CURRICULUM

This section encompasses all aspects of the curriculum, including degree-specific courses, general education, and respiratory care professional coursework. The curriculum is built on a foundation of general education and expected professional competencies, aligning with the program's mission and goals. The curriculum must be designed to ensure the breadth and depth of requisite knowledge and skills needed for entry into respiratory care practice as an RRT. Programs are not required to have separate courses for each content area mentioned in this section. However, expected student learning outcomes for all content areas must be included in the curriculum and course syllabi.

Foundational Content

4.01 The general education curriculum and degree-specific requirements must provide the appropriate foundational/core knowledge and preparation that aligns with the expected competencies. The core curriculum must include content in oral and written communication skills, social/behavioral sciences, and biomedical/natural sciences. This content must be incorporated in a manner that promotes achievement of the program's goal(s) as defined in Standard 3.01/3.02 and the curriculum's defined competencies relative to degree level.

Interpretive Guideline:

General education (i.e., social/behavioral science and biomedical/natural science content) must be at a level sufficient to satisfy the degree requirements of the program sponsor and state requirements for general education curricula, as well as to provide the requisite foundation needed to cultivate the core competencies identified in this section. General education requirements differ significantly between associate, bachelor's, and master's degrees, reflecting the varying levels of depth and breadth of knowledge expected at each degree level.

Evidence of Compliance:

- Curriculum published in the college catalog and the program's Student Handbook demonstrating appropriate curriculum sequencing and a description of all general education courses required for degree conferral;
- Results of CoARC Student and Personnel Program Resource Surveys (RAM);
- Results of CoARC Graduate Surveys (RCS).

Definitions: content areas; general education; competencies; learning outcomes

Resources: VALUE Rubrics (https://www.aacu.org/initiatives/value-initiative/value-rubrics)

Professional Content

4.02 The professional curriculum must include the integrated content necessary for students to attain their student learning outcomes and for the program to achieve its goal(s) identified in Standard 3.01/3.02. The program must equip students for practice as Registered Respiratory Therapists in various practice settings (such as acute care, post-acute care, and ambulatory care) and across the lifespan. The curriculum must include didactic, laboratory, and clinical education, utilizing information from respiratory care clinical practice, current literature, practice guidelines, publications, and other evidence-based resources related to the profession.

Bachelor's degree programs must include professional content in one or more of the following areas: leadership, education, research and/or expanded clinical skills. This content must be integrated in a way that supports the program's goal(s) and ensures students achieve the competencies defined at the bachelor's level.

Master's degree programs must include professional content that focuses on the application of purposeful evidence-based practice, applied research, and education, as well as future leadership in the respiratory care profession. This content must be integrated in a way that supports the program's goal(s) and ensures students achieve the competencies defined at the master's level.

Interpretive Guideline:

Professional content areas provide the knowledge base for respiratory care and prepare the student to assess patients and to plan, implement, and evaluate the outcomes of respiratory care services in a variety of practice settings. For programs offering the sleep specialist program option, professional content areas must cover the essential knowledge, skills, and abilities required of respiratory therapists in the practice of sleep disorders testing and therapeutic intervention.

Each clinical experience must be of sufficient quality and duration to meet the objectives and competencies outlined in the clinical syllabi for that rotation. The program must ensure that each clinical site provides students with access to the necessary physical facilities, patient populations, professional interactions, and supervision to meet program expectations for the clinical experience. The number of hours dedicated to clinical practice should increase as students advance through the program. Programs must also ensure that students are exposed to a comprehensive range of patient encounters necessary for entry into practice as Registered Respiratory Therapists. At a minimum, these encounters should include patient education, emergent, acute, and chronic patient care.

Each program will develop and maintain its own curriculum and unique methods for developing these expected competencies. However, the curriculum must establish a strong foundation in respiratory care while emphasizing the importance of remaining current with professional practice.

Educational experiences, including didactic courses, laboratory, simulation, and clinical practice,

and additional experiences such as case conferences, seminars, and journal clubs, must demonstrate breadth and depth to provide students with the necessary knowledge and skills to perform accurately and reliably as Registered Respiratory Therapists entering practice.

CoARC supports the use of simulation in didactic and laboratory competency training and evaluation as a complement to high-quality clinical experiences. A maximum of 25% of program-required clinical hours and clinical competency evaluation may be accomplished using simulation. Simulation should include evidence-based quality assurance approaches that adhere to recognized standards of best practice, including faculty development and structured debriefing.

Professional course syllabi must minimally include:

a) Course name,
b) Course description,
c) Faculty instructor of record and credentials,
d) Course goals/rationale,
e) Methods of student assessment/evaluation,
f) Grading method and criteria.
g) Outline of topics covered that align with instructional objectives and expected learning outcomes,
h) Expected learning outcomes and instructional objectives, stated in measurable terms that can be assessed, guiding student acquisition of required competencies

Evidence of Compliance:

- Professional course syllabi;
- Curriculum published in the college catalog and the program's Student Handbook demonstrating appropriate curriculum sequencing and a description of all professional courses required for degree conferral;
- Results of CoARC Student and Personnel Program Resource Surveys (RAM);
- Results of CoARC Graduate and Employer Surveys (RCS).

Definitions:
Acute care; post-acute care; ambulatory care

Resources:

<u>Core Competencies</u>

Standards 4.03 through 4.07 describe five essential core competencies expected of graduates. These core competencies serve as pillars ensuring that graduates acquire the essential skills, knowledge, behaviors, and abilities to provide effective and high-quality respiratory care and achieve success in the profession.

4.03 All graduates must be proficient in performing evidence-based diagnostic and therapeutic

procedures essential for a Registered Respiratory Therapist entering practice.

Bachelor's degree graduates must demonstrate additional proficiency in one or more of the following areas: leadership, education, research, and/or clinical skills.

Master's degree graduates must demonstrate additional proficiency in the application of purposeful and evidence-based practice, applied research, and education, as well as leadership skills.

Interpretive Guideline:

Graduates must be able to apply scientifically supported techniques to assess, treat, and manage patients with respiratory conditions effectively.

Bachelor's Degree Graduates:

Graduates of bachelor's degree programs are expected to expand their proficiency beyond fundamental RRT skills. In addition to performing diagnostic and therapeutic procedures, they must demonstrate proficiency in at least one of the following specialized areas:

- *Developing the ability to manage teams, guide decision-making, and influence healthcare policies or administrative functions within a respiratory care department.*
- *Engaging in teaching and training roles, whether for patients, students, or other healthcare professionals, to improve understanding and implementation of respiratory therapy techniques.*
- *Contributing to the body of knowledge in respiratory care by conducting studies, analyzing clinical data, and integrating new scientific findings into practice.*
- *Experiencing specialized techniques, interventions, or technologies that go beyond standard respiratory therapy practice, such as managing complex ventilatory support systems or working in specialized care units (e.g., diagnostics, neonatal/pediatric, critical care, or pulmonary rehabilitation).*

Master's Degree Graduates:

Graduates of master's degree programs must demonstrate a level of proficiency that integrates evidence-based practice, applied research, education, and leadership into their role. They are expected to contribute to the advancement of the respiratory therapy profession by:

- *Using research and clinical data to optimize patient care, improve protocols, and implement innovative respiratory therapy techniques.*
- *Conducting and applying research that directly impacts patient outcomes, respiratory therapy methodologies, or healthcare policies.*
- *Taking on leadership roles in academic or clinical education, training future respiratory therapists, and developing curricula or educational materials.*
- *Influencing organizational decision-making, advocating for policy changes, and driving improvements in respiratory therapy practices at institutional or systemic levels.*

This tiered approach ensures that all graduates meet the essential requirements of an RRT while

also encouraging higher-degree holders to take on expanded roles in leadership, education, research, and clinical practice. The progressive increase in expectations ensures that respiratory therapists are well-equipped to meet the evolving demands of healthcare, improve patient outcomes, and contribute to the profession's growth.

Evidence of Compliance:

- Professional course syllabi;
- List of evidence-based diagnostic and therapeutic procedures as determined by the program faculty and advisory committee;
- Evaluations that document the student's ability to perform all required diagnostic and therapeutic procedures safely and effectively in patient care settings;
- Examples of student work reflecting student learning outcomes (didactic, laboratory, simulation, and clinical);
- Results of CoARC Student and Personnel Program Resource Surveys (RAM);
- Results of CoARC Graduate and Employer Surveys (RCS).

Definitions: proficient

Resources:

4.04 All graduates must demonstrate the ability to find, evaluate, use, and communicate information to develop a respiratory care plan.

Bachelor's degree graduates must demonstrate additional proficiency by applying information to improve outcomes in one or more of the following areas: expanded clinical practice, education, research, or leadership.

Master's degree graduates must demonstrate additional proficiency in utilizing valid and reliable data, research, and scholarship to further the practice of respiratory care.

Interpretive Guideline:

To ensure all graduates meet competency expectations, they must possess essential information literacy skills. These include the ability to efficiently access, evaluate, and apply information relevant to patient care. Graduates should integrate evidence-based data into their knowledge base and translate this information into effective recommendations for respiratory care plans that enhance patient outcomes.

Information literacy—which encompasses information fluency and proficiency in information technology—is essential for success in higher education, lifelong learning, and the rapidly evolving healthcare landscape. As technology advances and information resources expand, graduates are confronted with an overwhelming array of content in both credible and unverified formats. This abundance raises concerns about the reliability, authenticity, and validity of information, posing

challenges in assessing, interpreting, and applying knowledge effectively. In this dynamic environment, graduates play a crucial role in generating new knowledge, navigating the complexities of an ever-changing information world, and ethically utilizing data, research, and scholarship. At the same time, faculty have a heightened responsibility to design curricula and assignments that foster deeper engagement with core concepts of information literacy and scholarship within the profession.

Bachelor's degree graduates must demonstrate additional proficiency in:

- *Locating and critically evaluating diverse sources of information, ensuring accuracy, credibility, and relevance.*
- *Using evidence-based data to make informed decisions in patient care, education, leadership, or research roles.*
- *Fostering innovation by applying new insights to improve clinical practices, educational methodologies, and healthcare leadership strategies.*
- *Enhancing patient and organizational outcomes by implementing best practices based on a thorough review of current literature and guidelines.*

Master's degree graduates must demonstrate additional proficiency in research, data analysis, and scholarly contributions to the field. Their responsibilities include:

- *Generating new knowledge through original research or the synthesis of existing studies to address gaps in respiratory care.*
- *Utilizing valid and reliable data to support evidence-based decision-making in clinical practice, education, research, and leadership.*
- *Engaging in scholarly activities, such as publishing research, contributing to professional discourse, and influencing policy and practice standards.*
- *Advancing the profession by applying enhanced analytical and critical thinking skills to shape the future of respiratory care.*

Evidence of Compliance:

- Professional course syllabi;
- Evaluations that require demonstration of the student's ability to access and use information effectively;
- Examples of student work reflecting student learning outcomes (didactic, laboratory, simulation, and clinical);
- Results of CoARC Student and Personnel Program Resource Surveys (RAM);
- Results of CoARC Graduate and Employer Surveys (RCS).

Definitions: information literacy; respiratory care plan

Resources:

4.05 All graduates must demonstrate critical thinking and problem-solving to arrive at evidence-based decisions that prioritize patient needs, available resources, and social

context.

Bachelor's degree graduates must demonstrate additional proficiency in applying sound reasoning and judgment in one or more of the following areas: implementing research, education, and/or leadership strategies.

Master's degree graduates must demonstrate additional proficiency in applying purposeful and meaningful judgment and reasoning when implementing research, education, and leadership strategies.

Interpretive Guideline:

Instruction must prepare students to apply critical thinking and decision-making skills to provide effective, efficient, appropriate, and evidence-based respiratory care services. Critical thinking is defined as active and reflective reasoning that integrates facts, informs opinions, and utilizes observations to enable students to develop an action plan within a reasonable time frame that is likely to be effective and appropriate in a particular patient care setting. This is another area in which simulation could be helpful from both the practice and evaluation perspectives.

Master's degree graduates must demonstrate additional proficiency in critical analysis, clinical judgment, and leadership in delivering evidence-based care, translating research into practice, and driving healthcare innovation. They must also be prepared to assume leadership roles, implement strategic initiatives, and contribute to policy development and education to improve patient and system outcomes.

Evidence of Compliance:

- Professional course syllabi;
- Evaluations that document the student's ability to apply knowledge, provide appropriate patient care, and adapt to changes in clinical conditions in a timely fashion;
- Examples of student work reflecting student learning outcomes (didactic, laboratory, simulation, and clinical);
- Results of CoARC Student and Personnel Program Resource Surveys (RAM);
- Results of CoARC Graduate and Employer Surveys (RCS).

Definitions: Critical thinking

Resources:

4.06 All graduates must demonstrate ethical decision-making skills and an understanding of professionalism.

Interpretive Guideline:

All graduates must exhibit a strong foundation in ethical decision-making. This includes the ability

to analyze complex situations, apply ethical principles, and make informed choices that align with professional standards and patient-centered care. Additionally, they must develop a clear professional identity, recognizing their role within the healthcare system and embracing their responsibilities to patients, colleagues, and the broader community.

Graduates must practice in a manner consistent with all principles in the AARC Statement of Ethics and Professional Conduct. The curriculum must include content and learning experiences in ethics, values, professional responsibilities, service, and leadership in the healthcare environment. The program must utilize procedures that assess intellectual honesty and appropriate academic and professional conduct. Simulation is another method to enhance learning from both the practice and evaluation perspectives.

Whether working in clinical practice, education, research, or leadership, graduates must be adept at applying ethical principles in real-world scenarios. This includes addressing patient confidentiality, informed consent, and interprofessional collaboration while upholding the integrity of the profession.

Evidence of Compliance:

- Professional course syllabi;
- Evaluations that require demonstration of the student's ethical behavior and understanding of professional identity and responsibility;
- Examples of student work reflecting student learning outcomes (didactic, laboratory, simulation, and clinical);
- Results of CoARC Student and Personnel Program Resource Surveys (RAM);
- Results of CoARC Graduate and Employer Surveys (RCS).

Definitions:

Resources:

4.07 All graduates must be able to function proficiently within interprofessional teams and communicate in a responsive, responsible, respectful, and compassionate manner that meets the needs of the patient, caregiver, and other healthcare professionals.

Bachelor's degree graduates must demonstrate additional proficiency in one or more of the following areas: applying evidence-based practices, reviewing research, educating others, and/or using shared leadership abilities to support team effectiveness.

Master's degree graduates must demonstrate additional proficiency in applying purposeful and meaningful evidence-based practices, implementing applied research and education strategies, and shared leadership abilities to support team effectiveness.

Interpretive Guideline:

The program must prepare students to work collaboratively in interprofessional patient-centered teams. Such preparation should include curricular content on the roles and responsibilities of other health care professionals, with emphasis on the team approach to patient-centered care.

This training must also include ongoing consideration of the constantly changing healthcare system and the impact of disparities on healthcare delivery. Instruction must prepare students to minimize bias when providing medical care to diverse patient populations. Students must have exposure to as diverse a patient population as possible as part of their preparation for interprofessional practice. Students must demonstrate effective communication with patients and other healthcare team members, both individually and in groups, regardless of their beliefs, language, and abilities.

As part of its efforts to address these issues, the program should consider using simulation with colleagues from other health profession programs at the institution to provide students with experiences in interprofessional teamwork.

Evidence of Compliance:

- Professional course syllabi;
- Evaluations that document the student's ability to communicate effectively in a variety of patient care settings and to interact well with all members of the health care team;
- Examples of student work reflecting student learning outcomes (didactic, laboratory, simulation, and clinical);
- Results of CoARC Student and Personnel Program Resource Surveys (RAM);
- Results of CoARC Graduate and Employer Surveys (RCS).

Definitions:

Resources:

Curriculum Review and Revision

4.08 The program must have a formal, written curriculum management plan, which includes:

a. A curriculum map that effectively and logically organizes didactic courses, labs, and clinical experiences, outlining how content is introduced, reinforced, and competencies are assessed to achieve program goal(s);
b. Evaluating the effectiveness of each course as it supports the program's goals and expected competencies;
c. A defined mechanism for coordinating instruction among program faculty;
d. An annual curriculum review and evaluation process with input from faculty, students, administration, AC, and other appropriate sources.

Interpretive Guideline:

Curriculum management should incorporate new information, eliminate unnecessary repetition, and ensure student competence. Annual reviews and revisions by program faculty must align curricular content with program goals and competencies.

The program must cover all necessary content and ensure logical learning progression. Regular reviews and updates of the curriculum map, with input from faculty, students, and assessment results, must address gaps or redundancies and reflect changes in program outcomes. This keeps the curriculum relevant to current practices. Thoughtful sequencing of foundational and professional coursework is essential, considering the overall program structure and content integration.

Curricular content in respiratory care must be reviewed and revised at least annually to ensure its consistency with the competencies and duties performed by Registered Respiratory Therapists entering the workforce, as established by the national credentialing agency through its periodic job analysis and credentialing examination specifications and published in the NBRC detailed content outline or matrix. In addition to a detailed annual analysis of graduate performance on the credentialing exams, the program must conduct an extensive review of curricular content following any revision to the national credentialing agency's content outline, which typically occurs every five years.

For the sleep specialist program option, curricular content must also be reviewed and revised at least annually to ensure its consistency with the competencies and duties performed by sleep disorder specialists in the workforce, as established by the national credentialing agency through its periodic job analysis and outlined in its credentialing examination specifications.

For programs offering a bachelor's or master's degree, curricular content must also be reviewed and revised at least annually to ensure its consistency with the program's stated goal(s), as specified in Standards 3.01 and 3.02.

Evidence of Compliance:

- Curriculum management plan;
- Curriculum map that aligns required courses with expected competencies and student learning outcomes (CoARC Template);
- Documentation of the comparison of the program curriculum to the most current national credentialing agency content outline (CoARC Content Outline Comparison Form);
- Documentation confirming annual review by program faculty of the program's NBRC TMC and CSE Sub Scores by Content Domain. For each major content area section where scores fall below 85% of the national mean on the new candidate summary, an action plan for curriculum improvement must be developed and implemented (RCS);
- Written policies/procedures for designing, approving, implementing, reviewing, and changing the curriculum;

- Minutes of faculty and AC meetings documenting curriculum review and evaluation relative to program goal(s). An action plan and follow-up to address deficits noted in any content areas, and/or to address AC recommendations;
- Examples of tools for curriculum assessment (e.g., course and faculty evaluations, student and faculty evaluations of clinical experiences);
- Documents (e.g., minutes, memoranda, reports) that demonstrate data analysis of student and/or faculty evaluations to support ongoing improvement of curriculum and teaching-learning practices.

Definitions:

Resources: Template curriculum map

Equivalency

4.09 The program must ensure that course content, learning experiences (didactic, laboratory, simulation, and clinical), and access to learning materials are equitable.

Interpretive Guideline:
The program must ensure the educational equivalence of course content, student experience, and access to didactic and laboratory materials, regardless of whether instruction occurs at different geographic locations or through varied pedagogical and instructional methods or techniques for certain students (for example, via distance education). Didactic, laboratory, simulation, clinical, and other curricular activities (i.e., leadership, education, and research) that substantially contribute to the development of a competent graduate should result in comparable learning outcomes regardless of the location of instruction.

The program should document the equivalency of both student evaluation methods and outcomes in all locations of instruction and when different delivery methods are provided for a portion of the students in the program. Under these circumstances, student access to learning materials should be similar at the various locations, and must be sufficient to meet program goals, but need not be identical.

The program must ensure that the sum and quality of each student's laboratory, simulation, and clinical experiences are equivalent to those of the other students in that cohort, and sufficient to allow the achievement of all required competencies.

Evidence of Compliance:

- Documentation that students at various program locations have access to similar course materials, laboratory equipment and supplies, and academic support services;
- Documentation that student exposure to laboratory, simulation, and clinical experiences is equivalent regardless of the clinical sites attended;

- Results of CoARC Student Program Resource Surveys (RAM);
- Results of student evaluation of the clinical sites and preceptors;
- Results of student clinical course evaluations.

Definitions: distance education

Resources:

Management of Learning Experiences

4.10 The sponsor/consortium must maintain written agreements with institutions, organizations, and/or facilities that provide laboratory, simulation, and clinical practice experiences. Program policies and procedures must address the selection and periodic evaluation of the adequacy and appropriateness of facilities to ensure that instructional sites can provide laboratory, simulation, and clinical practice experiences compatible with the expected competencies.

Management . Students must not be responsible for the selection of clinical sites, determining which competencies should be mastered at a given clinical site, or the acquisition of clinical instructors at these sites.

Interpretive Guideline:

Written agreements with Institutions, organizations, and/or facilities external to the sponsor/consortium identified in Section 1 must be established. This does not include learning experiences for instructional locations on campus.

The coordination of all clinical experiences involves identifying, contacting, and evaluating clinical sites is a responsibility usually assigned to the Director of Clinical Education (DCE). When program clinical faculty are not involved at a given site, the DCE should work with employer representatives on the Advisory Committee (when applicable) and/or with department supervisors at the clinical sites to identify suitable preceptors to supervise students.

Students may make suggestions to program faculty regarding sites and preceptors, but must not be required to do so. Prior to their utilization, student-suggested sites and preceptors must be reviewed, evaluated, and approved for educational suitability by the program, and subsequent student experience at such sites must be assessed to determine that outcomes are equivalent to those at sites chosen by the program.

Evidence of Compliance:

- Detailed laboratory, simulation, and clinical schedules;
- A list of all sites used for laboratory, simulation, and clinical training;
- Current, formal, affiliation agreements or memoranda of understanding, with all

laboratory, simulation, and clinical sites;

- Results of CoARC Graduate Surveys (RCS).

Definitions:

Resources: