medical information including current books, journals, periodicals and other reference materials related to the curriculum. Physical proximity of library facilities or ready access to online materials using a library/computer lab with extended hours for student use should be evident. Laboratory capital equipment (e.g., ventilators, mannequins, etc.), can be purchased or leased, but must be available to students when needed.

Physical resources refer to the space allocated to the program including that for offices, classrooms and laboratories, for confidential academic counseling of students, for program conferences and meetings, and for secure storage of student files and records.

Key Program Personnel

B2 The sponsor must appoint, at a minimum, a full-time Program Director, a full-time Director of Clinical Education, and a dedicated Medical Director.

Evidence of Compliance:

- Documentation of Employment;
- Written job descriptions including minimal qualifications.

Interpretive Guideline:

Full-time faculty includes all persons who are employed full-time by the institution, who are appointed primarily to the respiratory care program, and whose job responsibilities include teaching, regardless of the position title (e.g., full-time instructional staff and clinical instructors would be considered faculty). The length of the full-time appointment (e.g., 10-month, 12-month, etc.) must be sufficient to allow the Program Director and Director of Clinical Education to fulfill their responsibilities as identified in B3 and B7, respectively. The Medical Director (or co-directors) is/are not required to have full-time appointments but must be hired specifically for the Advanced Practice program.

Documentation of employment must include Letters of Appointment and Acceptance (templates are available on the CoARC website). Key program personnel must have academic appointments and privileges comparable to other faculty with similar academic responsibilities in the institution. A listing of both the key personnel and the program faculty should be published (at a minimum on the program's website).

Program Director

B3 The Program Director (PD) must be responsible for all aspects of the program, both administrative and educational. Administrative aspects include fiscal planning, continuous review and analysis of all program activities, planning and development, and the overall effectiveness of the program. Educational responsibilities include, but are not limited to, teaching and continuous curriculum development and review. There must be evidence that sufficient time is devoted to the program by the PD so that his/her educational and administrative responsibilities can be met.

Evidence of Compliance:

- CoARC Teaching and Administrative Workload Form;
- Institutional job description.

Interpretive Guideline:

PDs often hold other leadership roles within the institution (e.g., Dean, Department or Division Chair) or spend non-program time in clinical practice or research. The PD workload should balance these responsibilities with those of program teaching and administration. Documentation of sufficient release time to address the administrative duties of the program should be provided as additional evidence of compliance with this Standard.

B4 The PD must have earned a doctoral degree from an academic institution accredited by an agency recognized by the United States Department of Education (USDE).

Evidence of Compliance:

- Academic transcript denoting at least the required degree.

Interpretive Guideline:

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

Degrees are acceptable if they were awarded by an institution that is accredited by a USDE-recognized institutional accrediting body. Program Directors with degrees from non-USDE-accredited institutions do not meet this Standard. The degree earned can be in any field of study.

For degrees from institutions in countries other than the United States, the CoARC will use a foreign educational credentials evaluation service (e.g., www.naces.org) to determine the equivalence of the foreign transcript to the required minimum degree.

- B5 The PD must have a:
- a) valid RRT credential OR be a physician (MD or DO);
 - b) current professional license or certification as required by the state in which the program exists unless exempted from licensure under state or federal law;
 - c) minimum of five (5) years experience as an RRT OR physician (MD or DO), including at least four (4) years in clinical respiratory care, pulmonary medicine, cardiothoracic surgery, critical care OR anesthesiology;
 - d) minimum of four (4) years teaching experience in an accredited respiratory care program or medical school, or in clinical respiratory care, research, or management.

Evidence of Compliance:

- Documentation of current state license;
- Credential verification by the NBRC, ABMS, AOA, or relevant credentialing agency;
- Curriculum vitae.

Interpretive Guideline:

Documentation of credential validation can include a copy of the NBRC, American Board of Medical Specialties (ABMS), or American Osteopathic Association (AOA) certificate or an NBRC, ABMS, or AOA Credentials Verification Letter. Expired credentials are not valid. A completed CoARC Curriculum Vitae Outline for Program Faculty (available on the CoARC website) can be used to provide the curriculum vitae.

If a program is offered by distance education and the PD resides in a different state than the base location, or if a program is located near a state border and the PD resides in a neighboring state, the PD may hold a license in his/her state of residence, unless required by the program sponsor to hold a license in the state in which the program is located. In a state or jurisdiction where licensing is not available, a credential comparable to licensing should be used.

Regardless of accreditation status, all programs accepting applications for new vacancies in Key Personnel positions are required to comply with this Standard.

- B6 The PD must have regular and consistent contact with students and program faculty regardless of program location.

Evidence of Compliance:

- Results of student course evaluations;
- Results of CoARC APRT Student-Program and APRT Personnel-Program Resource Surveys.

Interpretive Guideline:

Student course evaluations and site visit interview responses should affirm that the PD is accessible to students throughout their course of study and that the extent of interaction between the PD and students facilitates the achievement of program goals. The PD must be available and accessible (in-person, phone, or on-line) when students are actively taking professional coursework.

Director of Clinical Education

B7 The Director of Clinical Education (DCE) must be responsible for all aspects of the clinical experiences of students enrolled in the program, including organization, administration, continuous review and revision, planning for and development of locations (with appropriate supervision) for evolving practice skills, and the general effectiveness of clinical experience. There must be evidence that sufficient time is devoted to the program by the DCE so that her/his educational and administrative responsibilities can be met.

Evidence of Compliance:

- CoARC Teaching and Administrative Workload Form;
- Institutional job description.

Interpretive Guideline:

The DCE workload should balance teaching and administrative responsibilities. Documentation of sufficient release time to meet administrative duties should be provided as additional evidence of compliance with this Standard.

B8 The DCE must have earned at least a master's degree from an academic institution accredited by an agency recognized by the United States Department of Education (USDE).

Evidence of Compliance:

- Academic transcript denoting the highest degree earned.

Interpretive Guideline:

Degrees are acceptable only if they were awarded by an institution that is accredited by an USDE-recognized Institutional accreditor. DCEs with degrees from non-accredited institutions do not meet this Standard. The degree earned can be in any field of study.

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

For degrees from institutions in countries other than the United States, the CoARC will use a foreign educational credentials evaluation service (e.g., www.naces.org) to determine the equivalence of the foreign transcript to the required minimum degree.

- B9 The DCE must have a:
- valid RRT credential OR be a physician (MD or DO);
 - current professional license or certificate as required by the state in which the program exists unless exempted from licensure under state or federal law;
 - minimum of five (5) years clinical experience as an RRT OR physician (MD or DO) including at least four (4) years in clinical respiratory care, pulmonary medicine, cardiothoracic surgery, critical care OR anesthesiology;
 - minimum of four (4) years teaching experience in an accredited respiratory care program or medical school, or in research or management.

Evidence of Compliance:

- Documentation of a current state license;
- Credential verification by the NBRC, ABMS, AOA, or relevant credentialing agency;
- Curriculum vitae.

Interpretive Guideline:

Documentation of credential validation can include a copy of the NBRC, ABMS, or AOA certificate or an NBRC, ABMS, or AOA Credentials Verification Letter. Expired credentials are not valid. A completed CoARC Curriculum Vitae Outline for Program Faculty (available on the CoARC website) can be used to provide the curriculum vitae.

If a program is offered by distance education and the DCE resides in a different state than the base location, or if a program is located near a state border and the DCE resides in a neighboring state, the DCE may hold a license in his/her state of residence, unless required by the program sponsor to hold a license in the state in which the program is located. In a state or jurisdiction where licensing is not available, a credential comparable to licensing should be used.

Regardless of accreditation status, all programs accepting applications for new vacancies in Key Personnel positions are required to comply with this Standard.

- B10 The DCE must have regular and consistent contact with students, clinical faculty, and clinical affiliates at each program location.

Evidence of Compliance:

- Results of student course evaluations;
- Documentation of DCE contact with clinical faculty/affiliates;
- Results of CoARC APRT Student-Program and APRT Personnel-Program Resource Surveys.

Interpretive Guideline:

Student course evaluations and site visit interview responses should demonstrate that the DCE is accessible to students throughout their course of study and that the amount of interaction between the DCE and students facilitates the achievement of program goals. The DCE must be available and accessible (in-person, phone, or on-line) to students when they are actively taking clinical professional coursework. Examples of contact documentation between DCE and clinical faculty/affiliates can include communications log, copies of email correspondence, or program faculty meeting minutes.

Medical Director

B11 A Medical Director must be appointed to provide medical guidance exclusively for the Advanced Practice program, and to assist the PD and DCE in ensuring that both didactic and supervised clinical instruction meet current practice guidelines. The Medical Director must be a licensed physician, Board certified (as recognized by the ABMS or AOA) in a specialty relevant to advanced practice respiratory care, and credentialed at one of the program's clinical affiliates.

Evidence of Compliance:

- Copy of state license and board certificate(s);
- Curriculum vitae;
- Appointment letter/contractual agreement;
- Confirmation of staff appointment or privileges at a clinical affiliate of the program;
- Records of interaction with Key Personnel including attendance at Advisory Committee meetings;
- Documentation of physician interaction (including the Medical Director) with students;
- Results of annual program resource assessment as documented in the CoARC RAM.

Interpretive Guideline:

The Medical Director works with the PD and DCE to ensure that both didactic instruction and supervised clinical practice experiences meet current practice standards as they relate to the APRT's role in providing patient care. The Medical Director must be a member of the Advisory Committee.

Documentation of credential validation can include a copy of the board certificate or Credentials Verification Letter from the appropriate credentialing agency. Expired board certificates are not valid and the Medical Director must be in active practice. Documentation of license validation can include a copy of the license certificate or License Verification Letter from the appropriate licensing agency. Expired licenses are not valid. A completed CoARC Curriculum Vitae Outline for Program Faculty (available on the CoARC website) can be used to provide the curriculum vitae. The CV or CoARC CV Outline Form must include documentation of the clinical site(s) where the physician is credentialed. Documentation of appointment as Medical Director

by the program must include letters of appointment and acceptance (templates are available on the CoARC website).

Examples of documenting physician interaction with students can include a physician interaction log in the student clinical handbook, evidence of student presentations to physicians in the didactic and clinical setting, or documentation of student participation in research activities supervised by a physician.

Instructional Faculty

B12 In addition to the key personnel, there must be sufficient personnel resources to provide effective instruction in the didactic, laboratory, and clinical settings for each course of study. At each location to which a student is assigned for instruction, there must be an individual designated to provide supervision and the assessment of the student's progress in achieving expected competencies.

Evidence of Compliance:

- Results of annual program resource assessment as documented in the CoARC RAM;
- Student surveys of faculty performance (e.g., course evaluation);
- Course class lists and faculty teaching schedules.

Interpretive Guideline:

The program should demonstrate that instructional faculty are qualified in the content areas that they are teaching. Qualified means that faculty have demonstrated sufficient knowledge, skills, and competency in those content areas. 'Appropriately credentialed' depends on the topics/skills being taught. Instructional faculty need not be respiratory therapists and can include professionals with advanced degrees or with experience and training in an appropriate field or discipline (e.g., MBAs, physicians, PhDs, pharmacists, nurses, pulmonary function technologists, etc.). Volunteer faculty, adjuncts, part-time faculty, or full-time faculty may meet this Standard.

The program must ensure that sufficient, appropriately credentialed clinical faculty are available for students at each clinical site. The term "faculty" as it relates to clinical rotations refers primarily to clinical instructors, although program faculty with clinical supervision responsibilities are included (see definitions in the Standards document.) Clinical instructors should have at least one valid clinical specialty credential (e.g., NPS, PFT, ACCS, SDS) or have board certification as recognized by the ABMS or AOA in a specialty relevant to respiratory care. Clinical faculty includes off-site clinical supervisors, as well as preceptors, or similar personnel who do not hold employment contracts with the program sponsor. However, all clinical instructors who are not program faculty must be employed by the clinical site at which they are teaching.

Instructional faculty participate in the evaluation of student performance. For all faculty who evaluate students, the program should have documentation that program personnel has provided them with orientation regarding their roles and responsibilities, the policies and

procedures of the program related to the competencies being evaluated, and inter-rater reliability training.

Administrative Support Staff

B13 There must be sufficient administrative and clerical support staff to enable the program to meet its goals and objectives as defined in Section C.

Evidence of Compliance:

- Results of annual program resource assessment as documented in the CoARC RAM.

Interpretive Guideline:

Administrative/clerical support may include “pool” staff that supports other programs. This model is used at many institutions. Administrative and clerical support should be sufficient to meet the needs of the program, meaning that the level of support allows Key Personnel to achieve both their educational and administrative responsibilities. Faculty should have access to instructional specialists, such as those in the areas of curriculum, testing, counseling, computer usage, instructional resources and educational psychology, as needed. Secretarial and clerical staff should be available to assist the Program Director and other program faculty in preparing course materials, correspondence, maintaining student records, achieving and maintaining program accreditation, and providing support services for student recruitment and admissions activities.

Assessment of Program Resources

B14 At least once each year, the program must use the CoARC APRT Resource Assessment Matrix (RAM) surveys to document resources described in Standard B1. The results of resource assessment must be the basis for appropriate changes in program resources ~~and~~ as well as ongoing planning and resource assessment. Identification of any deficiency requires development of an action plan, documentation of its implementation, and evaluation of its effectiveness as measured by ongoing resource assessment.

Evidence of Compliance:

- Results of annual program resource assessment, as documented in the CoARC APRT RAM, over sufficient years to confirm the development and implementation of action plans to address identified deficiencies and subsequent evaluation of their effectiveness.

Interpretive Guideline:

Only the approved CoARC APRT RAM format (available at www.coarc.com) can be used for reporting purposes. The RAM format documents the following for each resource assessed: a) Purpose statements; b) Measurement systems; c) Dates of measurement; d) Results; e) Analysis of results; f) Action plans and implementation, and g) Reassessment. Resource assessment must be performed annually using CoARC’s APRT Student and APRT Program Personnel Resource Assessment Surveys - SPRS and PPRS respectively (www.coarc.com), and the most recent RAM

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

must be submitted with the Annual Report of Current Status (RCS). Both surveys (SPRS and PPRS) should be administered as close to the end of the academic year as possible. The SPRS must be administered to all currently enrolled students. The PPRS should be completed by program faculty, the Medical Director, and Advisory Committee Members, with members of each group answering only the questions pertaining to that group. For both surveys at least 80% of survey responses must be 3 or higher for each of the 9 resource areas. Any resource for which this cut score is not achieved is deemed to be suboptimal and an action plan must be developed to address deficiencies. In addition, for both surveys, the program must acknowledge any responses below 3. Resource Assessments must be reported separately for each portion of the program with a separate CoARC ID number. Programs must maintain resource assessment documentation for five years (RAM, SPRS, and PPRS).

SECTION C – PROGRAM GOALS, OUTCOMES, AND ASSESSMENT

Statement of Program Goals

C1 The program must have the following goal defining minimum expectations: *“To prepare registered respiratory therapists (RRTs) for practice as advanced practice respiratory therapists (APRTs) with demonstrated competence in the cognitive (knowledge), psychomotor (skills) and affective (behavior) domains.”*

Evidence of Compliance:

- Published program goal in the student handbook and on the program or institutional website.

Interpretive Guideline:

The CoARC requires that all APRT programs have the same goal defining minimum expectations. The program goal must be made known to all prospective and currently enrolled students. Program outcome data, program and sponsor publications, and information made available during on-site interviews should demonstrate compliance with this Standard.

C2 The program goal must be the basis for ongoing program planning, implementation, evaluation, and revision. In addition, the program goal and associated competencies must be reviewed annually by program personnel to ensure their compatibility with the mission of the sponsor.

Evidence of Compliance:

- Documentation of annual review and analysis by program personnel of the competencies related to the mandated goal, as evidenced in the minutes of faculty meetings and the Annual Report of Current Status (RCS).

Interpretive Guideline:

Broad-based, systematic, and continuous planning and evaluation, designed to promote the achievement of the program goal are necessary to maximize the academic success of enrolled students in an accountable and cost-effective manner.

Program Professional Competencies

C3 **Cardiopulmonary Medical Knowledge**

Graduate knowledge of cardiopulmonary disease must include an understanding of: pathophysiology, presentation, differential diagnosis, diagnostic studies, disease management, health promotion and disease prevention. Graduates must have an understanding of biomedical and clinical sciences and how to apply this knowledge to patient care in their area of advanced practice. In addition, graduates must demonstrate an analytical approach to clinical situations and an understanding of the research

potential provided by such situations. Graduates are expected to demonstrate comprehension of:

- The etiologies, underlying pathologic processes, risk factors and epidemiology for cardio-pulmonary conditions;
- Signs and symptoms of various cardio-pulmonary conditions;
- Use of appropriate technology for diagnosis;
- Management of cardio-pulmonary conditions;
- Indications, contraindications, side effects, interactions, and adverse reactions related to the use of pharmacologic agents and other relevant treatment modalities used for cardiopulmonary diseases;
- Appropriate sites of care for patients presenting with cardiopulmonary conditions, including identifying emergent cases and those requiring consultation, referral or admission;
- Interventions for both treatment and prevention of cardiopulmonary conditions;
- Methods to detect these conditions in both symptomatic and asymptomatic individuals;
- Differences between normal and abnormal anatomy, physiology, laboratory findings, and other diagnostic data; and
- Use of a patient's history, and the results of a physical examination and diagnostic studies to formulate a differential diagnosis.

Evidence of Compliance:

- Syllabi of required courses demonstrating that the curriculum addresses these competencies with related objectives, teaching modules and evaluations;
- Documentation of student evaluations that demonstrate progressive acquisition of the competencies listed in this Standard;
- Results of CoARC Graduate and Employer Surveys.

C4 Interpersonal and Communication Skills

Graduates must demonstrate the ability to communicate with patients, patients' families, physicians, other health care providers, and health care systems by whatever means is most appropriate (oral, written or electronic). Graduates must be able to:

- Establish a respectful, confidential and comfortable environment for communication with patients:
- Obtain all pertinent information from patients and all relevant information to patients and their families in a respectful and reassuring manner:
- Communicate with patients and their families in a manner which takes into account the patient's health as well as the literacy and sociocultural considerations of both the

patients and their families;

- Convey complete and accurate information about a patient's condition to physicians and other members of the health care team;
- Demonstrate a calm demeanor, and respectful tone when responding to aberrant behaviors;
- Provide accurate and complete documentation of information for medical, legal, quality of care, and financial purposes.

Evidence of Compliance:

- Syllabi of required courses demonstrating that the curriculum addresses these competencies, with appropriate objectives, teaching modules and evaluations;
- Documentation of student evaluations that demonstrate the progressive acquisition of the competencies listed in this Standard;
- Results of CoARC Graduate and Employer Surveys.

C5 Patient Care

Patient care requires age-appropriate assessment, management, and follow-up. Graduates must provide care that is effective, patient-centered, timely, efficient, and equitable, including both pharmacologic and non-pharmacologic interventions. Under the leadership of a physician, graduates are expected to:

- Perform complete patient assessments (history, physical and ordering appropriate laboratories and other diagnostic studies);
- Develop, implement, and evaluate care plans for the treatment of cardiopulmonary disease;
- Perform the advanced practice cardiopulmonary and critical care procedures that are included in the curriculum;
- Evaluate diagnostic tests;
- Prescribe appropriate medications; (this is required whether or not a graduate will attain prescription authority)
- Counsel and educate patients and their families.

Evidence of Compliance:

- Syllabi of required courses demonstrating that the curriculum addresses these competencies, with related objectives, teaching modules and evaluations;
- Documentation of student evaluations that demonstrate progressive acquisition of the competencies listed in this Standard;
- Results of CoARC Graduate and Employer Surveys.

C6 Professionalism

As reflected in the AARC Statement of Ethics and Professional Conduct and required by the American Board of Medical Specialties, the APRT Graduate must demonstrate professionalism in the workplace at all times. Professionalism is the foundation of trust between medical professionals and the communities they serve. The patient's well-being is paramount; clinicians must practice, under physician supervision, within the limits of their training and ability, and without mental or physical compromise. APRT graduates must demonstrate a high level of responsibility, ethical practice, confidentiality, and respect for all patients. APRT graduates must be able to:

- Articulate the appropriate role of the APRT within the context of the healthcare team;
- Demonstrate respect, compassion, integrity and accountability to patients, the healthcare community and the profession;
- Demonstrate sensitivity to each patient's culture, gender, age, social determinants of health, and disabilities;
- Demonstrate a knowledge of legal and regulatory requirements of the profession;
- Demonstrate a commitment to 'doing no harm' and an understanding of professional and personal limits;
- Commit to ethical, evidence-based practice and care consistent with clinical practice guidelines.

Evidence of Compliance:

- Syllabi of required courses demonstrating that the curriculum addresses these competencies with related objectives, teaching modules, and evaluations;
- Documentation of student evaluations that demonstrate progressive acquisition of the competencies listed in this Standard;
- Results of CoARC Graduate and Employer Surveys.

C7 Practice-based Learning and Improvement

Practice-based learning and improvement describe the participation of APRT students in critical review of their clinical performance and professional development. APRT students must participate in an ongoing review of their practice to ensure that personal and team performance is consistent with published practice guidelines and relevant benchmarks. Graduates are expected to:

- Be able to critically reflect on their clinical competencies to identify personal clinical decision-making errors or those of their team;
- Formulate clinical questions, search the medical literature, analyze published studies for quality and strength of evidence and make appropriate changes to clinical practice;

- Review care delivered to patients and identify opportunities for changes in care that could improve clinical outcomes;
- Participate in the education of healthcare students and other healthcare professionals;
- Recognize and address bias in themselves and others as it relates to culture, gender, disability, social determinants of health, and mental health concerns.

Evidence of Compliance:

- Syllabi of required courses demonstrating that the curriculum addresses these competencies with related objectives, teaching modules and evaluations;
- Documentation of student evaluations that demonstrate progressive acquisition of the competencies listed in this Standard;
- Results of CoARC Graduate and Employer Surveys.

C8 Systems-based Practice

The APRT Graduate must function effectively within the care team, hospital system, and regulatory environment. The graduate must be aware of the reporting requirements of the healthcare system, regulatory bodies, and third-party payers, and must comply with all reporting requirements in a timely and accurate manner. The graduate should be aware of costs and provide cost-effective care. Graduates must be able to:

- Utilize information technology and electronic medical records to support patient care decisions;
- Interact with funding and payment processes that reimburse for patient care;
- Provide high-quality, cost-effective care;
- Provide support for the patient and family as they deal with the cost of care and the complexity of the healthcare system;
- Work collaboratively with other members of the healthcare team to improve quality of care, increase the efficiency of care delivery, and decrease costs;
- Address system-based problems that have a negative impact on patient outcomes.

Evidence of Compliance:

- Syllabi of required courses demonstrating that the curriculum addresses these competencies with related objectives, teaching modules and evaluations;
- Documentation of student evaluations that demonstrate progressive acquisition of the competencies listed in this Standard;
- Results of CoARC Graduate and Employer Surveys.

Interpretive Guideline:

The competency-based evaluation focuses on the assessment of a student's acquisition and application of knowledge and direct observation of the skills acquired as the student progresses through the program. A student's performance for each skill should be compared to a standardized outcome measure to determine if the performance of the required competency is satisfactory.

- *Programs must develop a plan to assess/evaluate/measure each student's progress toward mastery of each of the **Program Professional Competency (PPC)** domains.*
- *Programs must establish performance standards/expectations that define the minimal competency required for each of the PPC domains.*
- *Students must achieve at least minimal competency in every PPC domain prior to graduation.*
- *Programs must provide documentation demonstrating that every student has achieved at least minimal competency in every PPC domain.*
- *Programs must develop a system of evaluation that documents the achievement of the level of competency performance expected in the practice environments encompassed by the curriculum.*

Advisory Committee

C9 The communities of interest served by the program include, but are not limited to: students, graduates, faculty, college administration, employers, physicians, and the public. An advisory committee, with representation from each of these communities of interest (and others as determined by the program) must meet with key personnel at least annually to assist program and sponsor personnel in reviewing and evaluating program competencies, instructional effectiveness and program response to change, along with addition of/changes to optional program goals.

Evidence of Compliance:

- Current advisory committee membership list identifying the community of interest with which each member is affiliated;
- Minutes and attendance list of advisory committee meetings.

Interpretive Guideline:

The purpose of an advisory committee is to provide opportunity for discussion and interaction aimed at improving the program, evaluating program goals, recruiting qualified students and meeting the employment needs of the community. The responsibilities of the advisory body should be defined in writing. Program key personnel should participate in the meetings as non-voting members.

The advisory committee should evaluate proposed addition of changes and should review program competencies, instructional effectiveness, modifications the program is considering to address any shortcomings in these areas, and any other changes as they warrant. Advisory Committee meeting minutes should reflect an annual review of all resources - curriculum, capital

equipment, clinical affiliates, etc. In addition, the Advisory Committee should be asked to review and discuss proposed substantive changes as outlined in Section 9.0 of the CoARC Accreditation Policies and Procedures Manual. Policies and procedures outlining Advisory Committee responsibilities, appointments, terms and meeting protocols as well as a record of Committee minutes, deliberations and activities over the previous 5 years should be used to demonstrate compliance with this Standard.

Assessment of Required Program Professional Competency (PPC) Domains

C10 Programs must develop a system of evaluation to ensure that students have achieved the level of competence in every Program Professional Competency domain consistent with the performance standards/expectations for entry into practice as an Advanced Practice Respiratory Therapist.

Evidence of Compliance:

- Rubrics for all PPC domain competency evaluation included in all course syllabi and in the student handbook;
- Annual Report of Current Status (RCS) documenting evaluation of all PPC domains;
- Minutes of faculty and advisory committee meetings.

Interpretive Guideline:

The program must establish a method for ensuring that each student will have the opportunity to accomplish all applicable competencies prior to completion of the program. For example, a declaration of intent to complete all applicable competencies could be developed for students to sign prior to beginning the program. Although the program must demonstrate that it is providing specific learning experiences for each competency, the breadth and depth of these experiences will vary with focus area, the degree awarded, and the professional goal of the individual student.

A well-designed program assessment process should include adequate collection and interpretation of information regarding student learning and acquisition of program competencies, as well as the effectiveness of program administration. The assessment must include both the collection of all quantitative and qualitative performance data and results of its critical analysis by the program. Determination of the potential/necessity for improvement or change must be based on the relevance of the collected data to the applicable portion of the program.

Student Evaluation

C11 The program must have clearly documented assessment measures by which all students are regularly evaluated on their acquisition of the knowledge, skills, attitudes, and competencies required for graduation. The program must conduct evaluations equitably and with sufficient frequency to keep students apprised of their progress toward

achieving the expected competencies. This will facilitate prompt identification of learning deficiencies and the development of a means for their remediation within a reasonable time frame. For programs providing distance education and/or utilizing online exams or quizzes as part of the evaluation process, the program must provide evidence that such testing preserves academic integrity and maintains quality and fairness.

Evidence of Compliance:

- Course syllabi or other documents readily available to students, such as the Student Handbook, that explain remediation policies, as well as the number and frequency of student evaluations;
- Student evaluations of instruction documenting their satisfaction with the frequency and objectivity of evaluations and the opportunities for remediation;
- Student evaluations performed by faculty, supporting the equitable administration of the evaluations;
- Records of student academic counseling;
- Results of proctored exams and a description of the means used to assure academic integrity (can include proctored exams, locked browser system, video monitoring, etc.) [if applicable];
- Faculty meeting minutes confirming review of the effectiveness of the methods to ensure academic integrity (proctoring, etc.) [if applicable].

Interpretive Guideline:

Written criteria for passing, failing, and progress in the program must be given to each student upon entry into the program. Evaluation systems must be related to the objectives and competencies described in the curriculum for both didactic and applied components. Evaluations must occur with sufficient frequency to provide students and faculty with timely indications of the students' progress and academic standing and serve as reliable indicators of the appropriateness of course design and the effectiveness of instruction. A thorough assessment requires both formative and summative evaluations and involves frequent assessments by a number of individuals, based on the program's pre-specified criteria. Using these criteria, both students and faculty can periodically assess student progress in relation to the stated goals and objectives of the program. If a student does not meet evaluation criteria, provision should be made for remediation or dismissal, as appropriate.

Objective evaluation of student performance is necessary to ensure that individual student learning is consistent with expected outcomes. Grading criteria must be clearly defined for each course, communicated to students, and applied consistently. The processes to be used for evaluations of individual student performance must be clearly understood by all concerned.

While faculty should seek input from clinical preceptors who facilitate student learning experiences and perform formative evaluations in clinical settings, it is the responsibility of program faculty to ensure that evaluation of student performance in all settings is based on

programmatic criteria. Program faculty are ultimately responsible for both the summative evaluation of individual student learning competencies in all settings and subsequent remediation when required.

When a program uses an examination with a particular cut score to override prior academic performance, the program has created a “consequential examination result.” Under these circumstances, the program must justify such use of both the examination and the cut score. When examinations are simply part of overall academic performance evaluation, such documentation is unnecessary.

For programs providing distance education with online exams or quizzes as part of the evaluation process, any individual proctoring the tests must be an employee of the sponsor or of a reputable third party. All students must be made aware of the process used by the program to conduct proctored examinations. Proctors must use valid government-issued photo identification to confirm the identity of each person who takes the proctored examination, thereby ensuring that examination results will reflect the knowledge and competence of a specific enrolled student, in accordance with the program’s stated educational objectives and learning competencies.

Assessment of Program Competencies

C12 Achievement of mandated competencies by program graduates must be assessed annually. The CoARC Employer and Graduate Surveys must be used as part of this assessment of program outcomes.

Evidence of Compliance:

- Hard copy or electronic records of completed CoARC APRT Graduate and Employer surveys;
- Results of annual Report of Current Status accepted by CoARC.

Interpretive Guideline:

CoARC requires the use of its Graduate and Employer Surveys for APRT Programs (available at www.coarc.com) as part of each program’s ongoing self-assessment. The program must provide an analysis and action plan to address deficiencies identified in these surveys. In addition, the program should carefully review all pertinent data, including student evaluations for each course and rotation; student evaluations of faculty; failure rates for each course and clinical rotation; student remediation; student attrition; and faculty evaluations of students’ preparedness for rotations. Faculty should analyze these data and prepare focused action plans to address identified deficiencies.

Reporting Program Competencies

C13 The program must, at a minimum, meet the competencies thresholds established by CoARC for all mandated outcomes, regardless of student location or the instructional

methodology used.

Evidence of Compliance:

- Outcomes data in the Annual Report of Current Status accepted by CoARC.

Interpretive Guideline:

CoARC has established minimum performance criteria (Thresholds of Success) for each of the competencies (See www.coarc.com). The program must meet the competencies assessment thresholds, as documented in the Annual Report of Current Status. Programs must include analysis and action plans to address any shortcomings revealed by these evaluation systems.

Programmatic summative measures should include graduate achievement on national credentialing specialty examinations (when applicable), and/or program-defined summative assessments of outcome performance related to each PPC domain (e.g., Capstone project). For students undertaking specialty education in respiratory care (i.e. neonatal, intensive care, sleep disorders, etc.) programs must use the applicable national credentialing specialty examinations as a measure of competency, and outcomes for program graduates on these exams must be reported annually. The threshold for success on these examinations will be as determined by the applicable credentialing agency.

Attrition is defined as the percentage of students who enrolled in an APRT program but left the program prior to graduation. Students who leave the program within fifteen calendar days of the beginning of the first term are not included in program attrition.

Graduate and employer satisfaction surveys must be administered six (6) to twelve (12) months after graduation.

Professional advancement requires the graduate to meet program-defined criteria related to advanced clinical practice/patient care, teaching, research, professional service, and/or other professional development metrics.

C14 The program must use the standardized CoARC electronic reporting tool to submit an annual Report of Current Status (RCS) to CoARC.

Evidence of Compliance:

- Annual Report of Current Status accepted by CoARC.

Interpretive Guideline:

All programs must complete and submit an Annual Report of Current Status (RCS) by the CoARC mandated deadline. The RCS documents the program's outcomes in relation to the thresholds for mandated competencies, as defined in C9, where applicable. The program/option must also include a list of its current clinical affiliates, when applicable. Access to the Annual

Report of Current Status is available at www.coarc.com.

C15 Programs not meeting all of the established competency assessment thresholds must develop an appropriate plan of action for program improvement that includes addressing each of the identified shortcomings.

Evidence of Compliance:

- Progress report(s) with supporting documents.

Interpretive Guideline:

This Standard is only applicable to programs that have not met one or more of the competency assessment thresholds described in Standard C9. Programs and program options with sub-thresholds results will be required to engage in an accreditation dialogue, which may include progress report(s), a focused on-site evaluation, resource assessment, and detailed analyses and action plans addressing each of the sub-threshold results. The process and the deadline for the submission of these documents will be communicated to the program by the CoARC Executive Office. Detailed information regarding remediation of competency deficiencies can be found in Section 4.0 of the CoARC Accreditation Policies and Procedures Manual.

If the program does not currently have a Referee, one will be assigned. A program Referee is a member of the CoARC Board assigned to serve as the liaison between the program and the CoARC. The Referee will: provide consultation during the self-study process; analyze all submitted documents for compliance with CoARC Standards and Accreditation Policies and Procedures; help the program to identify ways to address outcome deficiencies/meet the Standards; communicate with the program concerning clarification of program matters, and recommend appropriate accreditation action to the CoARC Board.

Clinical Site Evaluation

C16 The program must define and maintain consistent and effective processes for both the initial and ongoing evaluation of all clinical sites to ensure that clinical resources and student supervision at each site are sufficient to facilitate achievement of program goals.

Evidence of Compliance:

- Program evaluation plan and results of these evaluations for all clinical sites and preceptors;
- Results of student evaluations of clinical courses, sites, and preceptors;
- Results of CoARC APRT Student-Program and APRT Personnel-Program Resource Surveys.

Interpretive Guideline:

An effective evaluation process requires the program to establish criteria for evaluation of new sites and clinical faculty as well as for those that have an ongoing relationship with the

program. The program should have a narrative describing, in concise terms, the types and frequency of these evaluations. This narrative must include a description of the methods used to evaluate its clinical sites and preceptors, as well as any available evaluations of the program and its clinical sites by the program's sponsor. The program should not include the actual evaluation documents in the self-study. However, they must be available for the site visitors during an on-site evaluation.

Clinical site evaluation requires program faculty monitoring all the sites used for supervised clinical practice experiences and to modify them as necessary to ensure that achievement of expected competencies will be met by each student upon program completion. Faculty should be able to document that the use of different clinical sites for students to achieve a given competency does not affect the overall-accomplishment of that competency. The evaluation should also show that while students are on supervised clinical practice rotations, preceptors are providing satisfactory feedback and mentoring.

SECTION D – CURRICULUM

Minimum Course Content

D1 The curriculum must include the integrated content necessary for the program to meet its goal(s) and for students to attain all mandated.

Evidence of Compliance:

- Course syllabi for all courses including course description, content outline, general and specific course objectives, methods of evaluation, and criteria for successful course completion;
- Published curriculum demonstrating appropriate course sequencing;
- Catalog course descriptions for all required courses in the curriculum;
- Curriculum map detailing where students will go to achieve these competencies;
- For clinical specialty programs, documentation of the comparison of the program curriculum to the appropriate national credentialing agency exam content outline.

Interpretive Guideline:

To ensure that students benefit from the program, the curriculum should build upon their prior education and professional experiences while remaining congruent with the goal(s) of the program and addressing the needs and expectations of the communities of interest. Course content must be consistent with the roles and degree requirements for which the program is preparing its graduates.

Course sequencing refers to the coordination and integration of content both horizontally and vertically within the curriculum. Appropriate sequencing requires consideration of all necessary content and its subsequent, appropriate integration. Both course content and course sequencing should build upon previous student learning experiences. Within each subject area, course content should be connected topic to topic, concept to concept and one year's work to the next. The progression of the curriculum should match and build on the progression of student acquisition of expected competencies.

Curriculum Review & Revision to Meet Goal and Competencies

D2 The curriculum must be periodically reviewed, and revised as needed to ensure its consistency with each stated goal of the program and its effectiveness enabling students to acquire the mandated competencies.

Evidence of Compliance:

- Course syllabi for all courses including course descriptions, content outline, general and specific course objectives, methods of evaluation, and criteria for successful course completion;

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

- Documentation of the comparison of the program curriculum to the expected PPC domain competency evaluations.
- Annual documentation of the program's analysis of program effectiveness in achieving the expected competencies, as well as corresponding documentation that this ~~is~~ was reported to the Advisory Committee, including any advisory committee response/recommendations. An action plan and follow-up must be implemented when significant deficits are noted in any content areas, and the plan must address any Advisory Committee recommendations.

Interpretive Guideline:

The program must provide evidence that curricular content is current and reflects the expected competencies for each subject/focus area. When credentialing examinations are used as an outcome measure, the program must document its comparison of the detailed content outlines for each course with the most recent matrix of the applicable credentialing exam, as available.

While the CoARC encourages the use of high-fidelity patient simulation as an adjunct to clinical training, for a variety of reasons, simulation cannot replace patient contact.

Length of Study

D3 The program must ensure that the length of the program is commensurate with the degree awarded and sufficient for students to acquire the expected competencies.

Evidence of Compliance:

- Annual RCS accepted by CoARC documenting both student achievements that meet thresholds and the satisfaction of faculty, graduates and employers with the program;
- Published curriculum outline in the academic catalog documenting the length of study required for graduation from the program and degree conferral;
- Clinical evaluation mechanisms that document the progressive independence of the student in the clinical setting;
- Clinical syllabi detailing expected student competencies;
- Results of CoARC APRT Student-Program and APRT Personnel-Program Resource Surveys;
- Results of CoARC APRT Graduate and Employer Surveys.

Interpretive Guideline:

The intent of this Standard is to allow flexibility in the length of study while ensuring that the program meets its stated goal(s). The curriculum may be structured to allow individual students to achieve the competencies specified for their graduation from the program prior to the expected completion date, as well as to provide the opportunity for students who require more time to extend the duration of their instruction.

APPENDIX A – GLOSSARY

Throughout the Standards, terms that have specific definitions are noted below.

NOTE: Where terms are not defined, their definitions are at the discretion of the CoARC.

Academic Catalog	An official publication that describes the academic programs and courses offered by the institution. This may be published electronically and/or in paper format.
Academic Policies	Published rules that govern the operations of the academic program including, but not limited to, policies related to admission, retention, progression, graduation, grievance, and grading.
Academic Support Services	Services available to the faculty and students in all programs offered by the institution, applicable to any teaching/learning format, including distance education, which help programs achieve their expected outcomes. These include, but are not limited to, library, computer and technology resources and advising, counseling, and placement services.
Accurately	Free from error.
Action Plan	A plan developed to address a problem (outcomes, resources) in such a way that progress towards the solution can be determined. At a minimum, an action plan should include methods, evaluation criteria and benchmarks, expected goals or outcomes, and timely re-assessment.
Adequate	Sufficient for the program to achieve its goals and outcomes.
Administrative and Clerical Support Staff	Administrative and clerical personnel provided to programs by their sponsor.
Advanced Placement	A term used in higher education to place a student in a higher-level course based on an evaluation of the student’s knowledge and skills. Similar terms include: advanced standing, prior learning, prior coursework, and credit for life experiences.
Advanced Practice Respiratory Therapist (APRT)	An Advanced Practice Respiratory Therapist (APRT) is a credentialed and licensed respiratory care practitioner trained to provide a scope of practice that exceeds that of the registered respiratory therapist. Having obtained the NBRC RRT credential, the aspiring APRT must successfully complete a CoARC-accredited graduate-level education and training program with a curricular emphasis that enables the APRT to provide advanced, evidence-based, diagnostic, and therapeutic clinical practice and disease management.
Affiliate (Clinical)	Institutions, clinics, or other health settings not under the authority of the sponsor that are used by the program to provide clinical experiences.
Affiliation Agreement	A legally binding contract between a program’s sponsor and a clinical

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

	site providing all details of the interaction and the rights and responsibilities of both parties. The agreement must be signed by administrative personnel who have the legal authority to act on behalf of the involved parties. A Memorandum of Understanding (MOU) is legally slightly different but does the same thing.
Annual Report of Current Status (RCS)	A report, in a format mandated by CoARC, that provides current information regarding personnel, program satellites (when applicable), clinical affiliates, enrollment/retention data and outcomes data from the prior academic year.
Appropriately Credentialed	An individual associated with a program who has the practice credential(s) (i.e. a state license, state certification, or state registration) required to practice his/her specific health care or medical profession within the state housing the program. Appropriate credentialing is required for all program Key Personnel and for instructional faculty, whether or not the individual is currently practicing.
APRT Resource Assessment Matrix (RAM)	A document developed by the CoARC that programs must use for on-going resource assessment. The matrix evaluates all mandated resources in a set format which includes: purpose, measurement system, dates of measurement, results and analysis, action plans and follow-up.
Assessment	The systematic collection, review, and analysis of information to evaluate student learning, educational quality, and program effectiveness.
Base Program	When a program sponsor has established a satellite program in addition to the original program, the base program is the one where the Key Personnel is based.
Clinical Education Experiences	The acquisition of required clinical competencies in a patient care setting under the supervision of a qualified instructor.
Communities of Interest	Groups and individuals with an interest in the mission, goals, and expected outcomes of the program and its effectiveness in achieving them. The communities of interest may include both internal (e.g., current students, institutional administration) and external (e.g., prospective students, regulatory bodies, practicing therapists, clients, employers, the community/public) constituencies.
Competencies	The measurable set of specific knowledge, skills, and affective behaviors expected of program graduates.
Competent	A composite term describing the knowledge, skills, and affective behaviors required of program graduates.
Consortium	A legally binding contractual partnership of two or more sponsors (at least one of which is a duly accredited degree-granting institution of higher education) established to offer a program. Consortia must be structured to recognize and perform all the responsibilities and

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

	functions of a program sponsor.
Continued Professional Growth	Maintenance and/or enhancement of faculty expertise using activities such as specialty certification or recertification; continuing education; formal advanced education; other scholarly activities such as research or publications.
Credential	Refers to a practice credential (i.e. a state license, state certification or state registration) that is required for the individual to practice his/her specific health care or medical profession within the state housing the program. An appropriate credential is a required qualification for the program director, the director of clinical education, and instructional faculty whether or not the individual is in current practice.
Critical Thinking	Active and reflective reasoning that integrates facts, informed opinions and observations to explore a problem and form a hypothesis and reach a defensible conclusion. Accordingly, critical thinking transcends the boundaries of formal education.
Curriculum	Formally established body of courses and/or supervised practice rotations and learning experiences presenting the knowledge, principles, values and competencies offered by a program.
Distance Education	Education that uses one or more technologies (i.e. internet, telecommunication, video link, or other electronic media) to deliver instruction to students who have no physical access to the instructor and to support regular and substantive interaction between the students and the instructor, either synchronously or asynchronously. CoARC does not allow clinical education or participation in clinical experiences to be delivered in a distance education format.
Equivalent	Comparable to.
Faculty (Clinical)	Individuals who teach, supervise, or evaluate students in a clinical setting but who are not employed by the program sponsor.
Faculty, Individual/ Full-Time	An employee of the program sponsor, assigned to teach in the respiratory care program, who holds an appointment considered by that institution to be full-time.
Faculty (Program)	The aggregate of individuals responsible for all aspects of the program including the design and implementation of the curriculum, instruction, and ongoing evaluation of the program and its curriculum. In addition to Key Personnel, these individuals include all respiratory care program instructors who are employees of the sponsor.
Goals	Aims of the programs that are consistent with program and institutional missions and reflect the values and priorities of the program. Should a program decide to pursue an additional goal, it must develop a valid and reliable measurement system to assess its success in achieving this goal.
Graduation Date	The official date of graduation is the date posted by the registrar on the student's transcript.

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

Institutional Accreditation	Pertains to the academic sponsor of the program. Signifies that the institution as a whole is attaining mandated objectives in a manner acceptable to the institution's accreditor.
Instructional Faculty	Individuals providing instruction or supervision during the didactic and clinical phases of the program, regardless of faculty rank or type of appointment.
Learning Environment	Places, surroundings or circumstances where knowledge, understanding, or skills are acquired such as classrooms, laboratories and clinical education settings.
Learning Experiences	Curricular activities that substantially contribute to the development of a competent graduate. Also referred to as educational experiences.
Length of Study	Duration of the program. May be stated as total time (academic or calendar year(s)), or as the number of semesters, trimesters, or quarters.
Mission	A purpose statement defining the unique nature and scope of the sponsor or the program.
Must	Indicates an imperative.
Objectives	Statements specifying knowledge, skills, or behaviors to be developed as a result of educational experiences. Objectives must be measurable.
Outcomes	Results, end products, or effects of the educational process. Outcomes include what the students demonstrated/accomplished and what the program achieved.
Outcomes Assessment	Comprehensive process for evaluating the results of programmatic efforts and student learning.
Outcome Assessment Thresholds	National, statistically-based expectations for graduate success established by CoARC including pass rate on the credentialing examinations, attrition, job placement, graduate and employer satisfaction, and on-time graduation rate.
Professional Development	Activities that facilitate maintenance or enhancement of faculty expertise such as: specialty certification/recertification; continuing education; formal advanced education; research, publications, and other scholarly activities.
Professional Service	Academically-centered community service, based on the concept of service-learning or community-based learning. Service-learning is a structured learning experience that combines community service with preparation and reflection. Students engaged in service-learning provide community service in response to community-identified concerns (e.g. smoking cessation, COPD screening, etc.) and learn about the context in which such service is provided, the connection between this service and their academic coursework, and their roles as citizens.
Program	An organized system designed to provide students with the

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

	opportunity to acquire the competencies needed to participate in the respiratory care profession.
Program Improvement	The process of utilizing results of assessments and analyses of program outcomes to validate and revise policies, practices, and curricula as appropriate.
Program Outcomes	Performance indicators that reflect the extent to which the goals of the program are achieved and by which program effectiveness is documented. Outcomes include but are not limited to: program completion rates, job placement rates, certification pass rates, and program satisfaction.
Program Professional Competency (PPC) Domain	Assessment of the results of the educational process; a determination of the extent to which student skills are consistent with goals of the program.
Progress Report	The response to an official inquiry from CoARC related to one or more specific deficiencies. The response must clearly describe how the program has addressed these deficiencies (the action plan) and both how and when it will determine the effectiveness of the plan.
Prospective Students	Individuals who have requested information about the program or submitted information to the program.
Published	Publicly available in written or electronic format.
Readily Available	Accessible in a timely fashion.
Remediation	The program's defined process for addressing deficiencies in a student's knowledge and skills, so that the correction of these deficiencies can be ascertained and documented.
Sponsor	A post-secondary academic institution, accredited by an Institutional accreditor recognized by the U.S. Department of Education (USDE), or a group of institutions (consortium-see previous definition), that is/are responsible for ensuring that its program meets its goals/CoARC Standards.
Standards	The Accreditation Standards for Advanced Practice in Respiratory Care (APRC) programs, as established by the CoARC from time to time.
Student	A graduate of a CoARC-accredited Entry into Practice respiratory care program, with an RRT credential, who is enrolled in a CoARC-accredited APRT program.
Substantive Change	A significant modification of an accredited program. The process for reporting substantive changes is in the CoARC Accreditation Policies and Procedures Manual.
Sufficient	Adequate to accomplish or bring about the intended result.
Teaching and Administrative Workload	Quantification of faculty responsibilities. Categories frequently used are teaching, advisement, administration, committee activity, research and other scholarly activity, and service/practice.

ACCREDITATION STANDARDS FOR ADVANCED PRACTICE PROGRAMS IN RESPIRATORY CARE

Technical Standards	The physical and mental skills and abilities needed to fulfill the academic and clinical requirements of the program. These Standards promote compliance with the Americans with Disabilities Act (ADA) and must be reviewed by institutional legal counsel.
Timely	Without undue delay; as soon as feasible after due consideration.
Understanding	Adequate knowledge with the ability to apply appropriately.